Hungary Comparative Report

Discussion paper 2013/7.5.

Csaba Makó & Miklós Illéssy & Péter Csizmadia

THEMP

Lifelong Learning

Tertiary Higher Education for People in Mid-life (THEMP)

Hungary - Comparative Report

Discussion paper 2013/7.5

Csaba Makó, Miklós Illéssy, Péter Csizmadia

Institute of Sociology – Centre for Social Policy – Hungarian Academy of Science

THEMP Partners

Fundación Conocimiento y Desarrollo
Martínez, Sonia (Project director)
Parellada, Marti (Project assessor)
Krüger, Karsten (Project coordinator)
Alvarez, Montserrat
Duch, Néstor
García, Javier

Escola Técnica Superior d'Enginyeria Química
Jiménez, Laureano
Molas, Alba

PLATO
van Lakerveld; Jaap
Kats, Erik

Facoltà di Scienze della Comunicazione e dell'Economia
Mariani, Michele
Epifanio, Antonella
Sgarzi,Matteo

Navreme Boheme
Štogr, Jakub
Mazak, Jaromír

Institute of Sociology – Centre for Social Science – Hungarian Academy of Science
Mako; Czaba
Csizmadia, Peter
Miklós Illéssy

CRADALL
Osborne, Mike
Houston. Muir

Institut für Arbeit und Technik
Öz, Fikret
Hamburg, Ileana

Tertiary Higher Education for People in Mid-life (THEMP)

Comparative Report of Hungarian Cases

Autores: Csaba Makó, Miklós Illéssy, Péter Csizmadia

May 2013

.

Index

1. Introduction

Main challenges of the ageing knowledge economy are constant upgrading of the skills of the active population and mitigating new and old social risks. In the aging society and the globalised knowledge economy, the people in mid-life are increasingly exposed to social risks of exclusion from the labour market. They are also excluded from formal Lifelong Learning (LLL), specifically Tertiary Lifelong Learning (TLL). The access of mid-life learners to TLL and their retention in the system have an increasing relevance for the socio-economic sustainability of the ageing European knowledge society.

Opening Higher Education (HE) for mid-life learners, designing flexible pathways from VET and professional experience to higher education, flexible learning arrangements conciliating family-work life and learning and the adaptation of didactical methods in HE are challenges to affront problems of the aging knowledge society.

The European Project THEMP (Tertiary Education for People in Midlife) focuses on the education and training mission of the Universities and asks for the measures taken by the universities to expand their educational and training activities beyond the traditional students to a wider range of citizens and in wider range of learning environments.

The project aims to study tertiary life learning (TLL) programs at universities in 7 EU-member states (Germany, Italy, Spain, Hungary, United Kingdom, Czech Republic, Netherland) with respect to inclusion of mid-life learners and social impact. It provides a description of the landscapes of tertiary life long learning in these countries, but the core contributions are case studies of three universities in each country. Main focus lies in the analysis of the weak and strong points of the lifelong learning activities in the selected universities and their strategies in developing and implementing training programs.

In Hungary three higher education were selected for the case studies. I. Budapest Business School (in Hungarian: *Budapesti Gazdasági Főiskola*), II. Szent István University, Faculty of Faculty of Mechanical Engineering (in Hungarian: *Szent István Egyetem, Gépészmérnöki Kar*) and the III. Debrecen University, Faculty of Engineering, (In Hungarian: *Debreceni Egyetem, Műszaki Kar*). All the selected institutions provide various programmes for adult learners.

2. LLL and TLL in national context

Short overview of the educational system

In order to understand the institutional framework of TLL, in the following the structure of the Hungarian education system will be briefly presented:

Pre-primary education (ISCED 0-1)

This educational level is created for children from 3 to 7 years of age. The pre-primary education (kindergarten, in Hungarian: *óvoda*) is optional, except for the final year (at the age of 5 or 6), which is compulsory.

Primary education (ISCED 1-2)

In Hungary primary schools provide basic education in two 4-year cycles. Children attend primary schools (in Hungarian: *általános iskola*) until the age of 14, after which they have to choose a secondary school.

Secondary education (ISCED 2-3)

In Hungary there are three different forms of secondary education:

1. Vocational and special vocational schools (ISCED 3):

   Students who do not intend to obtain a secondary school leaving certificate and wish to begin working immediately after the compulsory period of education, have the opportunity to attend a vocational school (in Hungarian: *szakiskola*). During the first and second years of their studies (9th and 10th grades), students are taught only general subjects. They learn professional subjects from the 11th grade on. The professional orientation and preparation for the vocational training starts in the 9th and 10th grades. However, the real vocational training begins in the 11th grade, partly in the school-workshops, and partly in factories. The duration of the training in vocational schools is 4 years. It consists of 2 years of general studies and a 2-year vocational course. From the next year, however, the system will be changed, according to the new legislation on VET (see in details before). The length of training will be shortened from 4 to 3 years and its internal structure will also be changed. In the first year students will learn both practical and general subject, but in the remaining two years only practical courses will be offered for them.

2. Secondary general schools (ISCED 2 -3)

   The secondary general schools prepare students for universities and colleges, providing general education. The general secondary schools (in Hungarian: *gimnázium*) offer four-year-long education – starting in the 9th grade and finishing in the 12th grade. Bilingual schools offer 5-year programmes. At the end of the final year, students take school-leaving exams. According to the two-level secondary school-leaving examination regulations, students have the opportunity to choose whether they take the standard-level or the high-level exam. The standard-level exam is focused on assessment of basic skills of students intending to complete their studies and search for a job. In case of high-level exam,

academic knowledge is more emphasized and this exam serves as an entry to the higher educational institutions.

3. Secondary vocational schools (ISCED 3)

    Secondary vocational schools (in Hungarian: *szakközépiskola*) offer the opportunity to learn a profession and provide general education as well. In the 9th–12th grades, students are taught mainly general subjects. This is a preparatory phase for the secondary school-leaving exam and further studies. The vocational orientation starts in the 9th grade. From the 11th grade on, theoretical and practical basic knowledge is taught in workgroups. The real vocational training begins only after the secondary school leaving exam (ISCED 4). Students complete their studies with final exams in the prescribed vocational subjects. The new legislation laid down in the SZT will changes this school type, as well. The most important change is that students will be offered more practical courses even in their first school years.

Tertiary (higher) education (ISCED 5-6)

In Hungary, higher education institutions can be state-owned or run by legal entities determined by the law. Non state higher education institutions can ask the official recognition of the state. There are two types of tertiary institutions: non-university institutions/colleges and universities. Previously, colleges used to offer college degrees, while universities used to offer college and university degrees. Today both types of institutions may launch courses in all of the three cycles, but they have to offer Masters courses in at least two fields of study and PhD courses in at least one study field in order to be qualified as a university. In the country there are altogether 77 universities and colleges (18 state universities, 14 state colleges, 25 religious colleges/universities institutions, 14 private and foundation schools and 6 colleges of foreign countries established in Hungary).

Two-year advanced vocational programmes, (ISCED 5B, 120 ECTS credits) can be launched by both higher education institutions and upper secondary schools, while professional higher education training programmes (at ISCED level 5A) are launched by higher education institutions for those who are already graduates.

In the last decades there has been a dramatic shift from vocational training to the general education. Based on the EUROSTAT the distribution of the Hungarian pupils/students between the various levels of the education system in 2009 was as follows. 15,14% of student were in pre-primary educational institutions (ISCED 0), 18,45% of them in primary education (ISCED 1), 20,17% in lower, 24,88% in upper secondary education (ISCED 2,3), 3,07% in post-secondary education (ISCED 4) and 18,49% of them participated in tertiary education (ISCED 5,6). 90,13% of tertiary education participants were in academic-oriented programmes, while 8,12 of them in occupational-oriented courses that shows a relatively modest practical orientation of the tertiary education system.

General LLL and TLL-Strategy

Institutional Setting and Regulations with respect to TLL

There are several legal sources that regulate directly or indirectly the adult education. Most important laws are the followings:

- Education Act
- Vocational Education Act
- Higher Education Act
- Employment Act
- Adult Education Act
- Labour Code

The two most important legal sources regulating TLL are the Higher Education Act and the Adult education Act. The former regulates the special training programmes that are offered by HE institutions for those who have already graduated (at ISCED level 5A). The law defines both the minimal human and technical standards necessary to run such courses and both the in- and output requirements.

According to the Adult Education Act adult education courses should be accredited by the Board for Adult Education and Training Accreditation (in Hungarian: Felnőttképzési Akkreditáló Testület: FAT) if the training provider wants to have his programme to be recognised by the state. Higher education institutions, however, are not obliged to have their programmes accredited

As part of the vocational education and training system, however, the HE institutions also provide two-year advanced vocational programmes (ISCED 5B, 120 ECTS credits, as well. These programmes can also be offered by upper secondary schools. There are, however, special training programmes (at ISCED level 5A) for those, who have already graduated. This type of training programmes (in Hungarian: szakirányú továbbképzés) offer possibility to graduates either to gain a new qualification or to specialise themselves in a given area related to their basic qualification. In some cases, e.g. legal, medical and technical professions, participating in such courses is a legal prerequisite of obtaining and preserving their licences. The ratio of participants in these programmes was 5,5% within the whole student population and was 6,5% in 2010. These programmes still do not seem to be very popular and widely accepted by the employers.

In the last decades there has been a dramatic shift from vocational training to the general education, accompanied by the radical increase of the number of students in higher education. (See Figure 1) Based on the EUROSTAT the distribution of the Hungarian pupils/students between the various levels of the education system in 2009 was as follows. 15,14% of student were in pre-primary educational institutions (ISCED 0), 18,45% of them in primary education (ISCED 1), 20,17% in lower, 24,88% in upper secondary education (ISCED 2,3), 3,07% in post-secondary education (ISCED 4) and 18,49% of them participated in tertiary education (ISCED 5,6). 90,13% of tertiary education participants were in academic-oriented programmes, while 8,12 of them in occupational-oriented courses that shows a relatively modest practical orientation of the tertiary education system.

Middle-Age specific TLL-Activities

At the strategic level the development of the employability of those in mid-life is an important goal but first of all in case of the poorly skilled people being in marginal labour market position. In reality, however, the Hungarian governments always have followed a „passive" policy in order to protect workplaces instead of increasing the employers' and employees' interest in skill development. The support of those in mid-life is restricted to special employment conditions that should be applied for employees over 55 which means that the termination of their contract is allowed only in extraordinary cases.

In case of VET, however, in 2008 a publicly founded tripartite programme started with the aim of supporting the development of the Hungarian VET system at the regional level. The goal of the programme titled Optimisation of the number of vocational trainees for the Regional Development and Training Committees is to strengthen the demand orientation of the Hungarian VET system. In order to achieve this goal 9 employers' associations and 5 trade unions' confederations have been involved into the programme led by the Hungarian Chamber of Trade and Industry (MKIK). The task of the social partners is to determine the skill needs of the economic actors at the regional level and to adjust the regional skill supply to the real economic needs.

3. Case Studies and Methodology

Justification for choosing case studies

In Hungary three higher education institutions have been selected for case studies. They are active in various fields of higher education system and represent different TLL strategies and practices. The three institutions are the followings:

I. Budapest Business School (BBS) (in Hungarian: *Budapesti Gazdasági Főiskola*):

The BBS provides three types of programmes for adult learners:

1. Two-year advanced vocational programmes (ISCED 5B) for those who have finished their secondary education and do not wish to entrance to HE programmes

2. Post-graduate programmes (ISCED 5A) for those who have already graduated and wish to obtain a specialised degree. Some typical fields: HR specialist, Market Research, Advertising, Financial management, Business informatics, etc.

3. Master programmes. Main fields: Marketing, International economics, Financial Management, Accounting Management

II. Szent István University, Faculty of Mechanical Engineering (in Hungarian: *Szent István Egyetem, Gépészmérnöki Kar*)

The Faculty provides Master programmes in the form of both distance and correspondance education in the following fields: Financial Management, International Economics, Regional Economics and Logistics.

III. Debrecen University, Faculty of Engineering, (In Hungarian: *Debreceni Egyetem, Műszaki Kar*)

The Faculty has two-types of programmes for adults:

1. Two-year advanced vocational programmes (ISCED 5B) for those who have finished their secondary education and do not wish to entrance to HE programmes

2. Post-graduate programmes (ISCED 5A) for those who have already graduated and wish to obtain a specialised degree. Some typical fields: technical diagnostic, facility management, quality management, CAD/CAM engineering, etc.

During the field work semi-structured interviews have been carried out with decision makers, programme coordinators, lecturers and adult students. In making interviews we used the interview protocols that had been elaborated by the project partners. The interviews reflected to various aspect of TLL, among others:

▪ General information about the programme

▪ Target groups

▪ Social and professional composition and motivation of the lecturers and participants

▪ Programme design and content

▪ Programme evaluation and impacts

4. Case Studies

KITE Farmer's Training Partner Programme

General Information Szent Istvan University Faculty of Mechanical Engineering (SZIE GÉK)

The History of Szent Istvan University Faculty of Mechanical Engineering (SZIE GÉK*)*

The Faculty of Mechanical Engineering of the Hungarian Agricultural University was established in 1950. The aim of the new Faculty primarily was to suffice the demand for agricultural appliance-station specialists. The institution formed into Gödöllő Agricultural College in 1954 and became the Faculty of Agricultural Mechanical Engineering of Gödölllő Agricultural University (GATE) in 1957. The new Faculty operated in Budapest initially and moved to its present base, Gödöllő, in 1969. As a result of a considerable structural reform (university integration) in 2000, GATE became Szent István University. Since then, the Faculty of Mechanical Engineering of SZIE has co-ordinated the training of technical specialists.

The Faculty changed over to the Bologna Process system in the semester of 2005/2006. Before that, university level (chartered) trainings took place as part of the academic specialisations of mechanical engineering, agricultural mechanical engineering and technical management. College level education was conducted as part of the mechanical engineering and communication-technical engineering courses.

There are several specialisations available at the Faculty of Mechanical Engineering at present. Bachelor's specialisations are: mechanical engineer, agricultural and food industry mechanical engineer, mechatronic engineer and technical manager; Master's specialisations: mechanical engineer, agricultural and food industry mechanical engineer, mechatronic engineer, technical manager, building engineer, logistics engineer and vehicle technical engineer.

1 600 students were registered at the Faculty in September 2012, and 65 lecturers minister educational duties.

Organisational Divisions Participating in Adult Education and their Network at SZIE

GÉK has been dealing with the organisation of (agricultural) technical trainings for fifty years and pursues adult education activities almost from the beginning. In connection with the organisation of traditional courses and specialised engineering trainings, the early 2000 brought significant changes.

In the course of the university integration, several new central units came into existence within SZIE. The University established the Adult Education Centre (FK) in 2001 in order to represent the different characteristics and contents of adult training programmes, to support adults with a desire to study and to co-ordinate methodology developments.

The division belongs directly under the control of the Rector. Tasks include the compilation and execution of the university's adult education plan, as well as the provision of accreditation duties in connection with this. A professional advisory board operates beside the centre division.

Additional tasks include the provision of support to other university departments through the following activities: continuously survey the demand for adult education, methodological counselling, promoting co-operation (joint adult training programmes, tenders, project management etc.), and assuring a standardised appearance in the market of adult education

(marketing, advertising, operation of an Internet portal etc.). FK operates the methodology (validation) and quality assurance systems of adult education as well.

Three organisational units of FK provide the following tasks: the Adult Education Office, the Methodology and Programme Development Group, and the Education Organisation and Sales (marketing) Group.

FK does not have tuition capacity on its own. The number of employees is only 3 persons who primarily deal with administrative tasks. The work of FK is assisted by a Professional Advisory Board founded by the Rector with 8 members who are adult education experts and representatives of the business world. The Adult Education Development and Methodology Committee has a similar supporting role whose members are professionals dealing with adult education within the organisation of the university.

The figure below illustrates the relationships among the FK, the departments dealing with adult education and other parties involved.

Figure 1

Network of organisational divisions dealing with adult education and related parties

Source: felnottkepzes.szie.hu
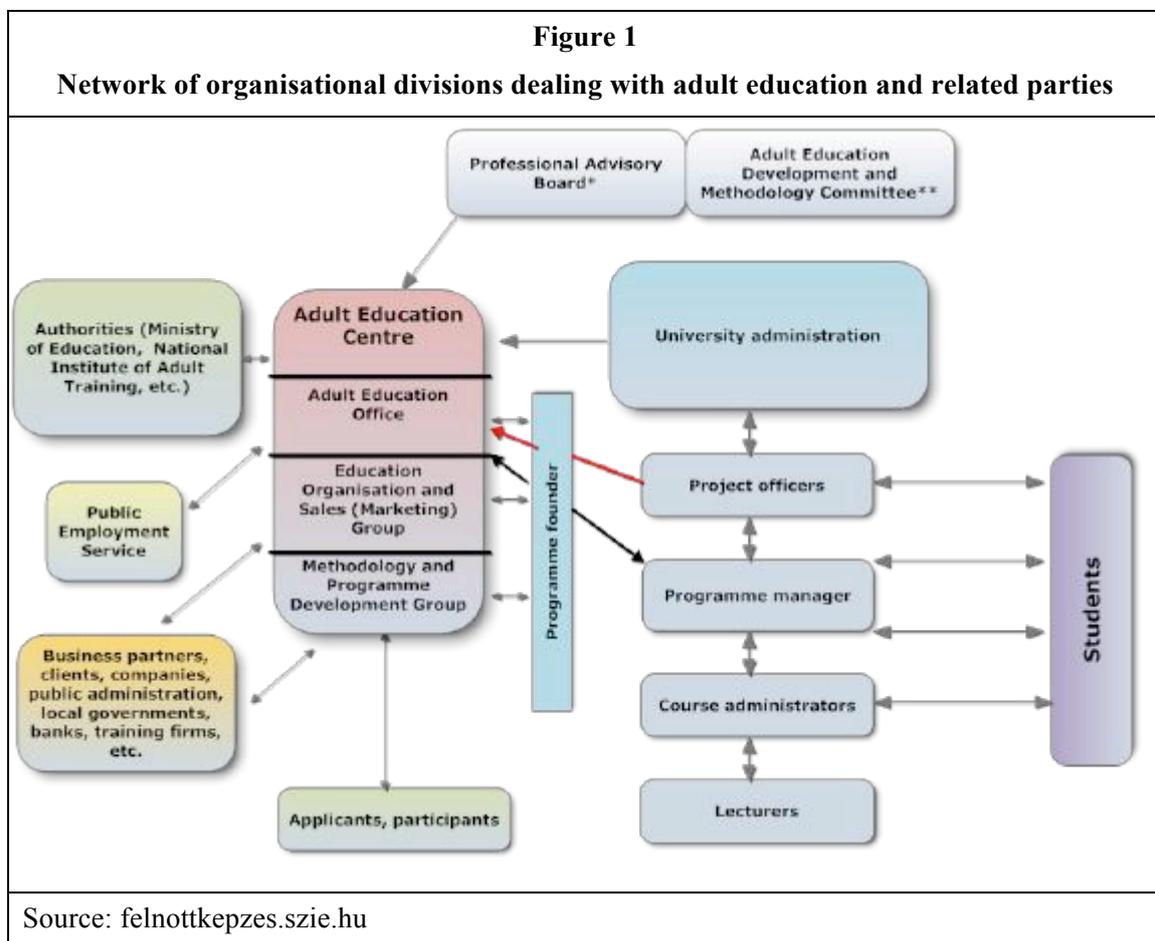
The Organisation of Adult Education Programmes at SZIE GÉK

The Adult Education Director is the professional responsible for organisational and co-ordination tasks. The associate professor and head of department (who carries out both teaching and research activities) fulfils the task for an extra pay. There is no dedicated team, only a direct inferior provides support in approximately 20 hours per week.

The structure of adult education within the Faculty is similar mostly to a project organisation. Besides the linear structure of institutes and departments differentiated by disciplines, there is a project system in existence in which adult education programmes are presented as independent projects directed by a project leader in charge (programme leader). It is the programme leader's right and task to select lecturers and to organise the courses assisted by the Faculty rapporteur.

As to the he elaboration of programmes and the selection of tutors, it is typical that lecturers are almost solely come from the department supervised by the programme leader. Therefore, in terms of planning and accountability, adult education programmes and projects can be well connected to particular divisions of the organisation.

There is no cumulated budget prepared with regard to the adult education activities; evaluation is carried out on a programme basis. The programme leader, as the person in charge of the project, prepares a draft budget on the basis of a pre-defined scheme that is presented to the Dean and the Faculty Council. In case the programme proves to be profitable on the grounds of the draft calculations then kick-off gets approval in principal. Programmes are planned for at least 20 students as a general rule, as with a lower headcount it would not be profitable based on experience. The programme budget defines the cost of services provided by the university or the Faculty (classrooms, overhead, management etc.) as a percentage share of revenue. A financial evaluation is too prepared at the closure of a programme which results are taken into consideration in the following project start-up.

GÉK Adult Education Portfolio (training structures, programme development, lecturer and student circle)

The adult education portfolio of SZIE GÉK consists of three programme types. Besides the special further training programmes (at ISCED level 5A) and the advanced vocational programmes (ISCE 5B), the new development of the last 2 years is the arrangement of company trainings.

Special Further Training Programmes

They currently run 4 programmes of this type with circa 100 students enrolled.

These programmes are not part of the Bologna Process and typically organised for 2-4 semesters in the form of part-time (correspondence) courses. The tuition fee varies in between EUR 520-640 per semester. The institution allows students to pay in instalments, as well as the tuition fee can be eligible for companies' vocational training contribution.

Students apply for special further training programmes (or are schooled by the employee) in order to enhance employability and extend domain-specific knowledge. Knowledge transfer is the combination of face-to-face education and blended learning. Classes are held biweekly for 2 days (on Fridays and Saturdays). 75% of the curriculum has practical aspects and students are assisted by e-learning materials in their individual preparation.

Students – as a consequence of the nature of the training – are all graduates with higher education degrees. As a result of the technical aspect of the topics, there are more male than female students. Lower headcount and increased average age became more typical in the latter years since the introduction of the Bologna Process. Namely, Master's degree programmes imply competition to special further training programmes.

Earlier programmes were developed on the basis of the available capacities (knowledge) of university instructors, however, direct market demand plays an increasingly important role (for

example in the case of township operator and recreation management, local governments and wellness service providers were concerned). In this case, the curriculum is the result of a joint development as well.

GÉK largely relies on its extensive business connection system with regard to the identification of learning demands and makes a considerable profit from the different professional / social memberships of its instructors.

> *'There it is for example the Together for the Engineers of the Future Association that we are members of. Large firms founded it and universities engaged in technical higher education also take part. We get together month by month and together reflect on the paths that the training of engineers advances… I consider these common way findings very useful.'*

From among adult training programmes, special further training programmes resemble university education the most as their arrangements and undertakings with the traditional dedicated staff take place smoothly. Approximately 70 percent of the lecturers are from among university employees and the rest are 'outsider' technical professionals. The essential selection criterion when appointing lecturers is sound and in-depth professional knowledge that is accompanied by several decades of practice in most cases. As a consequence, lecturers are rarely under 40 years of age.

The atmosphere of classrooms is much more informal than during traditional lectures. The manner of knowledge transfer differs as well, it is rather like a consultation and oral exam resembles professional conversations.

> *'It is good to teach at the specialised engineering trainings as students are motivated and well-prepared. It does not feel like teaching but rather chatting. I learn a lot, too.'*

Theoretically, there is an opportunity to get prior professional experiences accredited; however, it is not typical to take advantage of this opportunity.

> *'I do not remember anybody asking for exemption. They are glad to meet biweekly, monthly. (…) Generally, they belong to the same profession and work on the same field. This is an important ground for information exchange. Some also found a new job this way.'*

The specialised engineering trainings are descending despite the well-structured programmes. The principal reason for this is the appearance of MSc, intensified by the economic crisis. The Faculty cannot launch most courses in each year.

Advanced Vocational Programmes

The number of registered GÉK courses are above 80, out of which 32 was planned to be launched in 2012. The terms for launching the courses (minimum headcount, budget etc.) are equivalent to special further training programmes, although the adult education centre plays a

much bigger role in organisation (course announcements, administration, issuance of certificates.)

The specialised engineering trainings are short-cycle programmes lasting for a couple of weeks on the basis of face-to-face participation. Their aim varies; topics may include either the enrichment of technical knowledge or the attainment of new knowledge (for example design software trainings) as well as the development of general competences (for example negotiation techniques). Courses are recommended for adult employees or job seekers between the age of 18 and 60 who are motivated in extending their technical knowledge. Tuition fees show considerable spread depending on the duration and device need; the most competitive course costs EUR 85 whereas the most expensive is EUR 1 250.

Most courses comprise of sheer marketable content and some in the portfolio were launched by the supply side.

The curriculum of most prosperous courses was drawn up by either collaborating with the business sphere or on the basis of standards. Some were put together by the Professor beside his desk. The trouble with the latter one is that these courses get announced because the budget is successfully masked to appear fine and there are 4-5 people who are interested in them. They call daily to enquire about start dates. These courses do not and will not start though... this is negative advertisement for the Faculty and takes up a lot of energy. (Dr. BZ)

The courses are organised similarly to projects and are attached to departments. The majority of course instructors are among university employees and engage in adult education part-time only, whereas some of the external instructors come from the business sphere and take on TLL part-time as well. Solely their professional knowledge is taken into account in the course of the selection process.

The student set varies depending on the nature of the courses. There are some really heterogeneous groups (e.g. ECDL beginner's course) as well as homogeneous groups based on common educational background (e.g. microprocessor technologies). No statistics on the course students (age, residence, gender, background etc.) have been prepared so far.

The number of courses initiated by GÉK has been decreasing for the past years. The reason behind this on one hand is strong competition, whereas the effect of the economic crisis is apparent too. GÉK does not take part in the training of the unemployed.

Company Trainings

Trainings organised for large companies are the latest element of the adult education portfolio of GÉK. These are not similar to the programmes presented before in any way but represent an entirely new direction. Such programme is introduced in detail after a general overview (see KITE Farmer's Training).

A common feature of the company trainings is that the initiator is always a partner corporate that provides sales related trainings for its customer and/or resellers. The aim of the training is to prepare users for the safe and efficient application of the purchased technology.

It is agreed that companies put together the curriculum, prepare the lecturers and recruit participants, while the Faculty is responsible for the accreditation and organisation of trainings, provides instructors and classrooms, holds the training and exams, and issues certificates of attendance and successful exams.

GÉK is connected with three such companies at present, all of which are distributors of agricultural cutting-edge technologies in Hungary. The co-operation is well-established as experience of one another was already gained in the course of joint conferences, professional events and innovative assignments. These companies got directly involved in BSc and MSc programmes a year ago; one option is when the specialists and the management (design engineers, managers of various areas) of international brands distributed by the partner companies give lectures 5 times per semester in English.

'These courses are so popular that it is hardly possible to fit into the university classroom. We should take steps in this direction as demand is huge for such programmes. They talk about things to the students (and to us lecturers as well) that we haven't even heard of yet.'

The partner company is also entrusted with the specification of the curriculum when courses are held in Hungarian. In this case, lectures are held by the Hungarian specialists of the partner company. These as well are very attractive to students.

The Role of LLL in the Strategy of GÉK, Strength and Weaknesses

Adult education plays an important role in the strategy of SZIE GÉK that is shaped together with the economic and social partners. The efforts resulted in the search and introduction of brand new adult education solutions. The situation becomes contradictional when we look at the given conditions: for example, the management of the training portfolio is left to be dealt with by one part-time leader and an employee whose substitution is not resolved; adult education does not have a stand-alone organisation or budget etc.

'It is only possible to take a step ahead beyond empty words when the government drastically cuts back on or even withdraws from financing higher education. The shift will be forced out because of the funding. As I see, the only feasible way is to co-operate with the business sphere: applied research and specialised trainings for companies. Company trainings are raising stars these days as it brings in money. What I know is that we want more of them. But is this called strategy?'

The respondents fully agreed on the strengths and weaknesses of adult education. Strength included the in-depth experience of lecturers, didactical knowledge gained from part-time and blended learning courses, renewal skills (application of IKT in education, teaching and research of cutting-edge technologies), and stable and efficient contact with the business world. Funding emerged as the greatest weakness.

It would be of great benefit at present if we were in the position to offer scholarships or financing solutions for the ones taking part in the adult training programme. But the situation of the Faculty is such that we even find it difficult to allow for instalment payments.

Money shortage, decreasing state financing and job cuts have created a deeply distressing environment, and make academic infrastructure unsteady. According to the interviewed lecturer, the Faculty is not an attractive workplace for young engineers with marketable knowledge and language skills, and in his opinion this already jeopardises successful adult training programmes on the short-run as well.

'It is obvious that popular courses are related to the training or retraining of the application of new technologies, and company trainings are like that too. A great

deal of knowledge is required for teaching that I did not learn during my university studies but from company trainings and from practice. (…) People I have worked with in business would never be attracted to these conditions. I am only here now because I am doing my PhD.'

Lack of time and being overloaded are significant difficulties as well.

'As the Educational Deputy Dean I would be gladly thinking about which way to look ahead with regard to adult education… It would be good really to deal with sensible tasks but it is simply not possible. Every day we get a few hundreds of pages from the ministry for appraisal and university bureaucracy is extensive, too. (…) I do not even mention teaching, research and the necessity to publish.'

It clearly shows that the divided co-ordination between the Adult Education Centre and the Faculty does not serve smooth functioning either. Based on the materials of the website, it seems that FK is rather focused on bureaucratic tasks and only a few traces of proactive activities is to be found; market research, marketing and PR activities that belong to its duties are poor quality according to the management respondents.

'There is little money available and although they are trying hard, it would be necessary to do thing more seriously. There should be a professional market researcher and a PR specialist working for the Faculty who would help to map the market and would create a unified image.'

Successful way-seeking (and finding) in the area of adult education could be the key to survival for SZIE GÉK. The linkage of resources (infrastructure, instructors) and of functions (general principles of operation and regulations) between adult education and traditional training programmes – as a result of the general savings affecting the university – can even jeopardize the sustainability of successful programmes.

General Description of Selected Programme

- **The initiator of the programme***: KITE* Zrt. KITE was established in 1972. By today, it became the largest commercial agricultural and service provider in Hungary that offers all input substances and devices necessary for cultivation. Its headquarter is located in Nádudvar and there are also offices in 19 locations throughout the country. KITE plays a major role in the domestic acclimatisation of new technologies. Its technological activity is determined by the distribution and technical support of John Deere machines. The number of employees is 760 and its net turnover exceeds EUR 357 million per annum.

- **The organiser and the co-ordinator of the programme**: SZIE GÉK and KITE Zrt.

- **Aim:** the handling and operation of premium John Deere machinery (fitted with precision agricultural techniques) distributed by KITE, and the preparation for the handling of automatic steering system in practise.[1]

- **Demand:** lack of knowledge from the side of John Deere machinery procurers resulting from the appearance of new technology.

---

[1] Real-time positioning system operated by KITE, the RTK signaling network. The John Deere AutoTrac (the automated steering system) is considered as the technology entrance and together with the RTK

- **Target group:** the (potential) buyers of premium machinery distributed by KITE; companies operating in the field of agricultural raw material production (plant production) from all company size categories.

- **Participants:** machinery operators in the above mentioned company category. Typically engineers but the course is very heterogeneous in terms of various education levels; the scale ranges from university to vocational qualifications. Most participants are employees with secondary school qualifications. The average age of the participants is 40-45 years.

- **Lecturers:** two people are employed by SZIE GÉK and engaged in TLL solely as part of this programme plus in some cases (at the beginning) an additional KITE employed service engineer deals solely with TLL as part of this programme as well. They are aged between 30-40 years. The lecturers of SZIE GÉK did not take part in either the structuring of learning materials nor in methodology planning. KITE professionals draw up the curriculum (ppt) based on the materials (simulator software and user's manual) of the technology producer.

- **Time span:** 30 hours (6 hours on 5 consecutive days) during winter months when agricultural works are ceased.

- **Locations:** major cities of domestic agricultural regions and the seat of the university (4 locations in total)

- **Framework**: personal participation in technical courses held at institutions equipped with an IT laboratory

- **Extra-curricular services:** Financing: the costs of the programme are paid by participating companies and entrepreneurs. The course is accredited and the tuition fee can be eligible for companies' vocational training contribution.

- **Admission requirements:** none

- **Requirements:** from the management of participating companies' point of view the main objectives are the exploitation of the potential in technology, improvement of workplace performance and quality of work, continuous employability of machine operators, fewer breakdowns through knowledge extension, safer operations and cost reduction. From KITE's point of view the objectives are to have more satisfied business partners, the reduction of service and support time that resulted from operational failures and fewer guarantee issues.

- **Certificate of competencies:** certificate of course attendance and successful exam

Approximately there have been 300 participants of the programmes so far (10 groups).

Implementation and Process Analysis

SZIE GÉK and KITE Zrt. agreed on the launch of the Farmer's Training partner programme in the beginning of 2011. As part of the co-operation SZIE GÉK agreed to organise and execute the training on the handling of the GPS controlled automatic steering system applied in premium machineries and distributed by KITE. This mutual effort is another form of institutionalised co-operation among the parties.

As to KITE, the outsourcing of the training was required due to the lack of capacity within the company to fulfil the task, while it was obvious that the few-hours-long training held as part of the machinery handover process is not sufficient for the safe operation of the technology.

> *'They did not have time or staff for this task. Service engineers have a vast number of other tasks as they sell more from this machinery. They just simply did not want to deal with this.'*

As for SZIE GÉK, undertaking the organisation and execution of the training was mainly encouraged by the additional income (profit) potential[2], but knowledge expansion related to the leading technology and the deepening of co-operation were also motivating.

The co-ordinator did not provide information with regard to the profitability of the course or the distribution of revenues and costs among organising institutions. According to the lecturer interviewed, we can talk about a significant revenue source to the university.

> *'It has to be quite profitable as it was one of the main topics at the opening ceremony of the school year (...) I think that the costs are minimal. The simulator programme and training materials are provided by KITE, just as probation machinery. The Faculty only has to rent the secondary school classrooms and pay us.'*[3]

The first 30 hour-long course was launched at the end of 2011 in Gödöllő. Since then, a total of 10 trainings were held in an additional three locations (Békés, Nyíregyháza, and Csorna) for groups of approximately 30 people. The programme schedule is aligned with agricultural works and courses are delivered during the winter months. The next course is scheduled to start at the end of November 2012.

Locations are selected on a regional basis aiming to locate trainings closer to participants. Despite this, besides tuition fees, travelling and/or accommodation have additional cost implications for most participants. At countryside locations, computer labs are rented by SZIE GÉK from secondary school partners with whom they too have further collaboration.

---

[2] The core activity of the university and the Faculty is primarily loss-making as a consequence of the organisational characteristics and employment practices, and hence supplementary revenues have a huge role in maintaining operability. Those who can bring in such income sources to the university are positioned for the others as a role model to follow. *'The programme co-ordinator was celebrated like a hero that he was able to fix such course.'* (BZ)

[3] There are lots of questions around the lecturer's salary and reimbursement of costs. *'It is not clear whether I do this as part of the compulsory classes or what the proportion is. I paid for my travelling costs and accomodation to external sites (...) the university later transferred a small sum of money but I do not even know which courses this sum belonged to or which account it was.'* (BZ)

The Farmer's Training programme is announced by KITE to its clients and the university has no tasks related to the recruitment of participants. Generally, participants are the buyers (or their employees) of premium machinery but occasionally (in significantly lower number of cases) there are people who only plan to buy, or purchased similar technology from other companies. The latter group well proves the presence of a market niche, the absence of group trainings.

Participants so far were exclusively males aged 25 to 60 and their age in this range approximately followed normal distribution. Machine operators with secondary school or lower qualifications (skilled workers) with (or not even with) basic IT knowledge is typical. However, there were 4-5 people in every group with higher education degree, and deeper IT and GPS user knowledge.

The course has no official prerequisites but it is built on the mini-course that takes place after the handover of the machinery, and presumes some IT literacy of participants. However, the groups are very heterogeneous in this context according to the lecturers. The IT knowledge of older age groups is very shaky, while it is a key factor in the successful completion of the programme.

> *'The majority of them are machinery operators and the elders do not even use computers. Some of them had to be taught basic IT knowledge like practicing the use of the mouse by playing Solitaire.'*

Traditional machinery operator experience is not essential in the case of this course as automation technology is directly addressing errors resulting from the weakness of human abilities, tiredness and the lack of routine.

> *'It does not matter here how good somebody is as a tractor driver because with the presence of a well calibrated system, anybody can carry out work similar to the most experienced machinery operator in his best form.'*

Regarding employment status, the majority is subordinate employee; about 15-20 per cent is mid-level manager while owners (self-employed entrepreneurs, company owners) also have a roughly similar share.

Based on motivation, three quite significant groups can be identified. In the experience of the interviewed lecturer, the majority of participating machinery operators is delegated by the employer and their 'motivation' is not to fail and get fired. The interviewed participant also confirmed that these students are typically older and/or less educated, and show tough resistance.

> *'The luddites of the industrial revolution come into my mind (…) I think it was pointless when we had been explaining to them that this should be learnt, as within a few years' time it will not be possible to buy machinery without this (meaning GPS based precision technique)… so in a few years they will not have a job.'*

The second group comprises of those who realise that extending their technology competences is essential from the aspects of their position in the job market. They are typically younger and do not plan any career changes.

Another group of participants – much smaller share but a typical group – is made up of highly qualified, experienced management level professionals (company owners, managing directors, mid-level managers) who take part in the course to apply the new knowledge within the company and to pass it over to others.

> *'We bought several premium machineries from KITE. While I have experience in precision cultivation, this is a specific technology, specific software, this had to be learnt (...) I was the only one to take part. I would not have been able to go without any employee and it was more cost-effective at the same time. (...) I felt to be able to pass on this knowledge to other people while working.'*

Decision Making

University lecturers aged between 30 and 40 years who have expertise in IT and in the operation of GPS systems were trained in two weeks between August and October 2011 by KITE service engineers in order to be able to fulfil their teaching tasks. Four lecturers were trained in total and two of them actually lead the courses. The lecturers' professional background is engineering and IT. They were selected into the programme on basis of their professional experiences and relatively young age.

> *"We tried to find young colleagues with strong IT competencies."*

According to the interviewed lecturer the selection of trainers was based on the availability of lecturers.

> *"The programme coordinator wanted to use his subordinates. I do not believe that he would have taken the possessing of the proper pedagogical experiences or social skills into consideration."*

None of the lecturers had previous experiences in operating agricultural machineries; therefore the programme initiator KITE Zrt delegated some of its engineers In order to support the lecturers in providing knowledge on technical issues.

> *"I have never in my live driven a tractor and I am not even interested in doing it. I thought them the operation of the computer and talked them about how it should be programmed. Only the delegated experts were able to answer such questions like: What happens if I use the machine this or that way?"*

Didactical Aspects

The curriculum is based on the contribution of the experts delegated by the KITE Zrt. The aim of the teaching material is to support the practical implementation of the automatic steering system. The formal curriculum is supplemented with the teaching of basic IT skills.

Two lecturers are responsible for teaching the application of the software. In the first part of the programme the software is being presented. The second part of the programme is dedicated to solving practical problems created by the simulator software. The training aims at simulating real workplace situations.

"We were sitting at the computers and all of us tried to solve the same problem parallel. The trainers supported us in doing so, but it is extremely difficult with 30 people or more. They tried to help everyone, but it was impossible. There 4-5 people in the group who progressed with the lessons well enough and they also helped the others." (BA)

The lecturers play a supportive role but they also recline upon the informal involvement of the more experienced students into the didactical process. This way of the knowledge transfer has been created spontaneously and can be traced back to the relatively large number of students.

The programme concludes with a final examination composed by a written and an oral part. The aim of the examination is that students prove their ability to operate the automatic steering software. They have to solve a realistic programme on the simulator. According to the interviewees, the examination means a real challenge for those who lack the basic IT skills.

"This short programme is appropriate for those who already have basic software application skills and affinity to the issue. "

For most of students the final examination is a source of stress. According to the lecturers the exam situation causes problems also for those students who are being able to learn the material without any problems.

"This environment and logic is totally strange to the students. Most of them have not participated in formal learning for years or decades and now they have to sit in a classroom, where university lecturers give training to them and at the end they also have to take an examination. They only concentrate on what happens if they fail. First we have to calm them. (...) I have been working as a rescuer on a voluntary basis for many years and the experiences I have collected there help me a lot. I not formally trained for solving such problems."

Evaluation and Impact

At the end of the programme, students have to fill in a form where they can evaluate the programme. According to the interviewees this way of feedback remains, however, only formal and has no direct impact on the training content or on the way of knowledge transfer.

According to the lectures the most important problem of the programme is the unfavourable student/trainer ratio. There would be also a need for more psychological and pedagogic training for the trainers. Albeit fulfilling the requirements of the programme increases the graduates' skill level and labour market value, the acquisition of the new skills is often problematic. The main barrier is the basic prior IT skills and the difficulties of implementation of the acquired knowledge in concrete, real-life situations.

"The simulator is very useful and provides a good opportunity for practicing, but reality is something different. In the simulator you can make a correction if you did something wrong, but if you use a very expensive machine, such kind of mistakes may have very serious consequences. (...) The training programme provides very good basis, but learning such things is only possible in real, practical situations. If you want someone using the technology confidently without fear, he should practice and practice. If the programme makes it clear for the participants, it has reached its goal."

General summary

The programme aims at transforming specific technical knowledge and also provides a general overview about GPS and precision agricultural technology. It is worth stressing, however, that for several participants this programme means the first step into the world of informatics. It seems so, that companies do not care too much about the prior IT experiences of those who they delegate to the programme. According to the interviewed lecturer, companies would not be eager to finance a basic IT course for their employees.

Mainly the younger, more educated employees or company owners can fulfil the requirements successfully. Some of them become capable to transfer the skills gained during the course to his or her colleagues. Others will be able to deeper understand the functioning of the system independently while operating it. Operators may also learn how to detect and avoid basic technical problems which helps the technical support provided by KITE Zrt. The programme also provides opportunities for creating and 'maintaining' professional networks.

During the one-week long programme participants can face the dramatically changed technical requirements. According to our interviewees, this is an easier task for the younger, more educated employees than for the elder ones.

Quality Management Engineering Postgraduate Training Course

General Information

I miss some information about the Debrecen University,

General Description of Selected Programme:

There is a certain imbalance in the basic information about the programmes. It would be find, if you can homogenise the provide information. It must not be exactly the same information for all course, but similar.

- **The initiator of the programme**:
- **The organiser and the co-ordinator of the programme**:
- **Aim**:
- **Demand**:
- **Target group**:
- **Participants**:
- **Locations**:
- **Framework**:
- **Lecturers**:

- **Capacity**: 25 students
- **Training span**: 2 semesters
- **Training costs:** HUF 160,000/ semester (appr. EUR 570)
- **Training Responsible:** professor, dean, quality assurance commissioner of the University of Debrecen
- **The final examination admission:** 60 credits in the manner prescribed curriculum
- **Conditions of Admission**
  - For this postgraduate education can be accepted who has a Bachelor degree in mechanical engineering, information technology engineering, engineer in mechatronics engineering, engineering manager, civil engineering, electrical engineering, chemical engineering, or bioengineering and respectively environmental engineering. In this case their certification will be "quality management engineer"
  - Applicants with a Bachelor degree in non-engineering studies e.g. Engineering Management, Economics, and Natural Sciences or in Information Technology can be accepted for the postgraduate education. In this case their certification will be "quality assurance expert".
- **Extra-curricular services:**
- **Certificate of competencies:**

Implementation and Process Analysis

A basic goal of this training is to provide general knowledge about quality management. In this way the students can acquire professional knowledge on the integrated systems and can better understand the affecting factors of it. They are able to use specific computer programs, procedures to ensure a proper management of the integrated systems. At the end of the training these graduates possess the ability to build and operate integrated systems.

Decision Making

The main goal of the programme is the further training of postgraduate quality specialists. It provides comprehensive theoretical and practical knowledge that makes students capable to use their specific skills in the whole quality management process of an enterprise but first and foremost in the product manufacturing (quality improvement, quality planning, quality assurance, quality control, inspection). Graduates are able to develop and operate management systems based on international standards (ISO 9001, ISO 14001, ISO 22000, ISO 13485, IEC 28001, ISO / TS 16949) in companies of the industrial or of the service sector. At the end of this training the students have the specific knowledge to work in quality management positions of producing and service enterprises, to work in a specialized consultant positioned or to work as an expert in quality management.

According to the interviewee and to the internal documents of the Faculty the following theoretical and practical elements of knowledge can be acquired during the training:

1. Specific knowledge elements:

   - quality control statistics,
   - quality management system implementation and operation techniques
   - knowledge of standards and regulations,
   - auditing
   - fundamentals of quality management,
   - management systems,
   - metrology,
   - supporting quality management systems,
   - corporate governance and quality costs.

2. Personal skills and competences:

   Analytical skills, problem solving, system thinking, communication, innovation, quality management papers, quality management system design, implementation and operation, auditing, management control systems

Didactical Aspects

The above mentioned skills are reached by different didactical methods, like identification of main ideas, underlined ideas, summaries, writings, understanding, memory, notes, reasoning, teaching to think, problem-solving, teaching the art of asking, representations, etc. According to the interviewee the teaching process is very interactive and the students always have the possibility to ask questions and have feedbacks. The Quality Management Engineering Training courses didactically are based on different tools, such as concept maps, VEE diagrams, case studies, simulations etc. Especially in engineering sciences, it is difficult to separate thinking from reasoning and from the resolution of problems. That's why some programs can include exercises to develop the memory, the understanding, or other mental aspects. The intention of using concept maps (a metacognitive tool) is to provide the student with an alternative to rote memorization. Concept mapping enables students to make relationships between concepts explicit. Concept maps can be made based on text, lectures, labs, individual topics or whole courses. The concept maps may follow five steps:

1. Identify the concepts.
2. Establish an order for the concepts.
3. Relating concepts with linking words.
4. Finding cross-links.
5. Examining structure.

Another tool is the VEE diagram that is an aid to solving a problem or understanding a procedure. Concept maps and VEE diagrams are mechanisms for the students that progress enriching their autonomy and efficiency in their processes of construction of knowledge and help to synergize their knowledge of different courses. As these students are professionals with some years of practical experience, the lecturers expect them as equal. The good lecturer-student relationship enables better understanding of the learned topics and an efficient learning.

Evaluation and Impact

The program curriculum is based on a complete market research and on numerous discussions with business professionals. One of the lessons which can be learned is that such programmes can succeed only if they designed and implemented according to the demands of the market. Within the lecturers and guest lecturers of this training program are also experts and representatives of enterprises, who continuously support the Faculty in providing proper, market-oriented skills and knowledge for the students.

General summary

According to the findings of the current case study the project thesis, that the TLL programmes should be more focused on the group over 45 can be refuted. As a technology and innovation intense profession, the engineers must answer to the needs of the market so they are obliged to be aware of the newest technology, methods, and programmes otherwise they would not be able to practice their profession.

As a conclusion of what have been said in the previous chapters the programmes have been beneficial for the students in terms of:

▪ professional competences and skills,

- technical knowledge,
- provided additional qualifications,
- professional and social networks,
- position in the labour market,
- job security,
- work quality,
- preparing labour transitions.

The learning outcome of these programmes has on one hand a higher value on the labour market, because they provide specific skills and competences for the participants. On the other hand the learning outcome (further LO) has a higher value for the students as a result of its practical orientation and student-centred learning involves active learning and a better learning experience. In connection with the LO, the credits based on LO are the only tool to link VET and HE. Credits linked to levels can create all-encompassing credit and qualifications frameworks for lifelong learning.

The most important recommendation for the proposer of similar TLL programmes is a very precise and continuous market research and analyses that allows the evolvement of TLL programmes that answer the needs of the market and the macro environment. As other tertiary higher education organisations or professional fields the faculty has to play an important role in the LLL system. The Faculty has to develop further TLL programmes that are up-dated to the market needs; that provide specific competences and skills; that may fill a market niche and allow the participants to enhance sequential and complementary skills and competences. In that sense TLL programmes can be seen either as a never ending spiral of different skills and competence packages or as a continuous knowledge transfer process.

As result of the intensive changes of the macro environment TLL programmes has to face to challenges of the future. There is a permanent need of complex LLL strategy for the HE Institutions that is based on a SWOT analysis of all current initiatives taken at the university, especially with regard to continuing education. The lifelong learning has to be seen as an attitude and it should be embedded in the culture of the university and as such should be actively promoted towards the society. LLL is a perspective from which scientific research, education and service to society are to be strengthened and vice versa. The universities should have an efficient and effective support structure in place, which contains defined processes, responsibilities, competences and the necessary means to realise the cultural and contextual embedding of LLL at the university.

Generally the potentials of these programmes can be summarized as follows:

- LLL had to be seen by the universities as part of continuing education, which appears peripheral and only dedicated to mature learners. Jane Knight (2003) talks about using Middlehurst's terminology and emphasises two specific requirements, which are also applicable to lifelong learning:
  - The need to bring functions together, horizontally, across different disciplines and service areas of the institution, so that they complement each other and add value in ways that make the whole greater than the sums of the parts (e.g. teaching and

curricula, research, business and community development on the academic side; finance, human resources, marketing and quality assurance on the services side). In that sense we can speak about a synergy.

- The need to operate more formally and strategically as an institution, adopting a proactive rather than responsive stance to engagement. This implies a need to align lifelong learning activities and engagement vertically, from the level of individual academics, through departments, faculties, to the central level.

- Strengthening the provision of university continuing education, catering to the needs of adult participants,

- Consolidating reforms in creating a flexible and creative learning environment,

- Making best use of new technological opportunities

- Strengthening the regional role of universities, by fostering better university-business collaboration,

- Joint projects run by universities in different countries to develop joint curricula, run short-term intensive programmes, or establish thematic networks in different disciplines

- Networks of national experts working together on issues of common interest,

- Publication of comparable statistics indicating how the various education and training systems are progressing

Priority in implementing the strategy is to develop innovative ways of organising continuing education as an interpretation of lifelong learning. The implementation should be followed according to the main strategic goals (e.g. structure, content, context and culture), and to the different levels in the process (management, organisation and support).

Budapest Business School Faculty of Finance and Accounting (BGF PSZF)

General Information

The Budapest Business School, Hungary's market leading and largest college, educating some 20 000 students, was established as a result of the Hungarian higher education integration and on 1 January 2000 the three legal predecessors - the College of Commerce, Catering and Tourism (CCCT), the College of International Management and Business (CIMB), and the College of Finance and Accountancy (CFA) - were merged. These legal predecessor institutions have a long history. In the academic year 2010-2011 the Budapest Business School (BBS) offers 8 undergraduate programmes (in the case of four programmes in foreign languages as well: in English, French, German), 6 post-graduate programmes, 21 post-secondary vocational training programmes, 48 post-graduate diploma courses, Business Administration doctoral school, and numerous adult education programmes to its prospective students.

The BBS provides three types of programmes for adult learners:

1. Two-year advanced vocational programmes (ISCED 5B) for those who have finished their secondary education and do not wish to entrance to HE programmes

2. Post-graduate programmes (ISCED 5A) for those who have already graduated and wish to obtain a specialised degree. Some typical fields: HR specialist, Market Research, Advertising, Financial management, Business informatics, etc.

3. Master programmes. Main fields: Marketing, International economics, Financial Management, Accounting Management

The Adult and Further Training Centre (AFTC) was established in 1993 in order to serve the increasing demand for specialized further training programs. At the beginning of the transition period from the state socialism to the market economy, there was a rapidly increasing demand for new knowledge that was in accordance with the dramatically changed environment. On the other hand the collapse of the state socialism was accompanied by the radical restructuring of the size structure of the Hungarian enterprises, e.g. to the fact that large state-owned companies were replaced by small- and medium sized private enterprises that represented new demand for economically trained leaders. The AFTC provides both advanced vocational programmes and post-graduate programmes.

The Business School offers its training portfolio for two major target groups:

1) Innovative entrepreneurs.

2) External trainings for firms.

3) Fresh graduates having an ambition to continue their studies.

4) Those between 30-50 years of age who want to change their career trajectory.

5) The so-called "diploma-accumulators" who want to get as many diploma as possible (this category may be found in any age group).

6) There is a special segment in the age group above 40 who start to follow their studies. They are mostly successful entrepreneurs who did not have time to learning besides doing their businesses.

At present the Centre has 405 students, 190 of them are female which represents a share of 47% of the total number of students. Unfortunately, we do not have data on the share of students by age groups.

We asked our interviewees to give an overview on the most important segments of the demand side of this market. There was a consent that the global economic crisis had a negative effect on this market and the volume of the demand is decreasing. Beside this general trend the following demand segments were distinguished:

1) Micro- and small firms: the most numerous segment lacking the not only the necessary financial resources but often even the need for further training.

2) Hungarian-owned medium-sized firms: they have need for further training but lack the necessary financial resources.

3) Foreign-owned medium-sized enterprises: they also face with financial constraints and instead of buying external courses they rather organise in-house trainings.

4) Public sector: in most of the cases these institutions (e.g. National Tax Authority) have they own training centres.

5) Large foreign or multinational companies: they have clear training strategy and dispose the necessary financial resources.

As concerning the supply side, the competition is increasing as the high schools and vocational training schools also offer trainings in the market of the tertiary lifelong learning.

The training programmes have their own thematic elaborated by head of the training course that closely cooperates with the head(s) of the related department and with the director of the Centre. The basis of these thematic is always the existing teaching material used in the normal academic programmes which are slightly modified according to the actual needs and to the time limits of the actual courses. The most important difference between the courses offered by the Centre and by the Business School is that the former intends to provide practice-oriented programmes to students belonging to different (i.e. older) age groups having different training needs. This sometimes involves that they invite external lecturers disposing the necessary practical knowledge. The Centre regularly surveys its students by questionnaires in order to evaluate the quality of its training programmes. The problem is that the response rate is very low probably due to the fact that they provide short term training programmes and therefore the linkages between the students and the Business School are not strong enough and the students do not feel that it would be important to send feedbacks on the content and quality of the training programmes.

General Description of the selected Programme:

- **The programme investigated**: Business Coach Postgraduate Programme. This is a joint programme of the BBS and the Flow Group which is one of the largest HR service and organisational development (OD) provider companies in Hungary. The first semester takes place at the BBS and aims to provide theoretical foundations of business coaching. The Flow Group is responsible for the second semester where the aim is to develop the basic

competences of a business coach in various forms of practical training (actions learning, peer learning, problem-based learning, etc.)

- **The organiser and the co-ordinator of the programme**: BBS PSZF and Flow Group.

- **Aim**: to transfer the basic competences required in professional business coach praxis.

- **Target group**: No specific target group. Everyone can apply who has a HE degree.

- **Positioning**: compared to other training programmes in the field the programme investigated is neither psychological nor technological oriented. It represents an HR and management oriented approach of coaching.

- **Participants**: three identifiable groups: there are those who already possess professional experiences in the area (psychologists, HR consultants, trainers, etc.) and what to improve and/or expand their existing competences. The second group is formed by those who want to change their professional carrier and learn a new profession. The third group covers those participants who use the programme in order to support their personal development. The main motivation in all three groups is seeking for knowledge that can be applied in the participants' professional practice.

- **Lecturers**: lecturers from the BBS and experienced trainers and coaches from the Flow Group

- **Time span**: 1 year (two semesters)

- **Locations**: Budapest

- **Extra-curricular effects**: participants learn how to improve their sales and marketing capabilities.

- **Financing**: the costs of the programme are paid by participants. The tuition fee is approximately 1200 Euros for the whole programme which is far below the average price.

- **Admission requirements**: higher education degree

- **Certificate of competencies**: postgraduate diploma

Decision Making Process

<u>Initiative/Development/Structure/Marketing:</u>

The aim of the programme is to provide basic skills for those who want to start/continue their professional carrier as a business coach. The programme is divided into two parts. In the first part the lecturers from the BBS and invited lecturers from private companies teach the basic theoretical foundations of the profession. In the first semester the participants receive knowledge on HR and management-related issues and communication training is also provided. In the second semester the classes take place at the Flow Group where experienced trainers and coaches provide practical training to the participants that are related to six basic elements of the coaching process from the starting point to the successful closing of the coaching process and the supervision of the coach.

The faculty management realised the market demand for a business coach training programme and decided to broaden the portfolio of its adult education provision. The faculty runs a BA and an MA programme in Human Resources Management and the lecturers were selected from this area. It was also taken into consideration that the relatively high prestige of the BBS ensures a good position for the programme on the training market.

Pricing was also an important issue. The programme costs approximately 1200 Euros which is far below the price-level of private training companies that also run such programmes. The programme has a unique position on the market. Its orientation is neither psychological nor technological. It represents an HR and management oriented approach of coaching. One other distinctive feature of the training programme is its practice-oriented character. It is ensured in two different ways. On one hand during the first semester experienced practitioners are involved into teaching (for instance the subject of "Strategic management" is taught by two CEOs) and the courses in the second semester are held by the coaches of the Flow Group. This part of the programme is based on practice and problem-oriented and reflexive learning processes.

Students:

<u>Aims, expectations, motivation and reasons for participation, support and financial aid</u>

The participants have various and differentiated motivations. There are three basic student groups to be identified. The first group is composed by those who already possess professional experiences in the area (psychologists, HR consultants, trainers, etc.) and what to improve and/or expand their existing competences. The second group is formed by those who want to change their professional carrier and learn a new profession. The third group covers those participants who use the programme in order to support their personal development. The common motivation in all three groups is seeking for knowledge that can be applied in the participants' professional practice.

As for the age distribution of the participants, it is deviated between 25 and 50 years. According to our interviewees, rich work and life experiences may help the participants in solving complex and difficult problems they have to face during the coaching process, but the correlation between age and coaching performance is far from being linear and deterministic. There are situations where relatively younger students perform even better than their elder counterparts.

It is a general experience that tuition fee in each case is paid by the students themselves. Students regard their contribution as a personal investment in increasing their labour market value and are highly motivated in the active and cooperative participation in the learning process.

Implementation and Process Analysis

<u>Design and implementation of the programme, selection of lecturers, time period and content of courses or activities:</u>

As mentioned before, the structure of the programme is divided into two parts. In the first semester traditional courses are organised in the BBS and in the second semester intensive group work takes place at the Flow Group.

The training structure was designed according to the planned programme orientation, e.g. the theoretical training block contains subjects like strategic management, leadership, HR management, interpersonal communication. The content of the courses is practice-oriented. On the one hand experienced practitioners are involved as external lecturers (for instance in case of strategic management two CEOs held the courses with full autonomy in designing the content) and on the other hand the content is designed according to the competence needs of a business coach. It means for example that not general HR management issues are taught, but HRM as a development process.

In the second semester training is organised in small groups covering subjects like introduction to coaching, structure of the coaching process, coach competences, team and project coaching, etc. The structure and content of courses are based on international professional standards. The coach competence list recommended by the International Coach Federation served as a basic guide in compiling the courses. Lecturers are experienced practitioners (trainers and coaches).

<u>Didactical adjustments: assistance for learning, former experience of participants and other didactial issues related to the target group (age, no previous academic bacground or no connection to HE-Institutions):</u>

The training programme is a mixture of theoretical and practical training elements. As mentioned before the professional background of the students is rather differentiated. Although there are some who have experiences that are to some extent related to coaching (psychologists, social workers, teachers, trainers, etc.) the majority of the students count as newcomer on the area, since coaching itself is a relatively new professional area, as well. The work of a coach is based on interpersonal connections, where personality, empathy, communication skills, the ability to control emotional life and self-reflexive behaviour are of crucial importance. These elements of the work can only be acquired through experience-based reflexive learning.

According to the specificities of the coaching process the training programme is based on learning forms where students are not passive recipients of knowledge but are actively involved. Their role, however, is not restricted to the active participation; they also have to reflect on the learning process. The emphasis is put on experimental learning and on the differentiated feed-back mechanisms. The courses follow the pre-defined script of "theoretical input, exercise and then feed-back". Classes begin with a short theoretical introduction related to the actual issue which should be prepared and presented by the participants. Then even-numbered or triadic

structured or semi-structured practical exercises take place where there is always an observer who provides peer-review, e.g. students mutually evaluate their performance. In this model knowledge is not perceived as cumulative and linear but interactive and rooted in collective networks. It means, that learning is not purely output-oriented, but a mutual process wherein the actors take responsibility for the outcomes collectively. The aim is not just to transfer knowledge but to create suitable environments and possibilities that support students to collect and construct knowledge and to make students members of "learning communities" that serves as an arena for collective problem solving activities.

Within this framework learning methods are continuously developed, tested, implemented and assessed. The role of the lecturer is not the mediator of existing knowledge but rather the facilitator who supports students in experimental learning, gives feed-back and ensures the frameworks of the process, e.g. specifies learning goals and focuses on learning methods. His or her task is not to give instructions but to create better environment for learning.

Peer review includes the sharing and systematic evaluation of experiences collected during the exercises. Evaluation process is fairly reflexive. At the first stage students have evaluate the situation they have been involved in, reporting about their feelings and direct experiences. Then they have to locate their experiences within the coaching process taking the viewpoint of the client into account as well and at the final stage they have to evaluate what and how they have learned about themselves and about the client. Peer students should assess their counterparts in terms of evaluating the consistency of their performance with the pre-defined coach competences. Lecturers give feed-back also in which they try to strengthen students in areas where they perform well and call attention to the possible shortcomings. Lecturers act as supervisors who support the personal development of the students. Here evaluation is more process-oriented and focuses on the skill-level and learning capacity of the students. It means that measurement of students' performance takes place continuously and includes all stages of the learning process.

A very important practical aspect of the learning process that students have to find a client and coach him or her even during their studies. They regularly have to report about and reflect to their progress. Students have to assess their personal development so as the one of the others. Since it sometimes causes technical difficulties how to find a client, BBS provides the opportunity that participants of other adult training courses may be involved as clients of the would-be coaches. This exercise has the non-intended side-effect that students have to try to "sale" themselves as a professional coach while convincing someone to be their client.

Evaluation and Impact

Regular evaluations of participants (Instutionalised forms), Feedback possibilities during and after the programmes:

There is a formal evaluation at the end of the programme when participants are being asked to fill in a questionnaire. There is also a programme mentor who is responsible for mediating between students and lecturers. The programme management both at the university and at the Flow Group regularly monitor the programme and suggest changes if necessary.

Impressions of lecturers and students about the programme:

Both the students and lecturers gave a positive feed-back concerning the training programme. General opinion among the students is that the programme offers practical and useful knowledge for them. Some of them stressed that the programme made them motivated for further studies. The lecturers also like participating in programme because of the relative small number of highly motivated students and the possibility of using non-traditional teaching methods. As a result of the teaching process based on active involvement and participation of students it is clearly visible during the programme how students are becoming able to apply and modify new knowledge in practical situations. It is one of the main sources of the lecturers' motivation to teach.

Critics and change proposals:

As mentioned earlier there is a programme mentor who mediates between the students and programme management. The programme was restructured more times based on the feed-backs received from the students. An example: in the first year the theoretical part of the project year contained a subject that was called financial audit that was held by the participants totally unnecessary. The management replace a subject by a self-recognition training course.

Evaluation of the contribution of the programm on students (further working life, new stills, new insights for reorientation etc.):

There are no formal mechanisms for following the students' further carrier.

General Summary

What do we learn from this case study with respect to project targets:

As for the specificities of adult students the important lesson was that training content should be based on practical knowledge that are relevant to the participants' professional life and working experiences. These requirements also influence the didactical elements of the teaching process. According to our experiences the effective learning process should be based on active participation and involvement of students, it should reflect to real-life problems and should ensure place for meta-cognitive elements of learning. As for social inclusion, the adult learners' participation in formal training is always an investment that requires extra efforts from the students; therefore the motivation for learning should be sustained continuously. The practice-oriented teaching methods can serve as means for that but it should be noted that adult students also have to learn how to adapt to these way of knowledge transfer and learning.

Which lessons for designing and implementing such programms in other institutions and in other countries:

In designing the core competences that should be transferred via adult learning programmes it is of crucial importance to involve the company representatives in the design process and to ensure place for the discursive reflections of the students, as well.

Which didactical issues should be considered?

Lecturers who want to teach in adult training programmes should be prepared for didactical challenges required by the special target group. From this perspective a mixture of intellectual and social skills such as problems solving and effective team participation is part of the learning programmes. Such a system provide more space for the lecturers to vary the learning and teaching tools in a constant seek for the most effective and efficient learning paths. Lecturers, therefore, should be able to reflect continuously the changes of group-level processes and be able to change the actually used teaching methods and contents which requires the possessing of a certain set of possible methods. The other challenge lecturers have to face to is the very heterogeneous prior learning and professional experiences of the participants. As for the didactical issues it means that trainers must devote special attention to the development of the participants' learning competences.

5. Comparison of the three cases noting both commonalities and differences

Organisation

The first Hungarian case serves as a good example of cooperation between universities and companies. The basic idea behind the programme is to ensure knowledge transfer between the technology provider company and its clients on the intellectual basis provided by the university. The programme represents a special position within the adult training portfolio of the university but is a result of conscious strategy that aims at broadening the partnership with the business life. The case of quality management engineering postgraduate training represents a more 'traditional' approach. The programme is well established and fits unproblematic to the traditions and existing competencies and capabilities of the university. The third case study is about a postgraduate training programme offered by the Budapest Business School Faculty of Finance and Accounting. The program aims at training business coaching. The 1-year long course is based on the cooperation of the Faculty and the Flow Group which is one of the leading HR and organisational development (OD) service provider companies in Hungary. The first semester takes place at the BBS and the second semester is covered by the trainers coming from the Flow Group.

Social reach of the programmes

In the first case the social aim of the programme is to preserve the employability of the participants, e.g. mainly middle-aged machine operators. From the management of participating companies' point of view the main objectives are the exploitation of the potential in technology, improvement of workplace performance and quality of work, fewer breakdowns through knowledge extension, safer operations and cost reduction. The knowledge provider (KITE) aims at having more satisfied business partners, the reduction of service and support time that resulted from operational failures and fewer guarantee issues. Besides financial profits, the programme also contributes to the competence development of the lecturers via the knowledge transfer based on the possibility to become more familiar with the leading edge technologies.

In the second case the programme provides a further specialisation opportunity for engineers with the ambition to improve their labour market position. From the perspective of the participants the programme contributes to the improvement of their professional competencies and as a non-intended effect it may also increase their professional networking capabilities.

In the third case, Budapest Business School offers a special further training programme for those already having a BA or MA degree in the relatively new field of business coaching. The students pays for the training and they regard their contribution as a personal investment in increasing their labour market value and are highly motivated in the active and cooperative participation in the learning process. However, the amount of the fee (1200 euro) represents a huge cost for the majority of the students even if it is lower than the average price of such a training.

Curriculum development

The three cases represent three different logics and ways of curriculum development. In case of the company training programme the curriculum is based on the contribution of the experts delegated by the KITE Zrt. The aim of the teaching material is to support the practical implementation of the automatic steering system, but it also requires the active involvement of the lecturers' professional and didactical experiences. The formal curriculum is, for instance, supplemented with the teaching of basic IT skills. The curriculum of the quality engineering programme is a special mixture of the existing competences of the teaching staff and the implementing of recent technological knowledge. The design of the curriculum is based on market research results and a dialogue with the representatives of different professional organisations. The programme management actively seeks the possibilities to involve external experts into the teaching staff and to incorporate of the programme participants' knowledge into the curriculum. In the case of business coach programme, the curricula is developed jointly by the experts of Budapest Business School and Flow Group, a private company having extensive experiences in the field. Furthermore, the structure of the programme is divided into two parts. In the first semester traditional courses are organised in the BBS and in the second semester intensive group work takes place at the Flow Group.

Training and learning aspects

In case of the company training programme the main challenge for the lecturers is the non-traditional background of their students. Most of the programme participants are relatively low-educated machinery operators who lack both the elementary IT and learning skills. It is also problematic that the middle-aged machinery operators mostly cannot keep up with the more advanced professional participants, therefore the lecturers must recline upon the informal involvement of the more experienced students into the didactical process. In the other case the teaching process is fairly interactive. In order to better suit the adult students' needs innovative didactical methods are applied, such as concept maps, VEE diagrams, case studies, simulations, etc.

The case of business coach programme represents a unique mixture of theoretical and practice-oriented knowledge. The curricula and the teaching methods were developed in a way that it suits the most for the students. The structure of the programme is divided into two parts. In the first semester traditional courses are organised in the BBS and in the second semester intensive group work takes place at the Flow Group. The training structure was designed according to the planned programme orientation, e.g. the theoretical training block contains subjects like strategic management, leadership, HR management, interpersonal communication. The content of the courses is practice-oriented. On the one hand experienced practitioners are involved as external lecturers (for instance in case of strategic management two CEOs held the courses with full autonomy in designing the content) and on the other hand the content is designed according to the competence needs of a business coach. It means for example that not general HR management issues are taught, but HRM as a development process. In the second semester training is organised in small groups covering subjects like introduction to coaching, structure of the coaching process, coach competences, team and project coaching, etc. The structure and content of courses are based on international professional standards. The coach competence list

recommended by the International Coach Federation served as a basic guide in compiling the courses. Lecturers are experienced practitioners (trainers and coaches).

Furthermore, according to the specificities of the coaching process, the training programme is based on learning forms where students are not passive recipients of knowledge but are actively involved. Their role, however, is not restricted to the active participation; they also have to reflect on the learning process. The emphasis is put on experimental learning and on the differentiated feed-back mechanisms. The courses follow the pre-defined script of "theoretical input, exercise and then feed-back". Classes begin with a short theoretical introduction related to the actual issue which should be prepared and presented by the participants. Then even-numbered or triadic structured or semi-structured practical exercises take place where there is always an observer who provides peer-review, e.g. students mutually evaluate their performance. In this model knowledge is not perceived as cumulative and linear but interactive and rooted in collective networks. It means, that learning is not purely output-oriented, but a mutual process wherein the actors take responsibility for the outcomes collectively. The aim is not just to transfer knowledge but to create suitable environments and possibilities that support students to collect and construct knowledge and to make students members of "learning communities" that serves as an arena for collective problem solving activities.

Assessment of the impact of programmes for the participants and for their organisations

The company training programme aims at transforming specific technical knowledge and also provides a general overview about GPS and precision agricultural technology to the participants. It has a clear positive effect on the employability of the students through the development of their competences. Mainly the younger, more educated learners can fulfil the requirements successfully. Some of them become capable to transfer the skills gained during the course to his or her colleagues. Others will be able to deeper understand the functioning of the system independently while operating it. Operators may also learn how to detect and avoid basic technical problems. In many cases, however, the lack of basic IT and learning skills encumbers the successful application of the training material in real workplace context.

The learning outcome of the quality engineering and the business coaching programme is an increasing labour market value of the students, because these programmes provide specific skills and competences for the participants. The practical orientation and student-centred didactics of these curricula also support the participants in increasing their learning skills and capabilities. These programmes however, not only provide the possibility of competence development to the adult learners but the potential to widen their professional networks and business contacts.

6. Typology of Case Studies

	Case Study I	Case Study II	Case Study III
Institutional Setting (University centred, outsourced entity, Knowledge transfer etc………..)	*Cooperation between the university and a private company (knowledge transfer)*	*University*	*Cooperation between the university and a private company (knowledge transfer)*
Target (Unemployed, At risk, Employed, high Potentials)	*Professionals*	*Professionals*	*Open*
Access to the Program (University degree, open to everybody, degree and professional experience etc…..)	*Professional experience*	*HE degree in the field of engineering*	*HE degree*
Construction of the Program: (Incidental, Stand alone, Structural,)	Stand alone	Integrated	Integrated
Didactic Orientation: (Programme, Teaching-Learning, Activities, Practice Orientation) ■ Perspectives of learning ■ Degree of Openess ■ Degree of Flexibility ■ Orientation	Practice oriented Technology-oriented Group learning	Professional learning oriented Face to face Project learning	Practice oriented Face to face Experimental learning
Outcome: Award/certificate/degree type or professional recognition	*Certificate*	*Postgraduate diploma*	*Postgraduate diploma*
Intended Impact: (Career maintenance, Career development, Improved practice, Changed practice)	Preserving employability	Professional specialisation	Career development
Generic or specific career pathways	Specific	Specific	Specific
Evaluation (measured in what ways)	Student satisfaction	Student satisfaction	Student satisfaction
Impact (measured in what ways)	No	No	No
Social inclusion: (human capital, social capital, cultural capital)	Human capital Social capital	Human capital	Human capital Social capital
Quality of Life?: (labour market status; Economic security, Knowledge and Intellectual development, Social relations, Balance of time)	Status preserving	Status improvement	Status + Knowledge and intellectual development
Future prospects	Increasing demand	Stable	Increasing demand

6-Concluding remarks - Recommendations

The experiences gained from the case studies reinforce the experiences gained from other sources such as the literature review or secondary data analysis, that is, the Hungarian higher education system is less open to train people over the standard age. According to the statistics of the Hungarian Education Office, 70% of those participating in tertiary education are under the age of 25. The rate of those between 26-35 years of age is 19%, while only 11% is 36 or older. Statistics show that midlife learners are underrepresented even in part-time student programmes which could give a more flexible framework for their learning activities. In terms of training activity rate of those above 25, Hungary is lagging behind not only the EU-27 average but also behind all THEMP-countries.

Table 1 Participation of adults aged 25-64 in education and training (%)			
	2008	2009	2010
EU-27	9,4	9,3	9,1
Czech Republic	7,8	6,8	7,5
Germany	7,9	7,8	7,7
Hungary	3,1	2,7	2,8
Italy	6,3	6	6,2
Netherlands	17	17	16,5
Spain	10,4	10,4	10,8
UK	19,9	20,1	19,4
Source: Eurostat			

Evaluating the Hungarian policies and priorities concerning both higher and adult education we may state that tertiary life-long learning is currently not an issue in Hungary. The strategic aims of the Hungarian government concerning employment creation and stabilisation are laid down the Széchenyi Plan (central development plan of the Hungarian government). The programme dedicates a chapter to the employment-related issues. The programme identifies the low employment rate as the main problem of the Hungarian labour market and barrier to economic development. In order to overcome these difficulties the strategy puts the emphasis on the training of low-skilled people, especially in case of those between 55-64 years. The programme lays down the necessity of supporting of low educated people in their efforts in completing their primary education in order to prepare them for vocational training, in developing key competencies necessary for obtaining a vocational qualification in case of those who are not capable to finish primary school and in obtaining new vocational qualification for those whose skills became obsolete.

The strategy focuses on developing vocational skills and does not leave space for higher education. Somewhat contradictory, however, it emphasises the high importance of those trainings that are related to the environment protection, health industry and creative industries with special attention to digital skills.

This also means that the tertiary lifelong learning is a neglected area of the Hungarian education and employment policy which have to be strengthen from its basis. As one of the Hungarian expert of the field put it: 'The real need for a coherent system of lifelong learning needs to reconsider the entire education and training system, force to estimate where we are, where we are moving, what problems we are going to face, what should be done, to guarantee quality basic education, to ensure that various educational institutions, non-formal and informal courses provide people with useful knowledge so that one could feel safe and respected in labour market. For this aim there is need to encourage the state institutions, society, business community and citizens themselves to participate in the creation of continuing education and training space.'[4]

Although tertiary lifelong learning represents a significant financial source for higher education institutions suffering from constant lack of financial resources and the participation rate of Hungarian adults aged between 25-64 is amongst the lowest in Europe, the two sides can hardly meet in a win-win situation. The case studies carried out in the THEMP project suggest that one of the most important reasons for this is the lack of appropriate pedagogical framework. Higher education institutions are generally not prepared to teach people with different socio-demographic background than the traditional higher education student population (that is, those older than 25, from social background of lower prestige, with lower qualification, ethnic minorities, disabled people).

According to a national survey carried out in 2004 among the Hungarian higher education institutions, 10% of these institutions does not provide any LLL activity, there is no special department exclusively dedicated to deal with LLL activities in more than the half of these institutions. Another problem is that the training of the trainers is missing in almost 50% of HEI and that 40% of these do not have any marketing strategy. It is not at all surprising then that people belonging to elder age groups, and especially those above 45 are not yet integrated into the system of the Hungarian higher education institutions. This is even more problematic that long-term unemployed, inactive population are over-represented in this age cohort. In other words the training does not reach those who need it the most.

---

[4] Borbély, Sz. Synthesis on national studies on the promotion of lifelong learning, ETUC Infopoint