



**Working Paper
Series**

WP201/2016

Patterns of Co-operation between Higher Education and the World of Work

Andreas Saniter,* Muir Houston[†] & Karsten Krüger[‡]

* ITB Uni Bremen, DE

[†] Centre for Research & Development in Adult and Lifelong Learning,
University of Glasgow, UK

[‡] Fundación Conocimiento y Desarrollo, ES

(This is published jointly as ITB-Forschungsberichte No. 64)

To be cited as Saniter, A., Houston, M. & Krüger, K. (2015) "Patterns of cooperation between Higher Education and the World of Work" CRADALL-ITB Working Paper: CR&DALL 201/2016; ITB-Forschungsberichte 64/2016, CR&DALL: Glasgow (UK) and ITB: Bremen (DE).



Centre for Research & Development in Adult and Lifelong Learning (CR&DALL)

Based in the School of Education at the University of Glasgow, CR&DALL pursues a range of research activities which have relevance to the theme of lifelong learning. Our objective is to make a real difference through the contribution that adult education and lifelong learning can make to social justice, social inclusion and poverty reduction - a contribution that has received relatively limited recognition to date.

CR&DALL's aim is to conduct inter-disciplinary and multi-disciplinary research and development activities in adult education and lifelong learning in order to achieve observable impacts with respect to social justice, social inclusion and poverty reduction. CR&DALL pursues a range of research activities which have relevance to the theme of lifelong learning. Currently our research focus includes Citizenship, Civil Society, Community-based Learning, Literacy, Poverty and International Development and Widening Participation.

The Working Paper series provides a forum for work in progress which seeks to elicit comments and generate discussion. The series includes academic research by CR&DALL Core Members, Affiliates and Associates, PhD students and invited guest contributors

Editor: Dr Muir Houston

Editorial board: Prof. Nicki Hedge; Dr Catherine Lido & Dr Jesus Granados-Sanchez

Working Papers are available in electronic format at <http://cradall.org/workingpapers>

Please address comments and/or queries for information to:

<p>CR&DALL St. Andrew's Building University of Glasgow 11, Eldon Street GLASGOW G3 6NH Scotland <i>or</i> E-mail: cradall@glasgow.ac.uk</p>
--



Patterns of cooperation between Higher Education and the World of Work

Andreas Saniter (ITB Uni Bremen, DE), Muir Houston (U Glasgow, UK) & Karsten Krüger
(Fundación Conocimiento y Desarrollo, ES) (Eds.)

2016

This publication is based on the results of the project LETAE Labour Efficiency of Tertiary Adult Education. It is co-funded with support from the European Commission (LETAE-project n° 539382-LLP- 1-2013-1-ES-ERASMUS-EQR).



Funded by the Erasmus+ Programme of the European Union

This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



This work is licensed under the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-sa/4.0/>.

You are free to:

- **Share** — copy and redistribute the material in any medium or format
- **Adapt** — remix, transform, and build upon the material

Under the following terms:



Attribution — you must give appropriate credit



NonCommercial — You may not use the material for commercial purposes.



ShareAlike — If you remix, transform, or build upon the material, you must distribute your contributions under the same license as the original.

Notices:

You do not have to comply with the license for elements of the material in the public domain or where your use is permitted by an applicable exception or limitation.

No warranties are given. The license may not give you all of the permissions necessary for your intended use. For example, other rights such as publicity, privacy, or moral rights may limit how you use the material.

This report is a collaborative report using parts of the national reports produced by:

Laureano Jiménez Esteller, Alba Molas (U Rovira i Virgili) & Karsten Krüger (Fundación Conocimiento y Desarrollo) (Spain)

Andreas Saniter & Rainer Bremer (ITB Uni Bremen) (Germany)

Muir Houston & Mike Osborne (U Glasgow) (Scotland)

Kıymet Selvi, Dilruba Kürüm Yapıcıoğlu & Ayşe Dilek Keser (Anadolu University) (Turkey)

Yulia Shumilova & Yuzhuo Cai (University of Tampere) (Finland)

Michal Kaderka & Jakub Štoгр (Navreme Boheme, s.r.o.) (Czech Republik)

As it is a collaborative report, sections taken literally from the national reports are not marked as direct citations.

1. Introduction	7
2. Methodological questions.....	9
<i>What is University adult education?</i>	9
2.1. <i>Case study approach</i>	10
2.2. <i>Mutual Learning Seminars</i>	12
3. Institutional context.....	14
3.1. <i>Short overview of the educational systems and educational structures</i>	14
Spain	14
Germany	17
United Kingdom (Scotland)	18
Turkey.....	20
Finland.....	21
The Czech Republic.....	23
3.2. <i>Systems and structures of work based/work related learning in HE</i>	28
Spain	28
Germany	30
UK/Scotland	32
Turkey.....	33
Finland.....	34
Czech Republic	35
3.3. <i>Funding</i>	39
Spain	39
Germany	41
United Kingdom - Scotland	42
Turkey.....	43
Finland.....	45
Czech Republic.....	45
3.4. <i>Statistics on Educational structures and Graduate labour markets</i>	48
4. Case study fiches.....	56
4.1. <i>Spanish Cases</i>	56
4.2. <i>German Cases</i>	59
4.3. <i>UK/Scottish Cases</i>	62
4.4. <i>Turkish Cases</i>	65
4.5. <i>Finnish Cases</i>	68
4.6. <i>Czech Cases</i>	71
5. Tentative typology	74
6. Potential of university-business cooperation in the field of higher education.....	81
<i>Conclusions</i>	85
7. Literature.....	87

Tab. 1 Levels of Education and Qualification following ISCED and EQF.....	10
Tab. 2 Educational structure in 2004 and 2013 in Spain by age groups (25-34 and 25-64).....	16
Tab. 3 Higher education institutions in the Czech Republic	25
Tab. 4 Modules of “ship management”	31
Tab. 4 Economic Indicators of the Training within Enterprise ¹	39
Tab. 5 Participants by education level in Training in Enterprise	40
Tab. 6 Individual Training Permissions.....	40
Tab. 7 Apprentice wages (€) in West-Germany	41
Tab. 8 Funding of HE and Adult education in DE.....	41
Tab. 9 Ministry of National Education’s budget distribution for adult education*	44
Tab. 10 Budgets of Ministry of National Education and HEC+Universities*	44
Tab. 11: Public support for tertiary education	46
Tab. 12: Fees and financial support for higher education	47
Tab. 13 Percentage of younger adults (25-34 years old) with tertiary education	48
Tab. 14 Participation rate in education and training (last 4 weeks), Age from 25 to 64	49
Tab. 15 Providers of non-formal education and training activities, 2011	50
Tab. 16 1 st Typology of University Lifelong Learning Programmes	77
Tab. 17 2 nd Typology of University Lifelong learning Programmes	79

Figures

Figure 1 Structure of the Spanish education system	15
Figure 2 The relevant part of the German educational system.....	17
Figure 3 National Structure Scotland 2014/15	18
Figure 4 The Finnish system of education.....	22
Figure 5 The Czech system of education.....	24
Figure 6 Number of Students in 1989 – 2014 (CZ)	26
Figure 7 Share of people with higher education	51
Figure 8 Unemployment rate of people with higher education of the whole population	52
Figure 9 Unemployment rate of people with higher education.....	53
Figure 10 Higher education mismatch rate.....	54

1. Introduction

It has long been suggested that in order to meet the requirements of the knowledge economy, university provision for adult learners is crucial. In its resolution of 2011 on modernising universities for Europe's competitiveness in a global economy, the European Council claimed

“to improve the identification of training needs, increase the labour market relevance of education and training, facilitate individuals' access to lifelong learning opportunities and guidance, and ensure smooth transitions between the worlds of education, training and employment.” (EU 2011a)

The Council recognised the need to increase lifelong learning opportunities to: widen access to higher education, boost employability and upgrade the skills of the adult population. This requires close cooperation between public services, education and training providers and employers at all levels.

One of the key elements of this modernising strategy is to encourage higher education (HE) institutions to be more accessible to non-traditional learners including adult students; and, to develop further their role in lifelong learning, increasing, where appropriate, the diversity of the tertiary education system.

This is confirmed in the strategy framed in the new master plan *Europe 2020*. In the strategy paper *“Supporting growth and jobs – an agenda for the modernisation of Europe's higher education systems”* (EU 2011b) one of the key policy issues is to encourage a greater variety of study modes (e.g. part-time, distance and modular learning, continuing education for adult returners and others already in the labour market) to increase flexibility and therefore widen access.

However, each policy and their concrete outcomes must be subject to an evaluation measuring their efficiency. It is thus important to develop tools to evaluate the strategies of universities to provide programmes of study which develop labour market relevant skills and competences. This is of particular relevance to their programmes of adult education, which are at least in part mainly, funded by students themselves or by enterprises. Both students and enterprises expect an adequate return on their investment. An evaluation of the labour market efficiency of such programmes will be a valuable resource to allow institutions to adapt their programmes to local and regional labour market needs and to avoid poor investments or labour market and skill mismatch.

The LETAE project examines selected cases of *apparent good practice* in the participating countries of Germany, Scotland, Finland, Turkey, Spain, and Czech Republic; analysing potential and examining barriers to their successful articulation with the labour market, establish a dialogue between institutional and external stakeholders about ways to increase the labour market efficiency of the programmes and provide tools that attempt to measure this.

This project will promote the labour market articulation of tertiary adult education programmes, facilitated by universities, in relation to the demands of external stakeholders in the form of industrial organisations, enterprises, public sector and worker's representatives. It is expected that, orientation to this specific, but still broad area of demand, will contribute to mitigate and ameliorate the qualification gap outlined above. In the following, we present the results of a study about university-enterprise cooperation in the field of tertiary lifelong learning (TLL), university adult education or using the old fashioned term continuous training at tertiary level.

We selected and analysed three cases per country of university-enterprise programmes for adults, who already have labour market experience but who want to participate in education and training measures offered by universities to improve or consolidate their labour market position. These case studies are complemented by desk research about the institutional context of university higher education in each of the partner countries.

Core questions not only address the regulation of TLL systems within national qualification systems, but also examine the degree to which labour market actors are integrated in the design and delivery of the programmes. The project asked specifically for universities programmes in the area of further training to improve or consolidate the labour market position of adult students and its impact on their work performance. For this reason, we excluded all experience of business-university cooperation in the field of initial educational programs, which participants tend to enter directly after compulsory education.

We do not consider programmes analysed as representative of the provision of continuous education in the respective countries, but all of them show both potential benefits and obstacles of cooperation and collaboration between enterprises and other external stakeholders in the field of education. Chapter 2. *Methodological Questions* presents briefly the methodologies – case studies and mutual learning - applied in the project.

National strategies towards TLL depend strongly on the respective national educational systems: for this purpose Chapter 3. Institutional context offers a comprehensive insight into the educational systems of participating countries, focussing on similarities as well as differences that might strengthen or weaken mutual learning.

Chapter 3. *Institutional Context* is subdivided into 4 sections, beginning with a short overview of the educational systems and educational structures (3.1) of participating countries. Section 3.2 focuses on the systems and structures of work based/work related learning in HE. It will be no surprise if we mention in this introduction that funding is one of the most crucial elements in all the selected cases, and, given the importance of this issue section 3.3 is devoted to funding and the different approaches and mechanisms adopted by participating countries. Although the project and this report are drawn from qualitative research, the presentation of macro-data provides a context within which to situate the relevance and potential impact of cooperation between universities and the world of work, and thus some basic statistics from official sources (e.g. OECD; Eurostat) are quoted and analysed briefly in section 3.4.

A comprehensive overview of the 18 cases (3 per country) can be consulted in Chapter 4 *Case Studies*; detailed comprehensive case studies as well as the national reports are available for download on <http://www.letae.eu/>. Chapter 5 *Tentative typology* offers attempts to classify the university lifelong learning programmes in respect of the social needs, to which they gave response.

Chapter 6. *Potential of university-business cooperation in the field of higher education* consists of a summary in respect of our findings on university-business cooperation in the area; and, the potential, which it offers to align university education and training more closely to the labour market.

2. Methodological questions

In this section, we will briefly discuss some methodological issues starting with the question, what we consider as university adult education. This is followed by two sub-sections on the methodologies of the empirical research: non-representative multiple case studies and mutual learning seminars.

What is University adult education?

In recent decades, lifelong learning has played an important role in EU-education policies. In the key Commission document “*Making a European area of lifelong learning a reality*” (EU Commission 2001a) lifelong learning is defined as

“all learning activity undertaken throughout life, with the aim of improving knowledge, skills and competences within a personal, civic, social and/or employment-related perspective” (Ibid p9).

The same document welcomed the idea that lifelong learning is not restricted to a specific age or education period and neither to a specific learning mode. The definition includes all forms of learning.¹ When the focus shifts to learning activities of those people who have left initial education and training, lifelong learning is often termed as adult learning. In the Communication “*Adult learning: It is never too late to learn*” the European Commission (2006) stated:

“Definitions of adult learning vary, but for the purpose of this Communication it is defined as all forms of learning undertaken by adults after having left initial education and training, however far this process may have gone (e.g., including tertiary education)” (Ibid p2).

Moreover in the *European Adult Learning Glossary, Level 1* (2008: 5) Brooks & Burton include in adult education all formal, non-formal and informal learning activities of adults. It also includes higher education in the case that the adult does not come directly from other education tracks. That means, initial higher education of students, entering from secondary school, are excluded from this definition. But such a definition must also include initial (higher) education where the students are considered to be adults. In this sense Bélanger & Valdivielso (1997) characterized adult learning as any educational activity structured in terms of content and time frame, and aimed at serving adults who are outside of the formal education system (see also Bélanger & Bochynek 1997).

Tertiary education is defined as the level of education following secondary schooling – provided by universities and other higher and further education institutions. Often, tertiary education is

¹ The OECD (2007) referring to Behringer & Cole (2003:7) used a similar definition: “Learning activity that is undertaken throughout life and improves knowledge, skills and competences within personal, civic, social and/or employment related perspectives. Thus the whole spectrum of learning – formal, non-formal and informal, is included, as are active citizenship, personal fulfillment, social inclusion and professional, vocational and employment related aspects.”

used as a synonym for higher education. Tertiary education is not the same as university education. Universities are a core element of tertiary education, but there are other providers of tertiary education such as tertiary colleges or higher vocational schools². This is reflected in the revised ISCED 2011, where eight levels are distinguished reserving the levels ‘5’ to ‘8’ for higher education. Similarly, taking the qualification as point of departure, the European Qualification Framework also established eight levels applying the last four to higher education which also includes *Continuous Vocational Education and Training* (CVET, see **Tab. 1**).

Tab. 1 Levels of Education and Qualification following ISCED and EQF		
	ISCED¹	EQF²
Level 5	Short-Cycle Tertiary	HE short cycle (CVET)
Level 6	Bachelor or Equivalent	First cycle (CVET)
Level 7	Master or Equivalent	Second cycle
Level 8	Doctoral or Equivalent	Third cycle

¹ The ISCED is a frame to classify achieved education levels allowing an international comparison. On the contrary, the EQF defined the levels of qualification using three criteria: knowledge, skills and competences. But as we see, from the 5 level onwards, the congruence between both classifications is very high. The ISCED defines: “*Tertiary education builds on secondary education, providing learning activities in specialised fields of education. It aims at learning at a high level of complexity and specialisation. Tertiary education includes what is commonly understood as academic education, but is broader than that because it also includes advanced vocational or professional education*” (UNESCO 2011: 42)

² European Qualification Framework, see European Union (2008)

Our project sought to investigate the social impact of adult education provided by universities or universities of applied science, excluding other types of adult education, namely CVET. Following the aforementioned pragmatic definitions, we are studying the learning provision of universities for adults who have left initial education and training many years before (in general, people older than 25 years).

We prioritise the impact on the labour market situation of the learners. This does not exclude studying the relationship of university adult education to the *initial* higher education curricular structure of the Bologna cycle.

2.1. Case study approach³

This chapter presents the methods used for collecting data on the university adult education programmes based on the cooperation between universities and enterprises aimed to develop and test tools to measure their social effectiveness. Different EU-wide *University Adult Education Programmes* were selected, studied and compared in order to detect the relevance of work-linked learning and the social effectiveness of *University Adult Education* (UAE). Our methodology is based on a multiple case study approach combined with desk and statistical research. Additionally mutual learning seminars, both on national and transnational level, were

² For instance in Spain, training for higher technicians, considered as part of higher education, is provided by vocational schools.

³ This section draws heavily on (Mariani & Krüger 2013)

designed in order to involve project external experts and practitioners from the field of UAE in the project development from the beginning.

The Case Study method is deemed to be particularly well suited to study contemporary phenomena within real-life contexts, where the relevant behaviours cannot be manipulated (Yin, 2012). More specifically, we adopted a *Multiple-Case Study* research strategy, comparing different university programmes oriented to adult learners across a selection of EU countries and Turkey.

Our study was exploratory (rather than purely descriptive or fully interpretative) in nature, answering the following research question: ‘what are the conditions under which UAE programmes become socially effective in terms of access to jobs and quality of work?’

The analysis of social effectiveness was targeted to study the degree to, and the conditions under which:

- i) the different programmes successfully open higher education systems to adults; and,
- ii) participation in such programmes facilitates the transition between labour market episodes for adults to achieve the desired quality of work.

The underlying themes were:

1. The effectiveness of UAE in increasing the value of the individuals’ capital stock and improving their position in the labour market.
2. The impact of UAE on labour performance in the work place.

To evaluate the social effectiveness of programmes, our project adopted a twin perspective:

- a) The individual perspective: individuals, who have decided to participate in learning programmes, always develop some expectation of its impact on their life. The aim is to discover if the UAE programme has fulfilled these expectations in terms of access to jobs and/or quality of work.
- b) The enterprise perspective: enterprises facilitating employee access to (university) adult education through in-house or external training have some expectations on the return of investment. Our approach allows us to evaluate the impact of participation in UAE-programmes from a multiple capital perspective on the impact of programme participation on work performance.

A second aspect analysed by the project was the relevance of work-related learning provision for the effectiveness of these programmes. It does not ask so much about the relevance of internships but for the interrelation of learning with concrete working environments or the application of work oriented didactics (problem based learning, project learning, collaborative learning etc.).

The construction of an analytical model is a prerequisite for specifying the data collection tools in the form of interview protocols ((see Mariani & Krüger 2013)). The units of analysis were concrete University-based Lifelong learning programmes. Eighteen (three in each Country) programmes provided a cohort of case studies for comparative analysis. Our case studies relied principally on the systematic semi-structured interviewing of key actors.

In a semi-structured interview, the researcher must have a set of pre-defined questions ((the interview protocol)) at hand, but he or she is free to change the order of the items and to add or skip some. Semi-structured interviews are less systematic and more qualitative in nature than structured ones, allowing the collection of a richer set of data and evidence. The drawback is that a systematic comparison among the answers provided by respondents might be difficult.

An interview protocol refers to the instructions and to the list of specific open-ended questions that were submitted to each target group of respondents. We designed a unique interview protocol useful both for analysing the variables for social inclusion and for TLL teaching and learning methods. In addition, our research approach distinguishes between two main types of target: TLL providers and TLL users (students). Because of this, two different versions of the unique interview protocol were designed (see www.letae.eu)

To select the interviewees, a snowball process was followed:

1. Start by interviewing one decision maker of the HE institution within our research programme (i.e. the one who makes the agreement). At the end of the interview, we asked him/her to indicate other decision makers, lecturers and students who can conveniently be interviewed⁴;
2. Contact and interview people identified by the first interviewee and ask each one to indicate other decision makers, lecturers and students who can conveniently be interviewed until the necessary set of information and data has been collected.⁵

Before starting to investigate all the case studies (which proceeded in parallel), the interview protocols were tested in one preliminary pilot study in Spain. This pilot testing provided evidence for the validity of the overall research plan ensuring that:

- The questions were clearly understood and unambiguous;
- The interview length was acceptable;
- The collected data supported the research goals.

To perform the necessary analysis on the collected data, interviews were audio-recorded and transcribed. Together with additional secondary data, the interviews were used to write individual case study reports that were proof-read by the interviewees. To maintain consistency and ensure comparability, these reports maintained a common structure very similar to the structure of the interview protocol.

2.2. Mutual Learning Seminars

The second main pillar of the empirical methodology adopted in the project was the mutual learning seminar approach developed and successfully applied in a previous research project.⁶

Mutual learning has become prominent in the context of the *Open Method of Coordination* (OMC) of the EU to coordinate policy development in such key areas as employment, social policy and education & training. The OMC assumes that member states or entities (e. g. universities) within a state can learn from each other by exchanging apparent good practice experiences and jointly establishing benchmark indicators. In another context, mutual learning is seen as an essential element of policy development based on public participation (see Daniels

⁴ This also allowed the possibility to ask the interviewee, which questions in the interview protocol are in need of further elaboration.

⁵ The overall number of interviews to be performed depends on the information collected in each interview. Again, in this case, we're not aiming to achieve a representative sample. On the contrary, the aim should be to reach 'saturation', that is each partner should perform enough interviews to generate sufficient data about the subject under investigation (or to answer in a satisfactory way the questions contained in the interview protocol).

⁶ We make reference to the THEMP project co-funded by the European Commission within the Lifelong Learning programme, in particular Mariani & Krüger, 2013.

& Walker 1996). Our project adopted this participatory idea by creating a forum not only to present our research results and discuss them with practitioners, but also to reflect upon, share, consolidate and transfer experiences of university adult education more generally. This will hopefully influence the practice of adult education in European universities.

In this sense, mutual learning is a dialogue between project researchers, external experts and practitioners in order to facilitate the design, implementation and evaluation of project results; and, improve the practice of adult education in universities. It originates from the interrelationship between good social science, good practice and good learning. With reference to the learning concept of Kolb (1984) the mutual learning workshops combine social scientific conceptualisation, scientific observation, and active experience; thus creating space for reflective discussions around adult education at universities.

In our project, mutual learning has been interpreted as an active component of social learning. “The process of defining the problem and generating alternatives makes for meaningful social learning as constituencies sort out their own and others’ values, orientations and priorities” (Daniels & Walker 1996: 73). Mutual learning uses techniques that facilitate understanding of such complex matters as university adult education and its link to labour markets and employment policies. It combines the presentation of information with dialogue in order to allow participants to clarify the scope and definition of problems within the field of study.

These techniques are designed to stimulate creative discussion among participants from different countries and/or different kinds of institutions. Because of the nature of the project, our mutual learning seminars did not aspire to develop new policies or strategies on university adult education. The objective was to provide an informed environment for the discussion of different experiences of these issues, thus creating ideas and inputs for the future development of strategies and policies at universities, as well as indicators for future research in the field.

Two national mutual learning workshops in each participating country and two transnational mutual learning workshops comprised an essential part of the overall project flow. The first workshop was intended to promote discussion on the proposed approach and methods and their viability and suitability for the analysis and design of TLL as a viable component of social and employment policies. The objective was to introduce the viewpoint of practitioners in the field of university adult education into the approach and methodology design from the beginning.

The second workshop was convened to discuss the research findings and their implications for TLL development within the framework of social and employment policies. As such, both transnational workshops can be interpreted as opportunities for validation and exchange rather than data collection.

The content and structures of the national WS were more open; trusting that researchers from participating countries know best which themes would attract their national experts most – and would deliver best feedback to the LETAE consortium.

3. Institutional context

3.1. Short overview of the educational systems and educational structures

Spain

The **Spanish** education system is characterised by unique education tracks at the level of compulsory primary and secondary education, where the differentiation of type of schools is done by the funding of the institutions: public schools, private school and private schools with public funding.

After the compulsory stage, there are two education options to follow (see **Figure 1**):

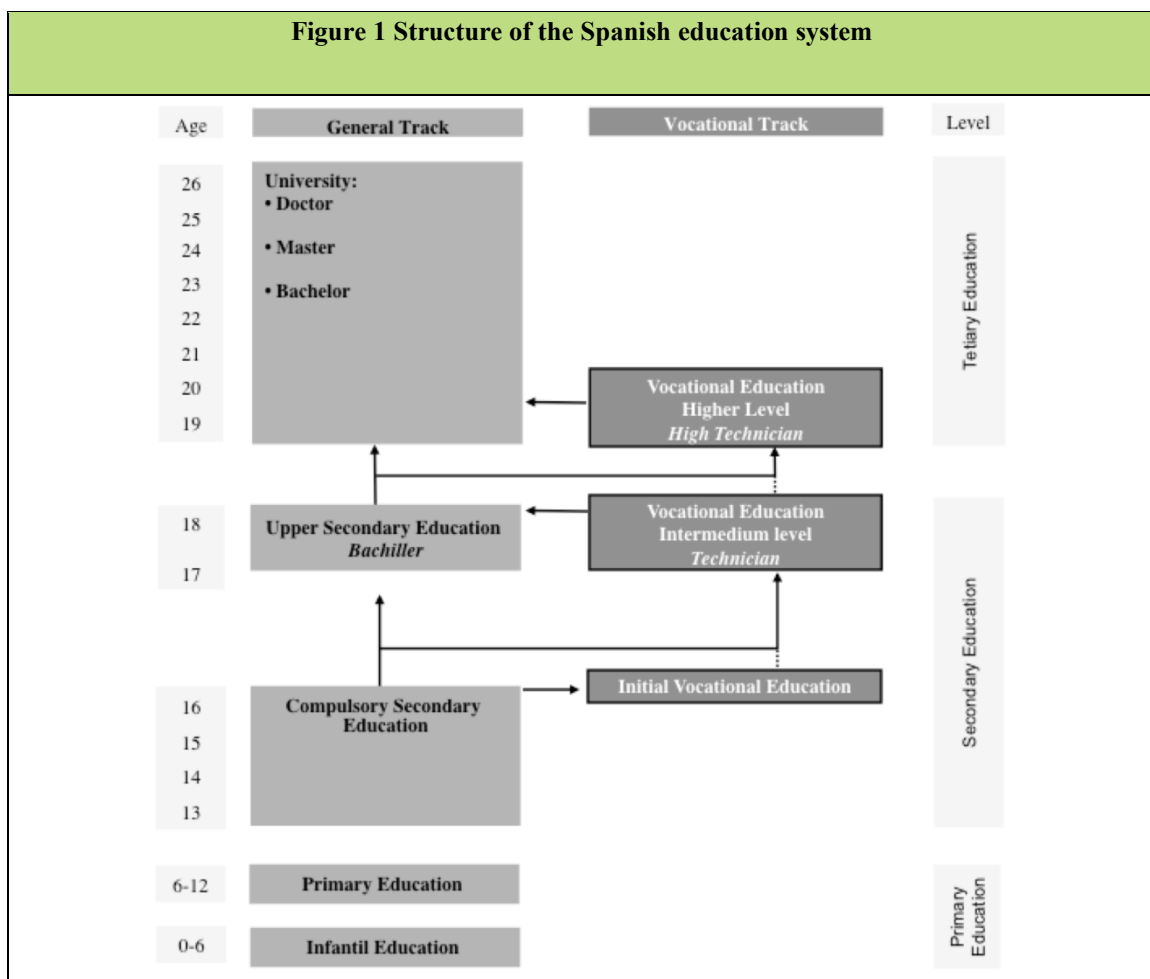
- a) The general education track: which delivers an education certificate allowing access to higher education; which can be higher vocational education & training or university education;
- b) The vocational track: which delivers a medium technician certificate; the certificate together with an access test permits the student to access higher vocational education & training leading to higher technician certification. This certificate permits direct access to universities.

This means, that the higher education systems is clearly structured for a vocational track (higher technician) delivered in vocational schools and a general track at universities and associated education centres. The vocational track is structurally considered as a prior step towards university education. University education is characterized by its institutional homogeneity; except for specific academic fields (Sports, Music and Arts), while official higher education degrees (Bachelor, Masters and Doctorate) are facilitated by only one type of institution: the full university.

Within this structure, demands for adult training derived from new political, cultural and labour conditions are not included and are delivered outside of the traditional educational system. Some are provided by social organizations through programs of *Vocational Training and Continuing Education*, and others directly by civil organizations, often without due social recognition. Some autonomous communities such as Andalusia, Catalonia, Galicia and Valencia approved specific laws for adult education but with the same practical difficulties of application. Outside the traditional education system, there was an intense development of vocational training in the 1980's. The INEM (currently the *Public Service of State Employment*) activities during this period were based on a strategy of continuing improvement of *Vocational Training and Professionalism Certificates*. Through social dialogue between the administration, trade unions and employers' associations a series of national agreements for continuing training have been established since 1992. Starting from these agreements it was understood that professional training was fundamental in responding to labour market needs.

In parallel, the 1983 *Law of University Reform* authorized universities to carry out unofficial teaching activities and offer continuing education and training, and therefore they were allowed to attract different student profiles. Moreover, this law allowed the possibility to offer autonomous degrees alongside the official provision. In practice, continuing education and training became widespread in the 1990s, focused at the graduate level and with a strong

professional orientation. Given the proliferation of programs of continuing education and training offered by Universities and also the existence of varied programs offered by non-university entities, there was an increasing need for homologating denominations and characteristics. At the University level, the objective was to apply some homogeneous criteria and to secure the specificity and quality of continuing education and training programs. Two agreements arose, one in 1988 for the Catalan universities, on the denominations and characteristic of the graduate degree studies and their certification; and another in 1991, for all Spanish universities, distinguishing the scope of continuing education programs between *master*, *specialist*, *expert* and postgraduate diploma degrees. The first one, of at least 50 credits, has as prerequisite a university degree; *specialist* and *expert* were programs of at least 20 credits directed at graduates or undergraduates but with at least a *Baccalaureate* certificate; the ability to grant a postgraduate diploma would be for other training initiatives.



However, although universities' continuing education and training depends on the autonomy of each institution - there are no legal guidelines - the objective of supply flexibility and better matching with demand was achieved; and, the practice created a varied and heterogeneous supply of programs obstructing recognition and transferability among institutions. At the same time universities began to develop short courses to address specific social specialisation demands, among which we find firm-tailored courses with even more heterogeneous denominations and durations, including language courses or initiatives such as the university for

people (focused on older participants of more than 50 or 55 years). In this way university continuing education and training has responded to the three dimensions mentioned above: *professional*, *social* and *academic*. Regarding the final dimension, one must also bear in mind the realization on the part of the adult population university official studies: at the moment Bachelor, Master and Doctorate.

The relevance of university continuous training – compared to many other EU-countries – must be seen in the context of the Spanish education structure and the development of the labour market. The educational structure of the Spanish population is a unique case among the EU member states. As Table 2 shows in Spain the rate of low educated people is with distance the highest followed by the rate of high educated people among the population between 25 and 64 years. But among the population between 25 and 34 years this is a reverse situation, the rate of people with higher education is higher than the of people with a low education level. In both age cohorts, the lowest rate is the one for medium educated people. This dual structure is persistent over time (taking as reference the period from 2004 to 2014), observe, however that the rate of people with low education levels is decreasing constantly, meanwhile the rate of people with medium and higher education is increasing.

On the other side, studies about sub-utilisation of labour indicate continuous mismatch (ILO, 2014). That means, the Spanish rate of underemployed higher educated people is always the highest or at least the second highest rate among the analysed countries (Cedefop, 2015).

In this context, there is a considerable demand for continuous higher education facilitating additional certificates so improving the labour market perspective of graduates. As mentioned before, this type of higher education and training is not regulated by the state in terms of content and fees; however, there is a more or less coherent structure observable with mainly one and two year programmes, but also shorter and tailor made programmes.

Tab. 2 Educational structure in 2004 and 2013 in Spain by age groups (25-34 and 25-64)				
	2004		2014	
	25-34	25-64	25-34	25-64
ISCED 0-2	37.4	54.6	34.4	43.4
ISCED 3_4	23.4	18.6	24.1	21.9
ISCED 5-8	39.3	26.7	41.5	34.7

Source: Eurostat Labor Force survey - annual data consulted 02/04/2016

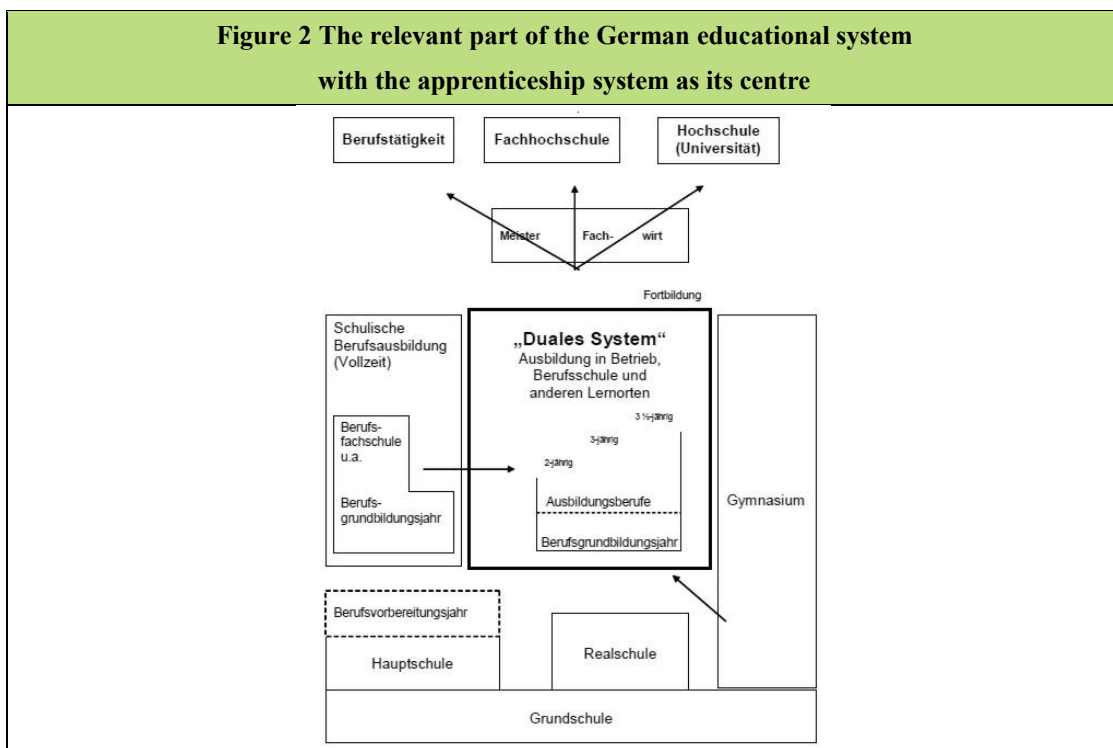
On the other hand, even in the traditional higher education track, there is an increasing demand for a stronger vocational orientation of university education to deliver more industrial Master and PhD programmes. In so far, the issue of work related or work based learning at universities is one of the main topics in the Spanish higher education debate.

Germany

The structure of the *German* Educational System is based on two mighty pillars: At the end of the 4th year⁷ of elementary school pupils have to decide (or the decision is made by teachers or parents) whether they want to go to university later and choose the track *Gymnasium* or whether they want to start an apprenticeship after their 10th year of (compulsory) general schooling (*Hauptschule* or *Realschule*).

Compared to this distinct frontier or threshold the difference between General and Higher Education (GE and HE) is not that sharp. The German *Gymnasium* covers the middle and upper parts of GE. At the upper stage it performs like a college, (which may be part of university level studies in other countries), the assignment of *Gymnasiale Oberstufe* either to GE or to HE is not a trivial thing.

The attempts to bring HE and work related learning together started in Germany with the latter! The ordinary career of a German young adult led from compulsory school to an apprenticeship; then to CVET – pathways leading to HE have been excluded for the mass of school leavers; HE used to be an exclusive field for a small privileged amount of population (~10%): Any bridge between HE and work related learning had to be built from the VET-side. **Figure 2** illustrates the way decisions can be made.



This section aims at understanding the way Germany has developed to what we have to face now in a more or less European defined situation. To characterise this situation from the general German perspective (as the latter is bound to the facts set by the recent reforms resulting in an elaborated VET regime) the leading questions of our project require a different interpretation. In Germany the need to open HE to workplace or work related learning cannot be the way to

⁷ At age 10

include the latter into the Educational System — as there already is a broad offer of vocational learning fixed in institutional structures; it is a question of opening workplace and work related learning to HE. In Germany the last step to terminate reforms aiming at parity of esteem now seems to come: Replacing the traditional VET regime by HE will import all the problems other countries struggle with to integrate workplace and work related learning into HE.

The two mighty pillars sketched in general respect of vocational education (*Abitur* resp. *Haupt-/Realschule* followed by IVET) find their prolongation afterwards: HE at university (or university of applied sciences) level was only available for applicants with *Abitur*; the standard career paths for others –after finalising IVET- were CVET-courses.

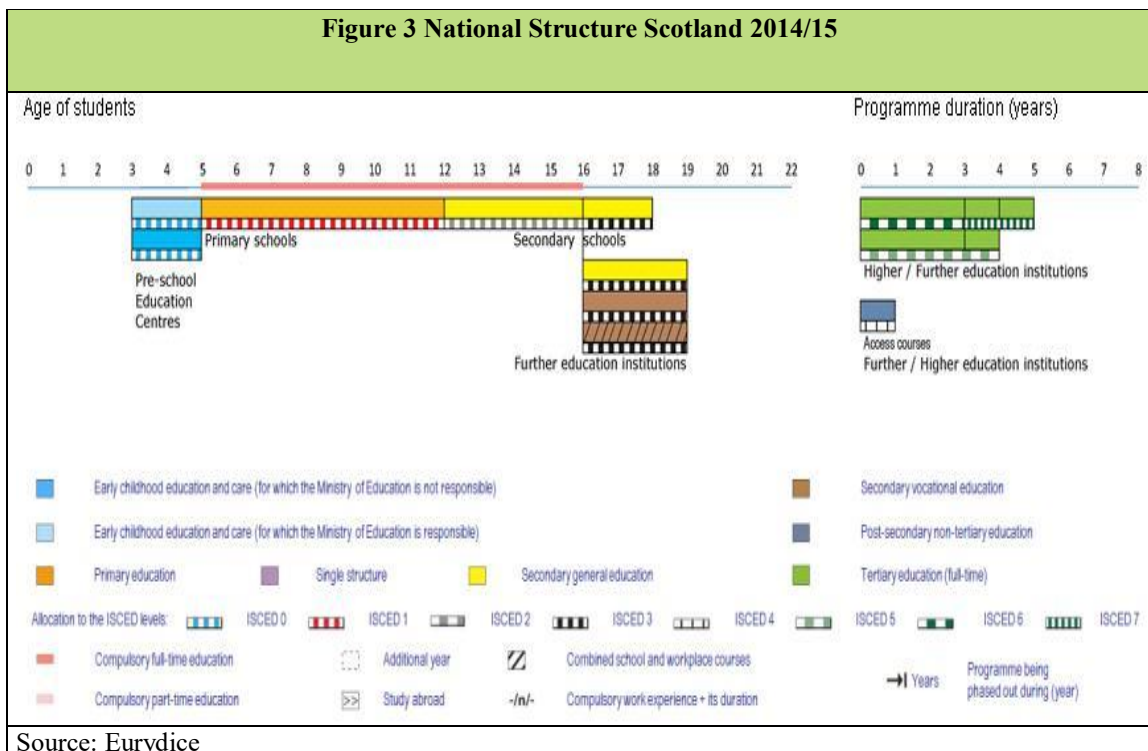
Aiming at increasing the options for university studies for students without the *Abitur*, the *German Ministry of Education and Research* recently introduced a pilot initiative “open universities”; supporting 47 pilot projects allowing people without *Abitur* to study, to:

- assure sustainable supply of skilled workforce,
- increase permeability between VET and HE,
- assure fast transfer of knowledge to practice,
- and to allow universities to develop a profile within the area of LLL.

Source: (O-H, 2015)

United Kingdom (Scotland)

We will first provide a general overview of the *Scottish* educational sector; briefly introduce the historical context for the development of adult education in higher education before moving on firstly to a summary of lifelong learning in general, and then more specifically the development and provision of work based learning in higher education.



It is important in any discussion of UK higher education to note that education is a devolved matter meaning that each of the constituent parts of the UK (England, Scotland, Wales and Northern Ireland) develops and implements its own policy; and, in relation to where this diverges between England and Scotland specifically in relation to post-compulsory provision the differences will be noted. The post-compulsory system in the UK consists of universities, *Higher Education Colleges* (HECs) and *Further Education Colleges* (FECs) with the majority of providers funded by the state. There have been recent inroads to the sector from private providers particularly in England which has travelled furthest down the road of the direct marketization of post-compulsory education.

The emergence of private providers has been subject to criticisms about quality, oversight and monitoring in particular in relation to issues of finance; specifically, access to public funding with a critical report released by the *National Audit Office* which provides scrutiny of public spending on behalf of Parliament.⁸ In Scotland the FE sector has also been subject to reorganisation which has resulted in the creation of a framework with 13 regions and 27 colleges. In ten of the regions a single regional College exists, often created from the merging of local FECs under one umbrella organisation. Higher education at sub-degree level delivered in FECs plays an important role in widening participation in Scotland with 64% of HE qualifications awarded from FECs in Scotland (2012-13) at HNC/HND levels.

The power to award degrees is regulated by law in the UK and there is a distinction between *Recognised* bodies which are institutions that can award degrees (these would be recognised as universities), and *Listed* bodies that offer courses which can lead to an award from a *Recognised* body; in addition, there are also institutions which can award their own unique degrees known as *Recognised* awards. At present there are 156 *Recognised* bodies with 16 of them in Scotland and only six of them, all in England, which are private institutions with four for-profit and two which operate as privately funded charitable bodies. In relation to *Listed* bodies, 653 institutions were identified with a considerable number of these recognisable as FECs. A review by Parry *et al.*, (2012) suggests that in England, some 349 FECs exist, the majority (283) offering some HE level provision; while a survey by the Department for Business, Innovation and Skills (BIS) noted 674 private providers of higher education which they reckoned was a very conservative estimate.⁹

FECs are providers of both non-advanced vocational education below HE level and of *Short Cycle Higher Education* of one or two year duration, equivalent in the national credit frameworks across the UK of one or two years of the Bachelors offered in universities and HECs. In England, the creation of the *Foundation Degree*, two year programmes with a vocational or employment focus, has replaced the previous *Higher National Diploma* (HND) while in Scotland the HND and its one year pre-requisite, the *Higher National Certificate* (HNC) are still awarded.

A further difference in the form of qualifications between England and Scotland relates to duration; and, while in England an Honours degree is typically three years in duration; in Scotland students may exit at the end of third year with an Ordinary degree or as the majority do continue to fourth year and exit with an Honours degree.

⁸<https://www.nao.org.uk/wp-content/uploads/2015/07/Skills-Funding-Agency-CGs-Report-2014-15.pdf>

⁹https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/207128/bis-13-900-privately-funded-providers-of-higher-education-in-the-UK.pdf

Given the likelihood (across the UK) of those studying in FE to be older, have lower levels of formal qualifications gained in compulsory education and to come from disadvantaged and under-represented groups; higher education delivered in further education is an important element in ensuring more adults have access to higher education to address the skill requirements of the knowledge economy as set out above.

Turkey

Adult education in **Turkey** has been an important issue since the foundation of the Republic of Turkey. In the early days of the Republic, adult education was regarded as the most important means not only to eliminate widespread ignorance, poverty, and illiteracy but also to introduce the ideals and values of the Republic to the public and develop the country (Miser, Ural, and Ünlühisarcıklı, 2013). As there was a common perception that informal education played a key role in development; it was considered almost equally as important as formal education (Miser *et al.*, *Ibid.*). Thus, teachers and their associations worked to enlighten people in cities and countries by talking to them about social change and teaching literacy until 1928 (Akyüz, 2010). After 1928 various institutions were founded aimed at educating adult people; *Nation Schools* in 1928, *Vocational Evening Schools for Men* in 1928, *Vocational Evening Schools for Women* in 1929, *Public Reading Rooms* in 1930, *People's Houses* in 1932, *Training of Trainers* in 1936, *Village Courses* in 1939, *Village Institutes* in 1940, *Evening Schools* in 1942, *Public Courses and Classrooms* in 1953, and *Community Development Studies* in 1961 (Miser *et al.*, *Ibid.*). In addition to the schools and courses, state radio and television has offered a variety of educational programs specifically to contribute to public education (Akyüz, 2010).

Today, adult education in Turkey is delivered by a number of diverse institutions and organizations. These institutions and organizations are the *Ministry of Education* and subsidiaries including university, municipality, confederation/ trade union, foundations and associations (Turkish Statistical Institute, 2014). The total number of education/training courses provided by these institutions in 2013 was 72,321 in total, and 3,294,418 people have attended these courses (Turkish Statistical Institute, 2014). In the Turkey Statistical Agency report it stated that 65.1% of these courses were organized by ministry and subsidiary, 21.9% were organized by municipalities, 7.3% were held by foundations and associations, and other institutions organized 5.6%. In the report it also suggested that social studies, professions and law were the most common areas of education with the 27.8 percent.

In the report published by *Ministry of Education*, institutions that organize courses for adults are classified as following; Public Education Centre (*Halk Eğitim Merkezi*), Practical Art School for Girls (*Pratik Kız Sanat Okulu*), Ministry of National Education Distance Education Centres (*MEB Uzaktan Eğitim Kurumları*) and Private Education Institutions (Yayla, 2009). Among those the most common adult education institutions are the Public Education Centres, which have 935 centres in total (Yayla, 2009).

Universities have a significant role among institutions involved in adult education in Turkey. Distance education is one of the biggest opportunities for adult education that is provided by universities. The first attempt at distance education in Turkey was the foundation of Teaching via Post Centre (*Mektupla Öğretim Merkezi*), in 1960 (Özer, 1989). This Centre provided 8 to 24-month-duration training for eleven professional and technical fields. In 1974, the Centre gained the function of providing higher education. As a result of problems relating to

organizational structures, this Centre stopped training in 1974 (Özer, 1989). Because of the intense need for education, distance education was restarted under a different organizational structure. Thus, the Informal Higher Education Institution (*Yaygın Yüksek Öğretim Kurumu-YAYKUR*) was established by *Ministry of National Education* in 1975 (Özer, 1989). This institution provided higher education thus solving the problem of people who wanted to go on higher education but could not enter the universities. About 85,000 people registered on the teaching training programs of YAYKUR in 1975-1976. However, due to problems it stopped training and was closed in 1978-1979 (Özer, 1989). In 1981, universities had the right to deliver distance education and later in 1982 this role was given to Anadolu University which had the scientific knowledge, academic experience, qualified human resources and technical and technological basis that conformed to international standards (Anadolu University, 2015). In 2010, Istanbul University and Atatürk University founded distance education faculties. Today, Anadolu University has the largest student population, with approximately 1.4 million students in distance education with around 2.2 million graduates. It provides eleven undergraduate and thirty upper secondary programs not only for people in Turkey but also for Turkish people who live abroad (Anadolu University, 2015).

Continuing Education Centres (CEC) of universities are another important element of adult education in Turkey. Founded under *The Law of Higher Education No.2547 Article 7*, *Continuing Education Centres* are organizations that aim to fulfil the lifelong education needs of adults by sharing the contemporary knowledge and experience of the universities with adult learners. The first CEC was founded within Middle East Technical University in 1991 and from 2000 the establishment of other CECs increased rapidly (Kılıklı, 2008). There are 184 universities in Turkey and 98 have CECs. CECs were gathered under the organisational umbrella of the *Turkish Universities Continuing Education Centres Council* (TUCEC), founded in 2011. The aim of this council was to let CECs become institutions that deliver more extensive, active, and qualified education and to enhance their collaboration with national and international institutions as well as providing more qualified educational services. CECs design and implement their programs by considering the demands and needs of adults. This is usually to gain a profession, increase their professional competences, acquire new professional skills, or cater for their personal development needs through CEC programs (Bulut, 2009).

One of the other main institutions providing training and courses for adults to provide professional and occupational opportunities is Turkey Employment Agency (*Türkiye İş Kurumu-İŞKUR*). This agency is an intermediary between people seeking employment and enterprises seeking employees. In addition to its task of helping people find work; the agency also provides courses for people to allow them obtain a professional qualification.

Finland

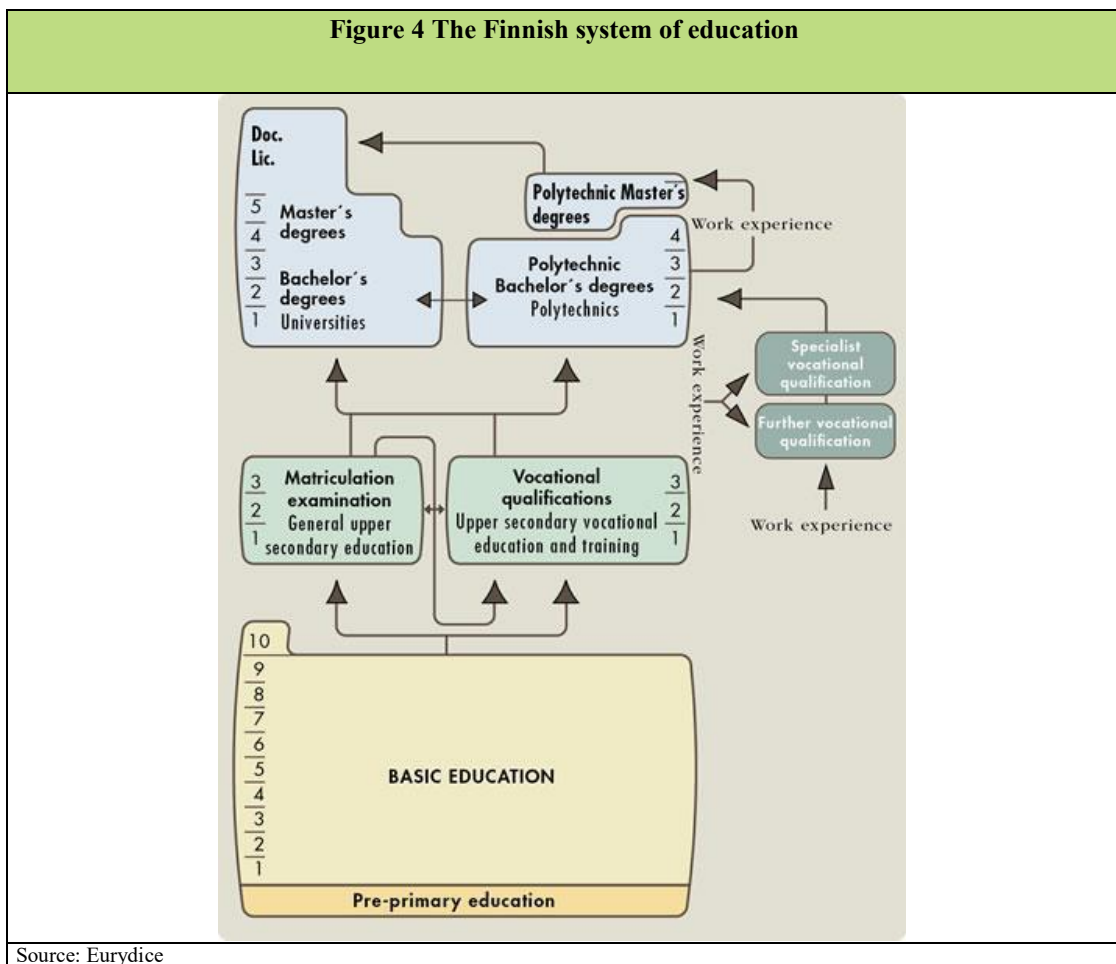
The *Finnish* education system is built on the principles of lifelong learning and free education. The key words in Finnish education policy are quality, efficiency, equity and internationalisation. The system is characterized by a high degree of permeability between general and vocational sectors. A tripartite partnership among Government, trade unions and employer organisations is an integral part of policymaking.

Participation and consultation of a wide range of different stakeholders play a central role in educational reform. The main objectives and broad lines of the policy are defined at central

level, but the implementation of these is devolved to the local level. The main steering document in Finnish education policy is the Government's *Development Plan for Education and Research* (Finnish National Board of Education).

Upper secondary education and training

After compulsory basic education school-leavers opt for general or vocational upper secondary education. Both forms usually take three years and give eligibility for higher education. Vocational education and training is popular in Finland, more than 40 per cent of the relevant age group starts vocational upper secondary studies immediately after basic education. The most popular fields are technology, communications, transport, social services, health and sports. However, due to the modular structure of upper secondary education, students may combine studies from both general education and vocational education and training.



Source: Eurydice

The selection of students for upper secondary school is based on their grade point average for the theoretical subjects in the basic education certificate. Entrance and aptitude tests may also be used, and students may be awarded points for hobbies and other relevant activities. Vocational qualifications can be completed in upper secondary VET, apprenticeship training or as competence-based qualifications. The majority of young learners complete their upper secondary vocational qualifications at vocational institutions. One of the main assessment methods there is the vocational skills demonstrations. Competence-based qualifications are usually completed by adults (Finnish National Board of Education, undated).

General upper secondary education ends with a national matriculation examination, which comprises four compulsory tests: mother tongue and, according to each candidate's choice, three of the following: the second national language, a foreign language, mathematics or one subject in general studies, such as humanities and natural sciences. Students may also include optional tests. The funding for upper secondary education and vocational education and training is based on the number of students reported by the school as well as on the unit prices set by the *Ministry of Education and Culture*.

Higher/Tertiary Education

The Finnish higher education system has a dual structure and consists of:

- a) 14 Universities providing academic education based on research. All 14 universities offer Bachelor's, Master's, Licentiate and Doctoral degrees (3 + 2 + 4 years), and
- b) 24 Universities of Applied Sciences (polytechnics) providing vocational education on a higher level and promoting applied research. Polytechnics confer Bachelor's (from 3.5 up to 4 years) and Master's (1 – 1.5 years) degrees. A student is eligible for polytechnic/UAS Master's level studies after accomplishing a Bachelor's degree, and having acquired at least three years of relevant work experience after that.

Finnish universities are independent corporations under public law; or, foundations under private law. The *Ministry of Education and Culture* set operational and qualitative targets for each university, defines how these targets are monitored and evaluated; and determines the resources required every three years. Universities receive funding from the state but they are also expected to develop external funding streams.

The Czech Republic

In the Czech Republic, school attendance is compulsory for nine years (usually from the ages of 6 to 15). Compulsory education includes Primary and Secondary education. All pupils start in a comprehensive single structure institution called *základní škola*, during the second stage it is possible to proceed to secondary school providing general education (*gymnázium*) or to eight-year dance conservatoire.

Upper secondary education in the Czech Republic include three different types:

- Secondary education completed with examination (ISCED 3A), that means:
 - Upper secondary general education at *gymnázium* secondary school (4 years),
 - Upper secondary technical education at secondary school (4 years), or
 - Art education at conservatoire (4 years)
- Secondary education leading to apprenticeship certificate (ISCED 3C)
 - Upper secondary vocational education at secondary school (2/3 years)
- Secondary education (ISCED 2C/3C)
 - Upper secondary general and vocational education at secondary school (1-2 years)

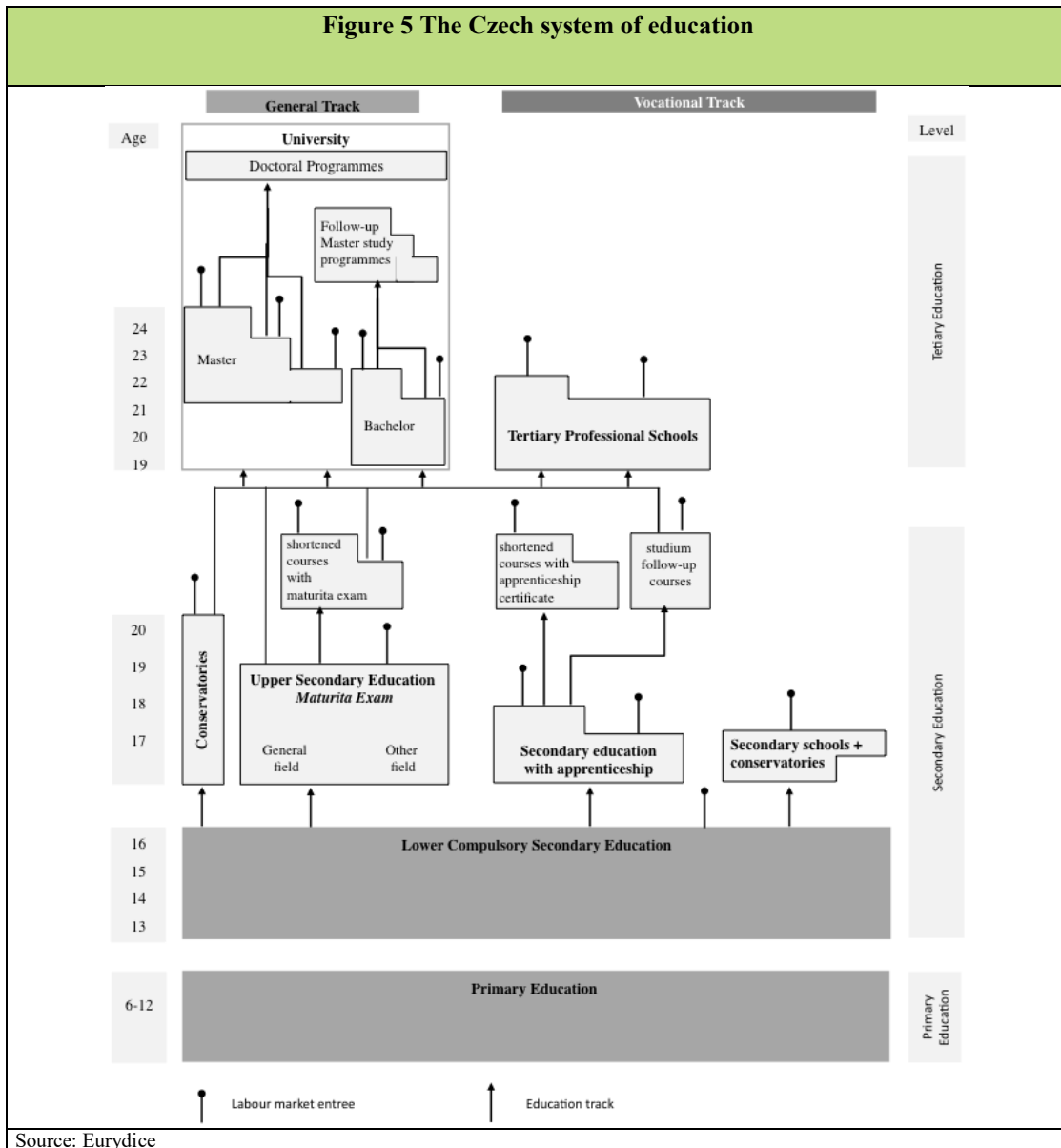
Post-secondary education includes two types:

- Post-secondary education completed by examination (ISCED 4A)
- Post-secondary education leading to apprenticeship certificate (ISCED 4C)

The tertiary education sphere is governed by two laws:

- Act on Higher Education Institutions (the Higher Education Act)

- Act on pre-primary, primary, secondary, tertiary professional and other education (Education Act), which has one section dealing with higher professional education.
- Since 2001 the three cycle structure has strictly been implemented in higher education:
- Bachelor's study programme (ISCED 5A);
 - Master's study programme (ISCED 5A);
 - Doctoral study programme (ISCED 6).



In the past twenty years, the Czech tertiary education system has undergone fundamental changes and dynamic development. At the present time higher education is provided at a total of 26 public (two of which are of non-university type, concretely *Vysoká škola v Ceskych Budejovicich* and *Vysoká škola Polytechnická Jihlava* and two state schools. 90 % of students are studying at public and state educational institutions. In 1998 The *Higher Education Act* defined: 'the roles and responsibilities of the state administration and of the higher education institutions, their financing and management, studies, types of studies and their processing, the

rights and responsibilities of students, the position and employment relations of academic staff.¹⁰ This act also permitted the establishment of private higher educational institutions. There are now 45 private higher educational institutions in the Czech Republic, almost all of them offer non-university education (three of them are university type).

In the Czech Republic there are also Tertiary professional schools (*Vyšší odborná škola*) which deliver non-university higher education, and art education (*Konzervatos*). Higher education (*Vysoká škola*) has a long-standing tradition in the present Czech Republic, in comparison tertiary professional schools (*Vyšší odborná škola*) represent a new type of school, which were founded in 1992.

Tab. 3 Higher education institutions in the Czech Republic			
Types of institution	ISCED level	Length (years)	Theoretical age
Konzervator – Art education	5B	2	17-19
		2	19-21
Vyšší odborná škola (tertiary professional school)	5B	3 (3,5)	19-22
Vysoká škola (higher education institution, university and non-university type) – Bachelor and Master's studies	5A	3-4/5/6/7	19-22/23/24/25/26
Vysoká škola (university type) – Doctoral studies	6	3-4	-

In the Czech Republic prior to 1989 cooperation between schools and companies (all of them state owned) was strictly planned. The capacity of schools and work based interns was established according to the plan of production. Companies were controlled by national directives and they had a guaranteed sale even if they were not innovative. This had an impact on cooperation between the schools and companies. Interns were very often approached formally and the effectiveness of the cooperation for the companies was not a priority.

After 1989 the number of university students rapidly increased from 110,091 in 1989 to 327,495 in 2014. Three times more students (peak 2009) compared to the period before 1989 and structural changes brought many new opportunities to the labour market which was suffering from a lack of professionals until 2010.

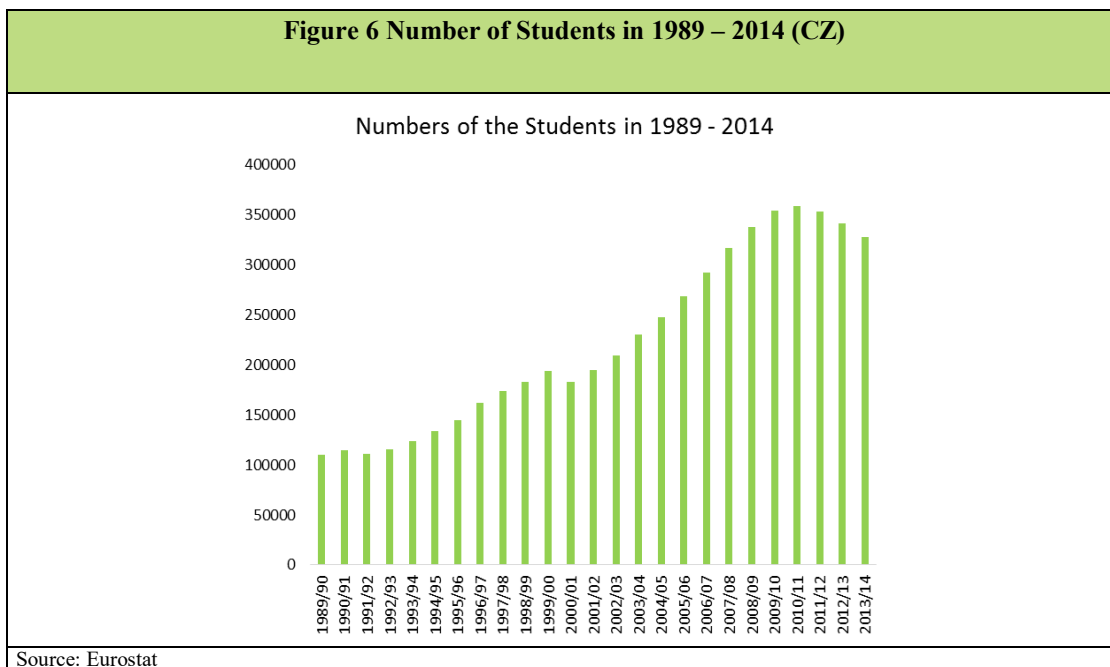
The development of a new tertiary sector had absorbed many employees from the industrial sector which was a national priority before 1989. Beside migration from the secondary to tertiary sector, university graduates were taking over positions in middle and top management.

The first ten years after the revolution were marked by a lack of brigade work for students but at the end of the millennium, qualified part time jobs for students grew rapidly. Students were no longer dependent on universities for obtaining their first professional internships. During the economic crisis the situation changed: wages for new graduates dropped and many companies

¹⁰https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Czech-Republic:Fundamental_Principles_and_National_Policies

had to reduce staff. For many students getting a proper and effective internship provided by the university became the only opportunity to achieve initial job experience.

The increasing demand for university places was supplied by the establishment of private universities. Those universities are often part of the discussion concerning the quality of adult education. This discussion ignores the fact that those universities focus on cooperation with enterprises and their alumni often achieve a higher employment rate compared to alumni from public universities.



Generally Czech schools lack know-how and experience for systematic collaboration with external enterprises. Therefore the *National Office for Education* organized a project: *Pospolu* (Together) which aimed to develop: closer cooperation between vocational schools and business enterprises and designs and tests an optimal system of cooperation between these partners.¹¹ This is part of national policy toward the popularization of technical education among Czech society.¹² This was followed up with the *Year of Industry and Technological Education 2015* and:

*Measures supporting systemic changes were intensified under the campaign umbrella. The most important include signing the national agreement on human resources development, eight sectoral agreements for selected industries, and thirteen regional sectoral agreements. These agreements should improve cooperation among companies, schools and regional administration and also support further use of the national register of qualifications and the national register of occupations.*¹³

¹¹<http://www.cedefop.europa.eu/pl/news-and-press/news/czech-republic-project-pospolu-together-fosters-cooperation-between-schools-and>

¹² <http://www.cedefop.europa.eu/pl/publications-and-resources/country-reports/czech-republic-vet-europe-country-report-2014>

¹³ <http://www.cedefop.europa.eu/en/news-and-press/news/czech-republic-looking-back-year-industry-and-technical-education>

National contexts: a summary

The above, drawing on the national reports, mirror a heterogeneous landscape not only of educational systems but also of the understanding of the participating researchers of educational structures that are relevant for the LETAE project. Some national reports like the Finish or German refer to the whole educational system, including VET, others like UK/Scottish report focus on post compulsory education in FE and HE. This might be influenced by the engagement of companies in VET; Finland (part of labour policies for older persons) and especially Germany (IVET) have strong approaches to apprenticeship, whereas in other countries like Spain companies expect that public bodies, either VET-schools or universities, deliver well-skilled workers – both blue and white collar.

The economic and political preconditions of participating countries must also be taken into account: three of the countries (Germany, UK/Scotland, and Finland) are, compared to the others, relatively rich and consequently pressure on educational structures is rather low although each has taken a distinctive approach and as noted marketization is the dominant difference in the UK context. On the other hand Turkey does have a certain backlog in labour market developments and low educational levels of the population (relative to the European mean); the Czech Republic, as all CEE-countries still struggles with the consequences of the overthrow of the former socialist regime (for example was apprenticeship in state combines an essential part of planned economy – maybe the idea to disestablish apprenticeship together with planned economy wasn't the best one); and Spain suffers (beside Greece) most under the current economic crisis; going hand in hand with a high youth unemployment ratio many of whom have higher education qualifications.

A first, preliminary, summary can be drawn: Educational systems, all over the world, are in a constant process of adaption and modernisation due to economic pressure and as they seek to compete in the 'global knowledge economy' although as we suggest later, the policy rhetoric does not always match the reality of the labour market. In Scotland, Germany, and Finland this process is characterised by incremental developments of existing educational structures, while Turkey still has the need to make major changes to and investments in existing structures. The Czech Republic still seeks equilibrium for structures as they develop in both public and private sectors. The Spanish HE system as such seems to be, at the first view, structurally very conservative. In this sense, some universities have created university foundations managing adult education outside of institutional provision. Another more recent trend is the cooperation between universities and private training providers in the field of adult education with agreements to provide joint adult education programmes with the university own certificate.

The LETAE project focuses on cooperation between universities and enterprises; beneficiaries of the programmes analysed should have already worked for some years. After working for some years, initial career boundaries like HE-diploma (or not) or kind of VET-diploma often vanish – so the first aspect of interest is whether these barriers are reinforced by TLL programmes by only offering access to certain beneficiaries; e.g. by requiring university entrance diplomas. Consequently one important aspect of the analyses of cases is the question, whether students must have a university entrance degree – or whether the programme is open for non-traditional students. This descriptor will be part of the typology developed and described in Chapter 5 of this report.

3.2. Systems and structures of work based/work related learning in HE

Spain

The *Organic Law of Education*¹⁴ (2006) of **Spain**, Chapter IX, Title I is devoted to Adult Education. However according to Rodríguez (2008) and the *Ministry of Education* (2009), this is just a continuation of what the LOGSE established, with some novel elements related to the evolution of policies directed at continuing training and distance education. The law offers a general framework for adult training, in which a series of mechanisms have been predicted to favour adult access and promotion in secondary education, professional training and higher education. The educational provision for Adult Education integrates different initiatives, both official and unofficial, for those older than 18 years. It starts with Initial Education then to *Secondary Education for Adult People* (ESPA); and, Education for obtaining the *General Upper Secondary Education Certificate (Baccalaureate)*, to allow access to vocational upper secondary and higher education. The legislation also includes disposition for a wide range of informal education.

On the other hand, *Royal Decree 395/2007* regulates the subsystem of professional training for employment. Its basic objective was to universalise workers, the unemployed and firms access to education and training. Specifically, its priorities were to favour lifelong training and to provide knowledge and practice adapted to the needs of firms and workers; to contribute to the improvement of productivity and competitiveness; to improve the employability of workers; and, to ensure that the professional skills acquired by the workers were appropriately accredited. It addressed workers and the unemployed, and among these groups, those that face additional difficulties such as the long-term unemployed, women, those older than 45 years, workers with low qualifications, immigrants and disabled people, and small and medium enterprises workers were given priority.

Adult education at universities is regulated by different laws and royal decrees. For instance, the *Organic Law of Universities*¹⁵ (2001) and the later modification *Organic Law of Modification of the LOU*¹⁶ (2007) points out in its preamble that society demands lifelong continuing training. Article 1 develops the diffusion of knowledge and culture by means of university extension courses and lifelong learning. Article 2 is devoted to the elaboration of study and research plans and specific lifelong education and training. Article 36 refers to the validation of the labour or professional experience. The twentieth legal requirement contemplates the *Registry of Universities, Centres and Degrees* (RUCT).

But it is the *Royal Decree 1393/2007* of October 29 on the *Regulation of the Official University Education* which deepens the definition and expression of university autonomy asking for higher education institutions to create and propose, in accordance with the legislation, the programs and certificates that must be offered. It adopts a series of measures that, besides being compatible with the *European Higher Education Area* (EHEA), makes the organization of education and training more flexible, promoting curricular diversification and allowing universities to take advantage of their innovation capacity.

¹⁴ Ley Orgánica de Educación.

¹⁵ Ley Orgánica de Universidades, LOU.

¹⁶ LOMLOU.

The objectives with respect of continuing education and training are:

- To offer quality training and their corresponding accreditation systems.
- To fulfil social needs with respect to personal enrichment and new labour perspectives.
- To involve universities in the design strategies of continuing education and training as a basic function.
- To take advantage of ICT to widen educational methodologies, favouring training together with the labour activity and family life.
- To promote access to training to people with diverse skills levels and learning backgrounds, and improve the collaboration universities with associations, social agents and other partners linked to the local productive system in specific training projects.
- To elaborate official guidelines to foster this type of training facilitating interuniversity agreements.
- To elaborate a normative framework that provides regulation (respecting the autonomy of the universities) and that facilitates the recognition of this type of training outlining the approaches and minimum requirements that the RUCT registry should keep in mind.

The process should develop in a gradual way with regard to access and duration of the programs and would require the following agreements:

1. Within continuing education and training it is necessary to differentiate the consolidated and well known programs currently offered as masters, expert, specialist and postgraduate diplomas. This agreement proposes that:
 - Master degrees have a length of 60 credits or more. Access needs a previous university degree, issued by the Rector and a centralised Registry. Moreover, curricula should be clearly defined, assessment in ECTS system and a final paper to obtain this degree.
 - Certificates of 30 credits or more will be named “specialisation diplomas” and they will refer to the current postgraduate diploma, expert or specialist certificates. These courses should comply with the same criteria than the masters, being advisable but not compulsory issuing a final document to obtain the certificate.
 - Moreover, the Universities will be able to offer other types of certificates or degrees. It is proposed to use unified denominations, although the length can be much more flexible. Thus, for courses that requires previous university degree, to differentiate among those with duration of up to 15 credits and those between 15 and 30 credits. For the latter, it is proposed to use the term “expert degree” and to consider “certificates” the former. For courses that don't require a previous university degree and with more than 30 credits, the denomination “diploma of university extension” will be used and for those with less than 30 credits “certificate of university extension”. For different types of continuing education and training, degrees as such should not be contemplated but certificates whose denomination can be decided by each University without using the previous labels to avoid confusion. In any case, the new denominations should contemplate a clear differentiation for the different titles, diplomas and certificates.
2. Obtaining an unofficial graduate degree will require, through the corresponding evaluation process, academic activities that correspond to the degree. Each degree provides a

transcript of all activities that configure the study program, with detail of course content, credits and activities that the program includes; this annex will also indicate the previous degree or requirements.

3. The recognition of credits from unofficial graduate degrees among Universities. This recognition can be at different levels:
 - Total or partial recognition of master and specialization diploma not registered in the RUCT but that fulfil the denomination, extension, evaluation, paper, etc. criteria.
 - Recognised credits from masters and specialisation diplomas can serve to complete studies or to continue them in other universities.
 - Recognition, by means of bilateral agreements and according to the norms of each University, of the rest of credits studied in the other types of unofficial programs of each University.

Germany

Work based or work related learning as a truly integrated element in Education and Training was in **Germany** part of the *Berufsausbildung mit Abitur* (BmA = VET certificate in combination with the *Abitur*) in the former GDR. Due to its political structure based on socialist principles (rooted in the philosophy of German Marxism), the GDR rejected the “bourgeois” notion of education — particularly the notion held by some that education should necessarily be non-utilitarian, i.e. non-job-related. The very name of the GDR’s general school type at the lower secondary level, “Higher Polytechnic School” *Polytechnische Oberschule*, POS), indicates that this type of school took the combination of general education and vocational education very seriously. The concept of this school type resembles those polytechnic educational institutions in France that go back to the days of the Napoleonic reforms. In these types of schools, higher education is not defined by the way it differentiates itself from the learning that goes on in the world of work; on the contrary, higher education is intended to be acquired explicitly within the context of a specific occupational field, such, as for instance, technology or economics.

After reunification of Germany, the BmA was disbanded, and no adequate replacement for this school type was provided. Whereas Eastern Germans voiced no strong objections to the fact that West German school structures were enforced on them, completely eradicating 40 years of East German educational structuring, they did regard (and objected to) the abolition of the BmA as a great loss.

Keeping this situation in mind, it becomes clear that education policy makers in the new states (who wanted to save a dual-qualifying educational path) had only one political alternative left: instead of offering university access together with vocational training, they had no other choice than to turn to the idea of combining vocational training with access to the *Fachhochschule* (University of applied sciences, FHS; FHR= Certificate of FH entrance), i.e. an institute of higher education (tertiary stage; a kind of Polytechnic School) that combines academic studies with work experience. In this, the *Fachhochschule* differs from a *Hochschule* (university), an exclusively academic institution, which requires a university entrance certificate awarded by the Gymnasium or *Berufsoberschule* (BOS). *Fachhochschulreife* (certification to pursue studies at the *Fachhochschule*, FHS) is based on a KMK agreement and can relatively easily be combined

with vocational training, given a degree of effort directed at resolving certain organizational and curricular problems.

In principle the construction of *Fachhochschulreife* can be seen as Germany's best practice in bringing HE and work related learning together: “FHR” is somewhat confusing since it is sometimes misunderstood as awarding access to the study of once specific subject (“Fach”) only. But actually, the FHR is an FHS entrance certificate that permits a student to pursue any course of study offered at a FHS. For example, a student who has attended the technological set of courses at a *Fachoberschule*¹⁷ can, of course, study electrical engineering, but could just as well study sociology. Studying at a FHS is not less academic than studying at a university. The only main difference between these two institutions of higher education is that there are no post-graduate courses offered at FHS; and, research is generally not an FHS focus. Another difference was (pre-Bologna) the shorter duration of study at FHS.

Universities of applied sciences (FHS) are a special feature of the German university system. Distinctive features of those universities are their emphasis on practical relevance, their small group size and exams which are integrated into the studies, as well as study programs which are highly structured, planned and job-related. Universities of applied sciences offer practice-oriented study courses mainly in Engineering, Economics, Social Work, Public and Legal Administration and Health and Therapy – so they are closer to “the world of work” than traditional universities; e.g. they include more internships in their curricula, either voluntarily or due to national or transnational regulations, as in the case of “ship management” offered by Bremen University of Applied Sciences (**Table 4**).

Tab. 4 Modules of “ship management”					
Semester	Module1	Module 2	Module 3	Module 4	Module 5
1 30 credits	Internship I				
2 30 credits	Mathematics I	Martime Communication I	Martime Economics	Maritime Human Resources I	Engineering I
3 30 credits	Mathematics II	Martime Communication II	Martime Law I	Ship’s Theory I	Engineering II
4 30 credits	Ship’s Command I	Maritime Meterology	Navigation I	Ship’s Theory II	Cargo Handling I
5 30 credits	Ship’s Command II	Martime Communication III	Navigation II	Ship’s Technology	Ship’s Command III
6 30 credits	Internship II				
7 30 credits	Emergency Management	Cargo Handling II	Maritime IT Systems	Efective I	Efective II
8 30 credits	Martime Law II	Maritime Human Resources II	Ship’s Command IV	Bachelor Thesis	Bachelor Thesis

Source: HSB 2013

¹⁷ <http://www.wir-sind-bund.de/WSB/EN/Eltern/Bildungssystem/Struktur/FOS/fos-node.html>

UK/Scotland

Specifically in relation to adult learning in higher education, the **UK** has a long tradition which dates back to the university extension programmes of Cambridge University which began in 1873 and which developed over the next hundred years into a tradition of *Liberal Adult Education* delivered both on-campus and off-site and which often had as drivers issues of social justice and individual empowerment.

Universities created links with movements concerned with political and social change, such as the Workers Educational Association (WEA), the Independent Labour Party and the Co-operative Party, and created Extra- Mural Departments and later Departments of Continuing Education or Adult Education to co-ordinate LAE work. (Osborne and Houston, 2012: pp.115-116)

This provision was very much geared towards access for adults who had been denied opportunities for whatever reasons to access higher education and the principal shift in the 1990s was to a much broader conception of widening participation and alongside a shift from widening participation and access among adults to an approach with far more emphasis on young people from under-represented groups and aspiration raising and interventions increasingly focused at the level of the school and in England this was delivered through its *Aim Higher* programme which was funded from 2004 to 2011.¹⁸

In relation to the provision of work-based or work-related learning in higher education there is also a long tradition. However, as we shall see, there is little measurement and no requirement to collect or publish data on the scope and scale of work-based or work-related learning in the UK. As autonomous institutions, universities have freedom to design and offer programmes of their own choosing depending on the expected demand.

There are of course subjects like Nursing and Teaching, Medicine and Dentistry where numbers are controlled by funding regulations; and it could well be argued that these also offer what might be seen as work-based and work-related learning. Whilst this is undoubtedly true, the focus here is on broader conceptions of work-based and –related learning and as noted, at the level of collaboration and partnership between external stakeholders and institutions of higher education in the provision of WBL programmes.

Work-based and work-related learning in higher education for adult learners is seen as crucial to address the predicted labour market skills gap identified in such communiques as: *New Skills for New Jobs Anticipating and matching labour market and skills needs*; and, *An Agenda for new skills and jobs: A European contribution towards full employment as part of the Europe 2020 strategy*. It is also relevant to debates on work-related learning and upskilling that were identified in the *Leitch Report* produced in the UK and which as we shall see has influenced various funding initiatives in both England and Scotland.

With reference to Scotland, a strategy was developed specifically in order to provide an integrated service as envisaged as part of policy in relation to economic strategy and in particular as envisaged in *Skills For Scotland: A Lifelong Learning Skills Strategy for Scotland* (2007).¹⁹ *Skills Development Scotland* (SDS)²⁰ was created in 2008 by merging a number of

¹⁸ <https://www.heacademy.ac.uk/workstreams-research/themes/retention-and-success/widening-access-programmes-archive/aimhigher-0>

¹⁹ <http://www.scotland.gov.uk/Resource/Doc/197204/0052752.pdf>

²⁰ <https://www.skillsdevelopmentscotland.co.uk/>

agencies involved in careers, skills and training at regional and national levels including *Careers Scotland*, the *Scottish University for Industry*, and the skills and learning functions of *Scottish Enterprise* and *Highlands and Islands Enterprise*.

This is in contrast to England for example where adult guidance and support is separate from statutory provision to school leavers and the young²¹ with individual schools having the responsibility for careers provision for their pupils and as such according to Hughes²² does not have the integration across levels and sector which the more consistently lifelong learning nature of the model of advice, support and information that Scotland offers.

Turkey

The *Turkish Basic Law of National Education* No.1739, Issued in 1973, sets the general structure of the national education system, which also determines the functions and scope of adult education (Miser *et al*, 2013). The *Organization and Duties of Ministry of National Education Law* (1983), No.3797 defined the institutions responsible for informal education including adult education and stated their duties. Along with other laws regulating informal education in Turkey, the constitution enacted in 1982 is probably the most important law regarding adult education. According to *Article No. 42*, educational rights of people were guaranteed by stating “no one can be deprived of educational rights”. Thus; adult education in Turkey is a right for individuals and a responsibility for the state. The government attempts to implement this responsibility by opening informal education institutions, preparing professional and general programs; or organizing courses in cooperation with public or private institutions for adults at all ages.²³ Another important regulation for adult education, *Vocational Education Law*, No. 3308, was enacted on June 5, 1986.

In December 13, 2004, a circular, No. 5275, was prepared to define the procedures and principles related to improvement and training operations that will be applied to young and adult convicts and prisoners in penal institutions, to ease implementation of legislation and to troubleshoot problems in practice.²⁴ In April 7, 2004, another regulation regarding *Occupational Health and Safety Trainings* was released.²⁵ One of the very recent and important regulations is *Informal Education Institutions Regulation*, which is directly related to adult education. This regulation, released by *Ministry of National Education* in May 21, 2010, aims at regulating procedures and principles on the administration, education, production, guidance and supervision of courses that are developed in cooperation with public education centres outside the statute of other institutions’ legislation. Legislation was enacted on June 2011 that was related to *Implementation of Public Education Activities*. The regulation regarding *Professional Development of Employees* who work at dangerous workplaces was published in July 13, 2013. The *Ministry of National Education Lifelong Learning General Directorate* enacted legislation *Supporting Formal and Informal Education and Training Courses* in September 23, 2014.

²¹ <https://www.gov.uk/government/publications/careers-guidance-for-young-people-in-schools>

²² Hughes, D. (2013) The changing UK careers landscape: tidal waves, turbulence and transformation, *British Journal of Guidance and Counselling*, 41, (3), pp226-239..

²³ www.meb.gov.tr/mevzuat/

²⁴ <http://www.adalet.gov.tr/>

²⁵ www.resmigazete.gov.tr

In addition, employers who have twelve or more employees have to provide professional training for their employees or help with their professional development; and, it is compulsory for institutions having fifty and more employees to organize courses at the work place or enable their employees to attend courses for their professional development (Yayla, 2009).

Finland

In addition to higher education degree studies available for traditional students, **Finland** has a long history of participation and promotion of adult education. The main objectives of adult education policy are ensuring the availability and competence of the labour force, providing educational opportunities for the entire adult population, and strengthening social cohesion and equity. The objectives should support efforts to extend working life, raise the employment rate, improve productivity, implement the conditions for lifelong learning and enhance multiculturalism. Educational institutions organize education and training intended for adults at all levels of education. Efforts have been made to make the provision as flexible as possible in order to enable adults to study alongside work (*Ministry of Education and Culture*, undated).

Adult education comprises education and training leading to a degree or certificate and liberal adult education and staff-development training provided or purchased by employers as well as labour market training; which is mainly targeted at unemployed people. Liberal adult education offers non-formal studies and promotes personal growth, health and well-being by offering courses relating to citizenship skills and society; and, in different crafts and subjects on a leisure or recreational basis. In both general and vocational education, there are also separate educational institutions for adults. In vocational training competence-based qualifications are specifically intended for adults. In higher education adults can study in separate adult education programmes offered by polytechnics (Finnish Education in a Nutshell, 2013.)

Adult education is provided in about 800 institutions including, among others:

- universities and polytechnics,
- public and private vocational institutions,
- adult education centres and summer universities,
- adult upper secondary schools, study centres, sports institutes and music institutes.

In Finnish HEIs, continuing education for the working sector is perceived as an important aspect of the university's 3rd mission and part of university profiling. According to the working group of the Ministry of Education's *Committee on University Lifelong Learning*, the role of university continuing education is to meet the continuously changing developmental needs of the academically educated.

A number of incentives have been created at the national level for universities to be actively engaged in provision of Lifelong learning. Hence, from the late 1990's the Ministry of Education has rewarded universities by a three year period nomination of a *University of Excellence in Adult Education*. Then universities were ordered to develop a LLL strategy by the end of 2006. The Ministry also finances development projects for new approaches in university continuing education activities. Currently, the internationalisation of university continuing

education is being promoted, usually, via project and network partnerships and the export of educational services.

Universities and polytechnics have the freedom, within the framework of the legislation, to autonomously decide on the ways of organizing adult education. In HEIs, the adult learners have a choice of 1) taking a regular degree program (free of charge), 2) following a shorter non degree course/program (professional specialization studies with a rating of 30-60 ECTS credits), usually coordinated by *Continuing Education Centres*; or 3) taking up separate fee-charging modules/courses in *Open Universities/Polytechnics*. The latter often entail a lot of independent distance studies and web learning (CIMO).

In an OECD review of tertiary education in Finland a number of shortcomings were noted with relation to tertiary lifelong learning. First, it was not clear whether the lifelong learning offerings of tertiary institutions in Finland were adequately transparent, institutionalised or developed, or whether the supply of lifelong study opportunities is insufficient to meet current demand. Second, it was evident that the needs of adult learners were not a prime focus of HEIs. At that time, the strategies or plans for promoting lifelong learning were just being developed. Third, there was a challenge of financial sustainability and the unwillingness of customers to pay (OECD, 2009).

Against this background, the main proposals for reforms in adult education were developed in the summer of 2009 and include “strengthening learning in working life, recognizing skills that have been acquired in different ways, facilitating opportunities to combine studies in a flexible way, making information, guidance and counselling services more effective in order to improve the relevance of adult education, increasing study opportunities for the population groups that are least represented in adult education, clarifying the benefit systems available for adult education, and expanding the funding base”. (Ministry of Education and Culture, undated)

The *Development Plan of Education and Research 2011-2016* sets the following aims for adult education and training:

“Finns are active adult learners. According to the comprehensive Labour Force Survey of the European Union, 23 per cent of Finns aged between 25 and 64 had participated in education or training during the preceding four weeks in 2010. The aim for 2016 is that 27 per cent of the 25-to-64-year-olds will have participated in adult education and training during the preceding four weeks, 60 per cent of the 18-to- 64-year-olds during the preceding 12 months and 80 per cent during the preceding years. The aim is that no section of the adult population will be permanently outside adult education and training”. (Eurypedia, undated)

Czech Republic

Legally, the highest executive organ responsible for the educational system in the Czech Republic is the *Ministry of Education, Youth and Sports* (MEYS) (the ministry is also responsible for Science). *Tertiary Lifelong Learning* (TLL) has been recognized as a distinctive form of tertiary education since 2004 by the *Education Act* (No. 561/2004). TLL is also regulated by the *Tertiary Education Act* (No. 111/1998). Another legal document with important impact on adult learning is the *Act on Verification and Recognition of Further Education Outcomes* (No. 179/2006), which enables adult learners to obtain a certificate of

qualification acquired through training and/or practice without having to go to school.²⁶ There are some more legislative norms connected to tertiary education and TLL as well. The MEYS also created a strategic document toward Lifelong Learning in the Czech Republic, which is available in English as well.²⁷

The Velvet Revolution in 1989 resulted in profound changes to the Czech political and economic landscape. This also influenced education. Private colleges began to appear and provide competition to the traditional public colleges and universities. Several new public colleges and universities were founded. Today, there are 26 of them in the Czech Republic, compared to 44 private institutions.²⁸ However, public universities educate about 85 % of tertiary students.²⁹

Students can choose among three forms of regular study programmes: traditional face to face; distance learning or blended learning forms. The degree achieved in each form is equal, but not all programmes are offered in all forms. By law, regular higher education at public and state schools is free of charge for citizens of all nationalities. This rule has the following exceptions: fees for administration of admission proceedings; fees for extending the duration of study beyond a set limit; fees for the study of an additional programme; fees for study in a foreign language.

However, within its educational activities, colleges and universities can offer programmes of Lifelong Learning (LLL) outside the framework of regular study programmes and they can charge for the LLL programmes. The programmes can be job-oriented (e.g. further education of pedagogical staff) or interest-oriented (e.g. the *University of Third Age*). Participants of LLL are not students as defined by the *Tertiary Education Act*, however, credits gained within LLL programmes can be transferred to regular study programmes with some restrictions. There are also some non-school organizations (firms, institutions, state organs) which provide education for their employees or for other organizations or individuals. Providers of non-school education can be both commercial and non-profit (professional organizations, foundations, churches and others).

Private institutions are generally considered more receptive to the market demand and offer education as a means of succeeding in the labour market. This was also confirmed in the interviews conducted with experts on TLL. Public institutions mostly refuse the market optic and see themselves as guardians of traditional education with other goals than satisfying the needs of the labour market. This also seems to be reflected in their LLL policies to some extent.

Whereas private colleges seem more open to offering programmes for professionals with special demands, public institutions took their time before opening programmes for the public as it follows from an interview with one of the institution representatives from a major Czech public university. She says LLL programmes for working professionals have become supported by the management of her institution only recently and are still only supplementary and only opened when they are well in line with what is done at the university. In other words, public universities may have difficulties to reconcile their traditional academic values and mission with the market

²⁶ *Ibid.* p. 6.

²⁷ See The Strategy of Lifelong Learning in the CR, available online: http://www.msmt.cz/uploads/Zalezitosti_EU/strategie_2007_EN_web_jednostrany.pdf (11. 2. 2013).

²⁸ Ministry of Education, Youth and Sports, available online: <http://www.msmt.cz/vzdelavani/prehledvysokych-skol> (11. 2. 2013).

²⁹ Structures of Education and Professional Training Systems in Europe, Czech Republic, 2009/2010, p. 8.

oriented demands of working adult learners and their employers. One way to go might be opening a firm owned by the university but kept separate from it and managed as a company venturing in market-oriented lifelong learning. This is accomplished by some universities in the western European countries, but is not yet so much the case at Czech universities, which rather let existing units (faculties or departments) organize their LLL programmes and only create smaller administrative units to provide an umbrella for LLL programmes.

Since the accession of the Czech Republic to the European Union in 2004, there have been new opportunities for adult education as many projects supported by the EU focus on this area. This is important to better assess the context of TLL in the Czech Republic. Specifically, there was *Operational Programme for Human Resources Development* (2004-2006) and *the Operational Programme Education for Competitiveness* (2007-2013). These programs were provided by the MYES. Furthermore, the *Operational Programme Human Resources and Employment* (2007-2013) provided by *Ministry of Labour and Public Affairs* also contains education programmes for adults. Some of the projects within the *Operational Programmes* mentioned in this paragraph are realised by universities or with universities as partners.

Actually it is not part of government policy to regulate cooperation between school and universities. The *Ministry of Labour and Social Affairs* set up a Fund for education which offers since February 2014 paid internship for graduates in companies. Paid duration is 300 hours in three months. But the amount of the internships is limited. National priorities are aimed more at people endangered in the labour market by disability, age or being a member of a minority.

National strategies: a summary

Most participating countries have strategies in terms of policies, recommendations, and/or even laws on the development and improvement of adult education; and for cooperation between universities and enterprises. But in most cases higher education institutions are not obliged to follow those strategies; implementing such approaches is voluntarily and the statement from the UK/Scottish report that “as autonomous institutions, universities have freedom to design and offer programmes of their own choosing depending on the expected demand.” can be supplemented by depending also on “human and financial resources” and is appropriate for all 6 countries. All countries have implemented Bologna reforms; including adoption of the ECT-System for crediting Learning Outcomes (LO) from “normal” (incl. dual studies in Germany) higher education learning – whether LO from “abnormal” learning venues like work-places are recognised is up to the university that provides the programme.³⁰ The question remains: is this uncertainty or non-standardised procedure caused by the qualitative difference of learning venues, teaching methods and acquired knowledge: LOs from the world of work might be on the same level (in terms of EQF or other frameworks) as classical higher education seminars, but they are different; less science-propaedeutic. The resulting question is:

Should programmes that are based on university-enterprise cooperation, be part of the normal Bologna with respect to ECTS procedures (in case that they are shorter at least leading to some credit-points (CP) that could be recognised in a possible study-programme later on)?

³⁰ As noted elsewhere despite much rhetoric around accreditation of prior learning it is still not a reality for most learners or providers.

No country answers this question clearly, but background information as well as cases analysed in detail show a tendency: UK (incl. the possibility of Short Cycle HE (SCHE) like Foundation Degrees in England or Higher National Certificates/Diplomas (HNC/D) in Scotland), Germany (due to the traditionally high relevance of diploma), and Czech Republic (cases analysed are more or less internships of regular programmes) try to refer their approaches to enterprise-university cooperation to Bologna criteria. On the other hand Finland (due to the specifics of programmes), Turkey (due to very short duration of programmes), and Spain (due to financial and partly bureaucratic accreditation procedures) offer only certificates, no Bologna Master or Bachelor diploma.

The question, whether cases analysed offer Bologna-compatible diploma or university-own certificates to successful participants will be the second descriptor in the typology (cp. chapter 5).

3.3. Funding

Spain

In *Spain*, non-university official adult education is free and university official adult education is subsidised. The cost of non-formal programs depends on the organising institution and of the course type. Of the total public expenditure in non-university education in 2009, 1.1% (equivalent to about 400 million Euros) corresponded to adult education; and, more than 460,000 people were registered, representing 6.2% of the total of students of non-university education in the academic session 2008-2009.

Resources to finance the subsystem of professional training for employment come from the share that it collects from the *Social Security System* (around 85%) along with some funds from the *European Social Fund* and contributions from the *Public Service of Employment*. The budget for the whole system was around 2,500 million Euros in 2010. Here, the resources of the share for professional training refer specifically to the volume of revenues resulting from applying a tax of 0.7% on the base rate for common contingencies that firms and workers contribute to *Social Security*. Of that global tax, 0.6% corresponds to firms and the remaining 0.1% to the worker. Approximately 60% of the total funds are dedicated to workers' training (1,545 million Euros in 2010) and 40% to the unemployed. The *Labour Ministry* decides how it is distributed among different administration bodies and training initiatives.

Firms that carry out tailored training will be able to benefit from some discounts in their contributions to the *Social Security*. This allowance is variable according to the size of the company. An allowance of 100% is foreseen for firms from six to nine workers, of 75% for those of 10 to 49 workers, of 60% for those that have between 50 and 249 employees and of 50% for those of 250 and more. For firms with a salary earner stratum between one and five a credit of annual allowance of 420 Euros is granted.

Tab. 5 Economic Indicators of the Training within Enterprise ¹ funded through the Tripartite Foundation						
	2010	2011	2012	2013	2014	2015
Financial Resources used (in Million €)	516.09	560.92	592.13	608.23	588.06	551,29
Qualifying Enterprises	380.548	432.182	459.620	478.621	471.590	439.188

Source: Fundación Estatal para la Formación en el Empleo: Síntesis estadísticas según iniciativa de formación. Formación en las empresas 2004-2015. <http://www.fundaciontripartita.org/Observatorio/Pages/Series-Estadisticas.aspx> consulted May 2016

(1) This type of training includes in-house training, but also joint training for several enterprises, In fact – in 2015 - more than 96% of the qualifying enterprises participate in joint training actions.

The major part of these funds are managed by “*Fundación Estatal para la Formación en el Empleo*” (State Foundation for the training of employees) also called tripartite foundation. This foundation provided allowances of 439,2 million Euros in 2015, although this indicated a decrease from 2013, the participants came from more the 439 thousand enterprises. The number of qualifying enterprises also decreased in the same period, reversing the tendency of growth in the previous years (see **Tab. 5**).

The respective training actions have covered more than 3.5 million participants; with a considerable increase in the number of participants through the years. In 2015, 36% of the participants have at least secondary studies or higher VET and around 30.5% of the participants on some kind of university studies.

Tab. 6 Participants by education level in Training in Enterprise funded through the Tripartite Foundation						
	2010	2011	2012	2013	2014	2015
Without studies	2.1%	2.2%	2.7%	2.0%	2.6%	3.1%
Primary studies or similar	30.1%	30.8%	29.4%	30.5%	30.4%	28.8%
Secondary studies (including VET)	37.0%	36.7%	37.6%	36.1%	35.2%	36.0%
University Studies	29.8%	29.4%	29.3%	30.0%	29.8%	30.3%
others	0.9%	0.9%	1.1%	1.4%	2.0%	1.8%
TOTAL (head account)	2,771,069	2,986,493	3,176,789	3,224,182	3,291,803	3,576,748

Source: Fundación Estatal para la Formación en el Empleo: Síntesis estadísticas según iniciativa de formación. Formación en las empresas 2004-2015. <http://www.fundaciontripartita.org/Observatorio/Pages/Series-Estadisticas.aspx> consulted May 2016

Additionally, in 2015 more than 9,400 individual permits for training were granted, many of them to follow university studies (more than 44%). From 2010 to 2013 there has been a substantial increase of these figures, including many people without universities studies, so that the share of learners with individual permission drops considerably in 2012 and 2013. In 2014 and 2015, the number of individual permissions decreased and the share of learners with HE-qualification increased again.

Tab. 7 Individual Training Permissions funded through the Tripartite Foundation						
	2010	2011	2012	2013	2014	2015
Financial Resources used	5,502.69	6,579.80	16,370.51	28,450.52	21,551.06	15,210.27
Nº of Participantes	3,335	4,634	18,909	30,226	13,666	9,403
Nº of Participantes with HE	72	55	16	13	35	44

Source: Fundación Estatal para la Formación en el Empleo: Síntesis estadísticas según iniciativa de formación. Formación en las empresas 2004-2015. <http://www.fundaciontripartita.org/Observatorio/Pages/Series-Estadisticas.aspx> consulted May 2016

University continuing education and training courses tend to be much more demand-oriented than bachelor's degrees. Since these courses are unofficial (they are not considered in the official catalogue) they are not funded with public resources and therefore they do not offer subsidised fees. Thus, these courses tend to be generally self-financed by means of tuition fees. Nevertheless, in practice, universities usually co-finance some of these courses by means of, for example, the use of infrastructure or financing the specific administrative units that manage this

type of education. In addition, the universities retain a percentage of the revenues of these courses (overhead). The availability of university owned programs (*master, expert, specialist*) has shown exponential growth before the economic crisis, from 145 programs in 1987 to more than 4,500 twenty years later. In parallel, the number of students following these courses also increased, representing today almost 10% of total students of bachelor degrees.³¹ In the same way, revenues coming from these unofficial training courses, self-financed, grew steadily representing today around 15% of the revenues raised through first and second cycle education.

Germany

The most successful approach of university-business cooperation in **Germany**, dual study models of combining VET profiles and study programmes, are free for students. As apprentices, they not only don't have to pay for their training but earn money whilst they are learning. **Tab. 8** shows that monthly remuneration of an apprentice-student can be rather high. In most of the cases this income is sufficient for studying.

Tab. 8 Apprentice wages (€) in West-Germany		
Min	Max	AV
494.00	1057.00	832.00
Source: BiBB (2015)		

Beside these happy few (at least regarding financial aspects) in dual study programmes all other students also profit from state support: Normal study programmes are also free (if not exceeding nominal number of semesters) and students might apply for financial support (up to 735€ if in need) – but this support must be remunerated fifty-fifty after studying.

Tab. 9 Funding of HE and Adult education in DE			
State support of each university place per year (2013)	State support for each participant in adult education in 2012	Σ state support of higher education (2012)	Σ state support of adult education (2012)
10,790 €	300 €	27.8 Billion €	6.1 Billion €
Sources: Spiegel (2016), Bertelsmann (2015)			

Tab. 9 Funding of HE and Adult education in DE highlights financial support from state for higher education and adult education. A direct comparison is not fair (many adult education programmes are rather short and/or co-financed by companies or other entities); but it becomes quite obvious that public support of adult education at universities cannot cover the real costs of programmes; all 3 programmes analysed in German case studies are co-financed by third parties (participants, companies, projects). For sure this is a rather negative reason: but the willingness of individuals or companies to pay for a HE course (traditionally free in Germany) might be seen as a descriptor of quality.

³¹ We can take people with Bachelor degree as reference as they are one of the main clients of these programmes.

United Kingdom - Scotland

The issue of the marketization of higher education particularly in relation to student funding is an area where divergence in policy between the devolved constituencies of the UK is perhaps most apparent and widely known. Under the vagaries of EU law, this has resulted in a situation whereby EU students studying at undergraduate level in England are liable to pay tuition costs, they do not have to pay fees in Scotland although students from the Rest of UK (England, Wales and Northern Ireland) do have to pay fees if they wish to study for an undergraduate degree in Scotland.

In relation to students support, both England and Scotland offer a system based on both needs based grants and loans for full-time students. However, amounts available, the eligibility criteria and repayment conditions vary.³²

There has also been in addition to tuition fees, and student support funding, further divergence in funding in terms of England and Scotland in a number of areas. In relation to funding the post-compulsory education, England has maintained the distinction between the HE and FE sectors and the FE sector has underwent a number of changes.^{33, 34, 35, 36} The Skills Funding Agency has recently introduced as an addition to the Foundation Degree route for learners and/or employers in areas of WBL the *Higher Apprenticeship* which are WBL programmes leading to either awards at Levels, 4, 5 or 6.^{37, 38}

Higher education funding in England is the responsibility of the *Higher Education Funding Council for England* (HEFCE) which funds and regulates universities and colleges of higher education in England. In 2014-2015 its overall budget was just under £3.9 billion.^{39, 40} Specifically related to funding and relevant to this report; HEFCE invested more than £100 million⁴¹ in the period 2001-2011 to develop Foundation Degrees as part of its wider *Workforce Development Programme* (WDP).⁴² The WDP was specifically aimed at engaging with recommendations contained in the *Leitch Review of Skills*.

In Scotland, and in contrast to the approach taken in England, efforts have been directed to integrate the funding regimes of further and higher education and this was specifically linked to government policy, the structure of the Scottish post-compulsory sector and funding incentives through the adoption of a recognisably lifelong learning approach to education and training. This is perhaps best illustrated by reference to *Learning for All*⁴³ which detailed their widening access strategy.

³² http://eacea.ec.europa.eu/education/eurydice/documents/facts_and_figures/fees_and_support.pdf

³³ <http://www.legislation.gov.uk/ukpga/2000/21>

³⁴ <http://www.theguardian.com/politics/2009/jul/28/learning-skills-council-quango-debt>

³⁵ <https://www.gov.uk/government/organisations/skills-funding-agency/about>

³⁶ <https://www.gov.uk/government/organisations/education-funding-agency/about>

³⁷ Cert.HE, Foundation Degree, Bachelor Degree respectively.

³⁸ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/374552/Employer_Guide_to_Higher_Apprenticeship.pdf

³⁹ <https://www.hefce.ac.uk/pubs/year/2014/201405/>

⁴⁰ <https://www.hefce.ac.uk/about/role/>

⁴¹ <http://www.hefce.ac.uk/news/newsarchive/2010/Name.94096.en.html>

⁴² http://www.hefce.ac.uk/media/hefce/content/pubs/indirreports/2011/RE.1311.Workforce.dev.prog/rd13_11.pdf

⁴³ http://www.sfc.ac.uk/web/FILES/Access/learning_for_all_publication_september_2005.pdf

This is now subject to the publication of an annual update *Learning for All: Measures of Success* with its ninth edition published in March 2015 which sets out how and in what ways outcome measures participation and achievement have changed on an annual basis.⁴⁴

The *Further and Higher Education (Scotland) Act 2005*⁴⁵ dissolved the *Scottish Further Education Funding Council* (SFEFC) and the *Scottish Higher Education Council* (SHEFC) and created a new *Scottish Funding Council* (SFC).⁴⁶ This development it is suggested can be directly linked to the integrated strategy outlined in *Learning for All* and also to the SFC's strategy on employability *Learning to Work*⁴⁷ which was to support college and university efforts to build capacity and good practice with a view to enhancing student employability of which WBL was an element. In *Learning to Work Two*⁴⁸ over £4 million in funding was allocated to four Work Placement Projects on:

*Education into Enterprise*⁴⁹

- to make accredited work-placement opportunities available to students enrolled in HE courses which do not currently offer this option at participating institutions;

*E-Placements Scotland*⁵⁰

- place 750 students of any discipline at any level of study in participating universities and colleges in business and information technology placements in the IT industry ranging from 3-12 months;

*Third Sector Interns*⁵¹

- place 200-300 students in flexible format paid placements (350 hour maximum) with third sector organisations;

*Making the Most of Masters*⁵²

- helps masters programmes source and implement work based dissertation projects. These will be aimed at companies working in Scottish Government key economic sectors and will be aimed particularly at small to medium sized enterprises

Turkey

In the *Turkish* report prepared by the *Ministry of National Education* (2009) it is stated that the main funding source of adult education is society capital. These are funds that are allocated by state and *Special Provincial Administration* budget for informal education. In addition, there is finance obtained by courses organized within the scope of discretionary funds and voluntary support and donations. On the other hand informal vocational and technical training is supported by the *Supporting Operations to Develop and Extend Apprenticeship, Vocational and*

⁴⁴ http://www.sfc.ac.uk/web/FILES/Statistical_publications_SFCST062015_LearningforAllMeasuresofSuccess/SFCST062015_Learning_for_All_2015_Measures_of_Success.pdf

⁴⁵ <http://www.scottish.parliament.uk/parliamentarybusiness/Bills/25083.aspx>

⁴⁶ <http://www.sfc.ac.uk/aboutus/aboutus.aspx>

⁴⁷ <http://www.sfc.ac.uk/skills/LearningtoWork/LearningtoWork.aspx>

⁴⁸ <http://www.sfc.ac.uk/skills/LearningtoWork/LearningtoWork.aspx>

⁴⁹ http://www.sfc.ac.uk/web/FILES/Skills_LearningtoWorkTwo/Education_Into_Enterprise.pdf

⁵⁰ <http://www.e-placementscotland.com/>

⁵¹ <http://www.3rdsectorintern.com/>

⁵² <http://www.mastersprojects.ac.uk/>

Technical Training budget. Institutions such as municipalities, foundations and associations directly support adult education by delivering public courses. Private companies also support adult education by reimbursing their own employees’ educational costs or directly (purchasing educational services from other institutions).

Tab. 10 Ministry of National Education’s budget distribution for adult education*			
Years	Total budget appropriation of Ministry of National Education	Distributed amount for Lifelong Learning and Public Education Center	Distributed amount for Lifelong Learning General Directorate
2013	47,496,378,650	1,364,812,300	24,736,000
2014	55,704,817,610	1,099,037,830	442,643,810
2015	62,000,248,000	1,172,419,039	494,868,899

* Figures in TRY currency

It can be seen in **Tab. 10** that budget appropriation of the *Ministry of National Education* has increased throughout the years. In contrast with this increase there is no significant change in the amount distributed to the budget for the *Lifelong Learning and Public Education Centre* while the amount distributed to the *Lifelong Learning General Directorate* has dramatically increased in 2014. According to the table, the proportion of the *Ministry of National Education’s* budget spent for adult education is around 2.5 %.

In **Tab. 11**, the total budgets of *Ministry of National Education* and *Higher Education Council + Universities* are shown for the years 2013 and 2014. According to this information, adult education *HEC + Universities’* budget is around three times less than the *Ministry of National Education’s* budget. However, it is known that both the *Ministry of Education*, and the *Higher Education Council* and universities allocate money for adult education. When the amounts in both **Tab. 10** and **Tab. 11** are combined, it is seen that nearly 20 billion in total is spent for adult education by two important educational institutions – *Ministry of National Education* and *HEC + Universities* in Turkey.

Tab. 11 Budgets of Ministry of National Education and HEC+Universities*			
Years	Total budget appropriation of Ministry of National Education	Budgets of HEC+Universities	Total
2013	47,496,378,650	15,227,760,500	62,724,139,150
2014	55,704,817,610	16,939,010,000	72,643,827,610

*Figures in TRY currency

Finland

In terms of funding in **Finland**, about 12 per cent of the *Ministry of Education's* budget is allocated to adult education. Of this total, about 40 per cent is allocated to vocational adult education and training and apprenticeship training, one fourth goes to adult education provided by higher education institutions, a fifth to liberal adult education, and about 5 per cent to developing adult education and continuing education for teaching staff (Eurypedia, undated).

In Finland, there are no tuition fees for BSc, MSc or PhD programs designed for Finnish or EU citizens. This is why universities have limited options to redesign these programs to make them suitable for adult students. The programs are not designed for part-time study, and it is difficult to study in these programmes while working full time. In addition, pedagogically, the studies are designed for young people. Even though the studying itself is free (no tuition costs), adult students must find ways to finance their own living costs (Myllymäki, 2013).

There are several possibilities to seek financial support while studying for adults. *The Education Fund*⁵³ is administered by the social partners of the Finnish labour market. Its purpose is to support employees' studies by granting them financial assistance (*Adult Education Allowance*) and to support the development of the vocational qualification system by granting scholarships for competency-based qualifications (*Scholarship for Qualified Employee*).

The purpose of the *Adult Education Allowance*⁵⁴ is to support employees' and self-employed persons' voluntary vocational studies. To qualify for the allowance, the applicant must participate in studies leading to a degree, or in continuing education organized by a Finnish educational institution. In addition, they must live permanently in Finland and their full-time employment relationship with the same employer or pension-insured entrepreneurship must have lasted for at least one year. Moreover, the applicant must have been employed by a Finnish employer or have worked as a self-employed person in Finland for at least eight years.

When an employed adult wants to study full time, he or she can apply for a study leave. One can apply for a maximum of two years of study leave within a five-year period. Finland also has a long tradition of liberal adult education offering non-formal non-certificated studies for leisure or self-development often delivered through folk high schools.

Czech Republic

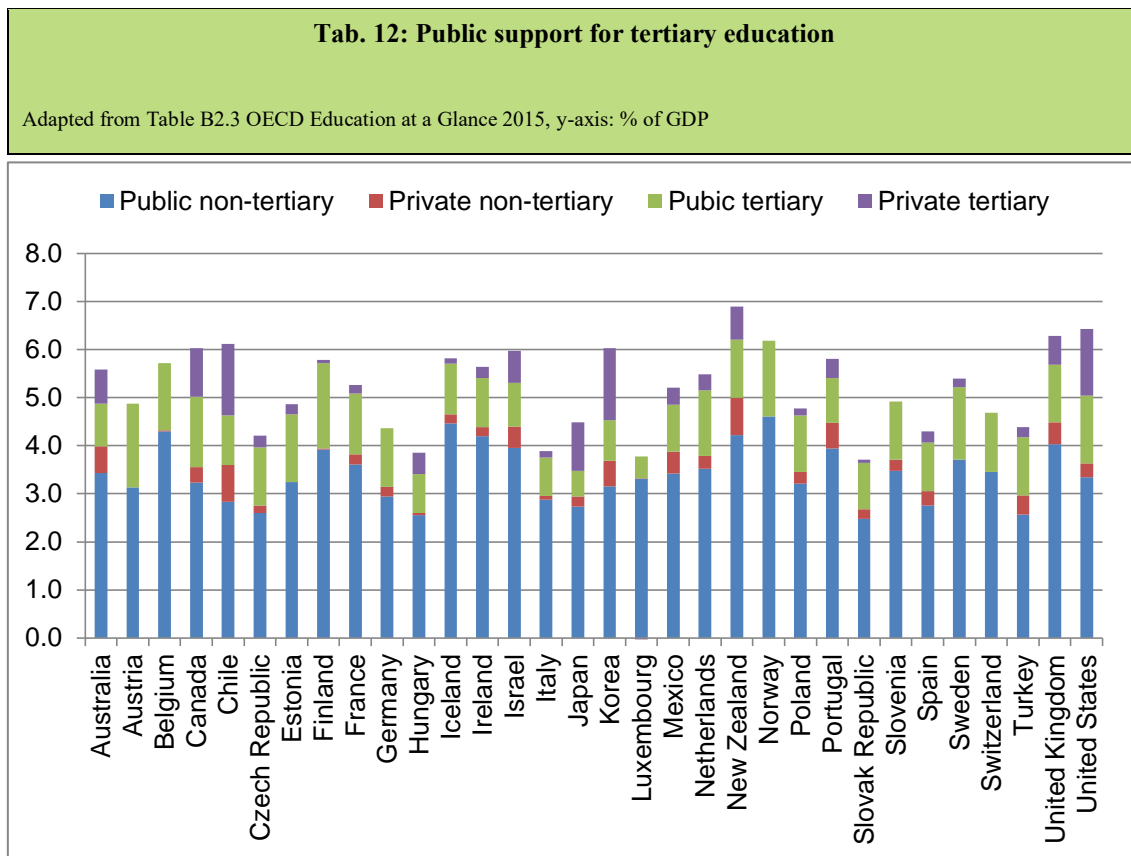
Over 90% expenditure on primary, secondary and post-secondary non-tertiary education is public in many OECD countries. The Czech Republic is no exception; private expenditure on primary, secondary and post-secondary non-tertiary education is around 10%. This can be contrasted with the tertiary education sector where the proportion of expenditure is wider in OECD countries. In the Czech Republic the private expenditure is around 20%, but in some countries (such as Chile, Korea or USA) the private expenditure on tertiary education is over 70%.

The main part of expenditure on tertiary education is public expenditure on educational institutions (it is more than 80 %) and expenditure of other private entities and household expenditure (Education at a glance, OECD 2010). The ratio of public expenditure on educational institutions is higher than in other OECD countries and overall support is lower than

⁵³ <http://www.koulutusrahasto.fi/en/education-fund>

⁵⁴ <http://www.koulutusrahasto.fi/en/adulteducationalallowance/>

in OECD countries. Annual public expenditure on educational institutions per student in tertiary education, by type of institution in 2012 is in Tab. 12 below.



Concerning the funding of further education and training, the sources are:

1. Public sources (state or regional budgets)
2. Private sources (companies, individuals, social partners etc.)
3. Sources from EU (ESF)

Expenditures on further education are provided by companies (88 % in the Czech Republic and 72 % in EU), by state (11 % in the Czech Republic and 18 % in EU) and by individuals (1 % in the Czech Republic and 10 % in EU) (Palán 2007). Further education is provided mainly by big companies (54 % employees in big companies are educated) and less frequently in small companies (21 % employees in small companies are educated), the mean is 49 % employees (Palán 2007).

Studying at universities in *Czech* language is free at all public schools. Universities try to cooperate with companies to place all learners to the internship. All internships are not paid but universities have to invest to facilitate the agenda developing this cooperation.

Funding: a summary

With Finland, Czech Republic, Germany and Scotland (differing from England) 4 of the 6 LETAE-countries don't charge tuition fees for "normal" students; in Spain and Turkey students have to pay.

Tab. 13: Fees and financial support for higher education		
	Fees	Support
CZ	Minimal administration charge and no fees; international students pay no fees unless in foreign language instruction	Some support dependent upon need, excellence, location - family allowances and tax benefits for parents
DE	Small administrative charge but no fees - no fees EU, outside EU and EAA members	General public and merit based grants plus loans (age limited <30) – family allowances and tax relief
ES	Multiple fees systems based on ECTS; exemptions by need; individual responsibility (15-25% of fees) – non EU higher fees	Tuition fee waiver plus national grant – no tax benefits or family allowances
FI	No fees	Study grant and housing supplement – income dependent – study loans available – no tax benefits or family allowances
TR	Public universities differential fees morning or evening; not for profit fee discounts available; 1 st and 2 nd Cycle differential	Various forms of grants in form of scholarships and learning credits; loans – no tax benefits or allowances
UK	England: expensive tuition fees (max €11,000 p.a.) repayable as income contingent for home and EU students; international fees not regulated	Low income grants now abolished – loans repayable as with fees – no tax benefits or allowances
	Scotland: no tuition fees for home and EU – but fees payable by Rest of UK students; International fees unregulated	Grants for low income and loans – income contingent repayable – no tax benefits or allowances

(Source: adapted from Eurydice 2015)

Cooperation between universities and enterprises are in all countries with the exception of one Scottish case considered as an additional offer and are not covered by the basic funding of universities; additional funding for these programmes by third parties is required. This additional funding is usually project (programme)-based, assured only for a short period for some tracks and is either paid by federal bodies (for instance by projects or from adult education funds), by the companies that send their employees to the programme, or by the students themselves. Whether students and/or company have to pay for a programme or not, has been analysed in detail in our cases studies, will be the third descriptor of the proposed typology in chapter 5.

3.4. Statistics on Educational structures and Graduate labour markets

OECD-statistics for *participating countries* on the percentage of younger adults with tertiary education offer an impression of the role of HE in the LETAE partner countries; **Tab. 14** shows the development from 2000 to 2013.

Tab. 14 Percentage of younger adults (25-34 years old) with tertiary education		
Country	2000	2013
OECD mean	27%	41%
Czech Republic	11%	30%
Germany	23%	28%
Spain	34%	42%
Finland	38%	41%
UK	29%	49%
Turkey	9%	23%

Source: OECD 2015

Although this kind of macro-data always includes a lot of uncertainties (different understanding of HE, politically corrected statistics, different quality of HE-institutions or -programmes...); it offers at least a clear separation between the LETAE partner countries: Finland, Spain and the UK are above (or on the) mean, Turkey, Czech Republic and Germany below mean – OECD-reports for these countries are combined with recommendations to increase the amount of adults with tertiary education. Whereas these recommendations are reasonable for Czech Republic and Turkey due to the really low enrolment in 2000 and the special historic circumstances (post-socialist and low-industrialisation respectively); for the case of Germany this recommendation ignores an important aspect of the German educational system in respect of the labour market: Many demanding positions that in other countries are filled by HE-qualified persons, are covered by CVET-qualified persons in Germany, with comparable wages, status and sometimes even higher concrete skills for the position. Comparable conclusions can be drawn when analysing statistics on participation rates in education and training by adults in LETAE countries table (cp. **Tab. 15**). A lot of hidden variability (quality of programmes, understanding of informal learning, intention of programmes (e.g. real added value vs. programmes only to decrease numbers in the unemployment statistics), and beneficiaries is included but the same trend as in **Tab. 14** is apparent with: Spain, UK and Finland above or close to the mean, and Czech Republic, Germany and Turkey below.

As before, a naïve and simplistic interpretation (the higher, the better) must be questioned: For sure a certain ratio of population must be re- or further qualified during their working life due to changing economies, new technologies, or other reasons – but a high ratio might also be seen as an indication of poor initial (whether VET or HE) education; for example if initial programmes unconnected with labour market demands or if modularised IVET approaches offer only a training to a certain workplace or sector – and further education is necessary if the person

changes to another workplace; even if it is in the same company and within the same broad job family. It also ignores the evidence that each national labour market contains only a limited proportion of ‘graduate’ jobs and above that there is a danger of over education and mismatch in terms of qualifications and skills.^{55,56}

Tab. 15 Participation rate in education and training (last 4 weeks), Age from 25 to 64		
Country	2009	2014
EU 28 mean	9.1%	10.7%
Czech Republic	6.8%	9.3%
Germany	7.8%	7.9%
Spain	10.6%	9.8%
Finland	22.1%	25.1%
UK	20.1%	15.8%
Turkey	2.3%	5.0%
Source: Eurostat 2015)		

But levels of participation in education and training do not provide any information on the kind of programmes, specifically; whether they can be considered as being part of TLL. **Tab. 16** gives an impression of the distribution of training providers of non-formal education.

The authors of the study state:

“Within the domain of lifelong learning statistics, formal education corresponds to education and training in the regular system of schools, universities, colleges and other formal educational institutions that normally constitute a continuous ‘ladder’ of full-time education for children and young people (generally completed by the age of 25).”⁵⁷

Non-formal education and training is defined as any organised and sustained educational activity that does not correspond to the definition of formal education. Non-formal education and training may or may not take place in educational institutions and cater for persons of all ages. It may cover educational programmes to impart adult literacy, basic education for out-of-school children, life skills, work skills, and general culture.

⁵⁵ http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/publication/wcms_315623.pdf

⁵⁶ www.cedefop.europa.eu/files/9087_en.pdf

⁵⁷ http://ec.europa.eu/eurostat/statistics-explained/index.php/Lifelong_learning_statistics

Tab. 16 Providers of non-formal education and training activities, 2011

Country	EU-27	Czech R.	Germany	Spain	Finland	UK
Employer	32.0	40.7	28.2	14.4	44.1	44.3
Non-formal education & training institution	17.7	32.6	14.3	13.5	8.9	10.7
Formal education institution	9.8	9.1	16.8	9.5	20.4	-
Commercial institution where education & training is not the main activity	10.9	3.4	17.0	16.1	5.2	-
Employers' organisation, chamber of commerce	3.2	1.3	-	6.9	1.0	7.3
Non-commercial institution (e. g. library)	5.7	2.0	5.2	22.4	2.8	1.6
Non-profit organisation	5.9	1.5	3.0	5.9	10.1	2.1
Individual	5.1	7.1	7.7	3.4	1.3	3.4
Trade union	1.0	-	0.9	3.8	1.8	-
Other	4.9	1.6	4.2	-	4.0	-
Source: Eurostat 2011						
Note: No data for Turkey available, no entries: weak evidence, data: percentage						

Note that the statistics presented do not cover informal learning, which corresponds to self-learning (for example through the use of printed material, computer-based learning / training, (internet) web-based education or visiting libraries). (Eurostat 2011)

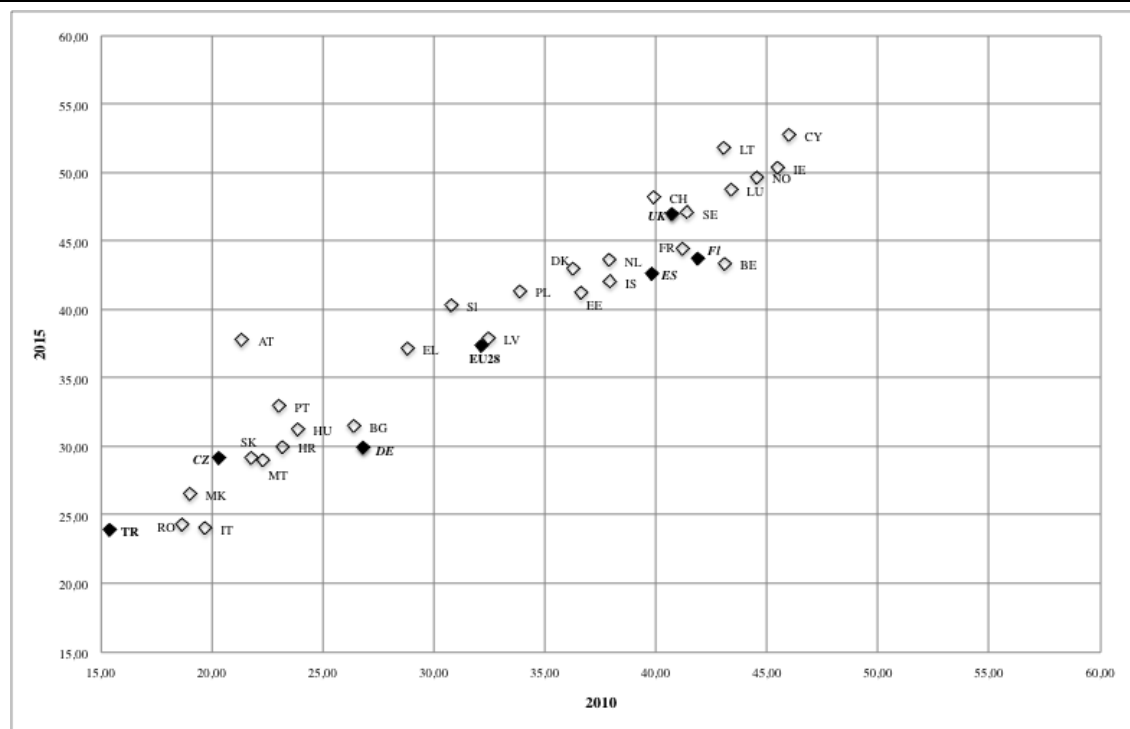
With the understanding of non-formal learning cited above, many of the cases analysed (cp. chapter 4) must be considered as being “non-formal”, as they are not part of a “continuous ladder of full-time education” and most beneficiaries are much older than 25. Only between 9.1% (Czech Republic) and 20.4% (Finland) of non-formal programmes are offered by formal education institutions – not only universities, but also by schools, for example to provide an University entrance diploma via “second-chance education”; there is quite obvious a broad zone for further development of TLL-programmes.

As we have stated, the situation in the studied countries is very different and goes some way to explain the different university adult education strategies. We have outlined some difference in higher education systems, which will be now complemented by some general observations of the labour markets.

The first element is the share of people with higher education in the population. We have analysed respective OECD data before, but we come now back to this issue taking as reference the population aged between 25 and 39 years using Eurostat data. **Figure 7** shows the evolution of the share between 2010 and 2015.

It is obvious that in all countries the share of people with higher education has risen. But it also evident, that the position of each of the studied countries is different. Turkey has the lowest share of people with higher education. The Czech Republic and Germany are in both years of reference clearly under the EU-28 average. But the Czech Republic shows a stronger growth of the share compared to Germany. On the other side, there are Finland, Spain and the United Kingdom with a share clearly higher than the EU-28 average, showing the United Kingdom with a higher growth rate than both other countries.

Figure 7 Share of people with higher education of the whole population aged 25 to 39 in 2005 and 2015

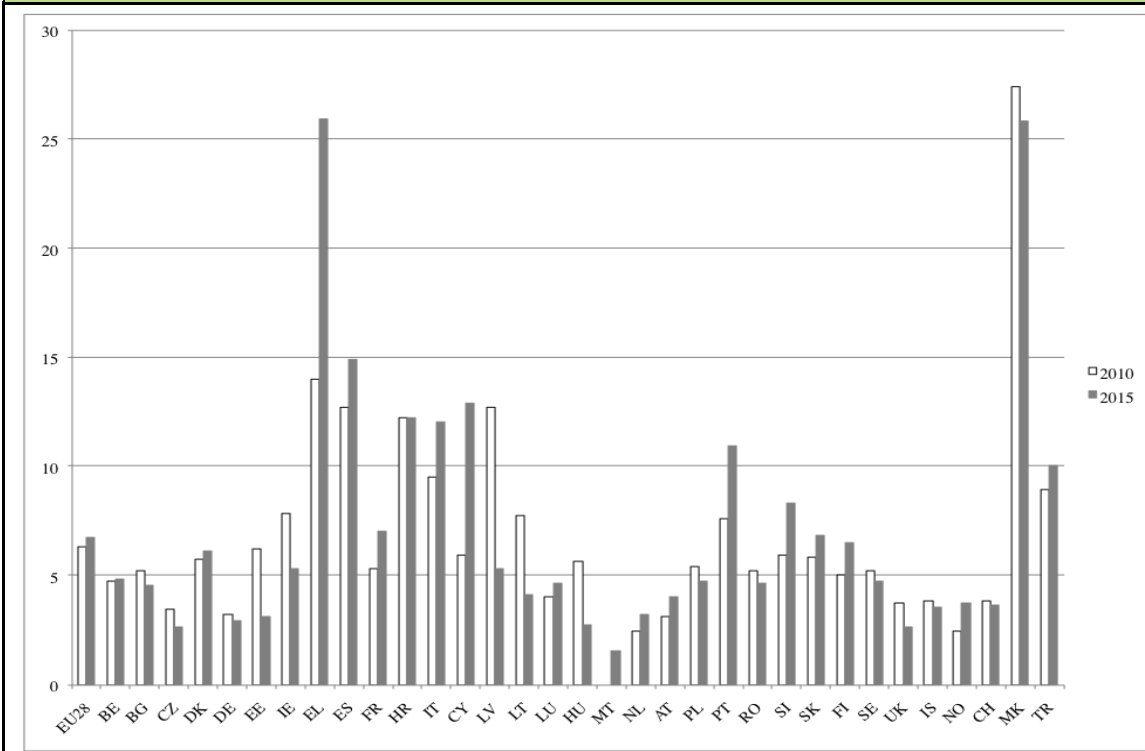


Source: own elaboration based on Eurostat data (Labour Force Survey)

The second element is the unemployment rate. In all countries the unemployment rate of the people with higher education is considerably lower compared to the national average. In four of the studied countries (Finland, Germany, the Czech Republic and the United Kingdom the unemployment rate is relatively low, meanwhile in Spain and Turkey it is high). This Figure is in the line with the general profile of unemployment in these countries. However, and as noted elsewhere that low levels of unemployment may also signify a high degree of mismatch between educational attainment and labour market position; and that many of the new jobs are in low skill precarious employment with few prospects and little protection.

With this in mind, it would be interesting to compare the evolution of the unemployment rate of people with higher education to the rate of people with mid education (ISCED 3 and 4). For this comparison, we divide the unemployment rate of the people with higher education by the rate of people with mid education. In the case that the result is higher than (1), then the labour market position of higher educated people is better than the situation of people with mid education in terms of access to jobs.

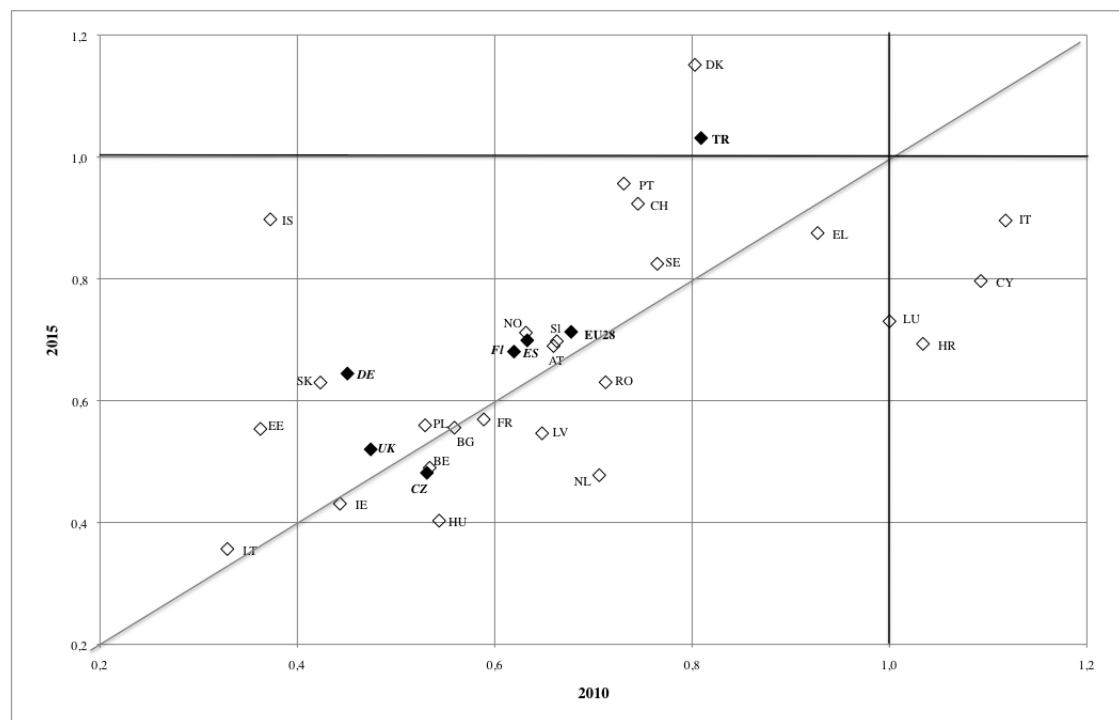
Figure 8 Unemployment rate of people with higher education of the whole population aged 25 to 39 in 2010 and 2015



Source: own elaboration based on Eurostat data (Labour Force Survey)

In the majority of the European countries included in the analysis, the unemployment rate of the high-educated people is considerably lower than the respective rate of people with mid education. But there are a number of countries, in which both rates – in the year 2015 - are not so far away from each other as e.g. in Denmark, Greece, Island, Italy, Portugal, Switzerland, and Sweden. In this group we find also Turkey – one of the countries studied by the LETAE project. In the other studied countries, the unemployment rate of higher educated people is considerably below the rate of people with mid education. However, in five of six analysed countries, we see that the distance between both rates became closer between 2010 and 2015 with the exception of the Czech Republic. But this is not a general trend among the European countries. There is also a series of countries in which the distance increased.

Figure 9 Unemployment rate of people with higher education in comparison to the unemployment rate of people with mid education of the whole population aged 25 to 39 in 2005 and 2015

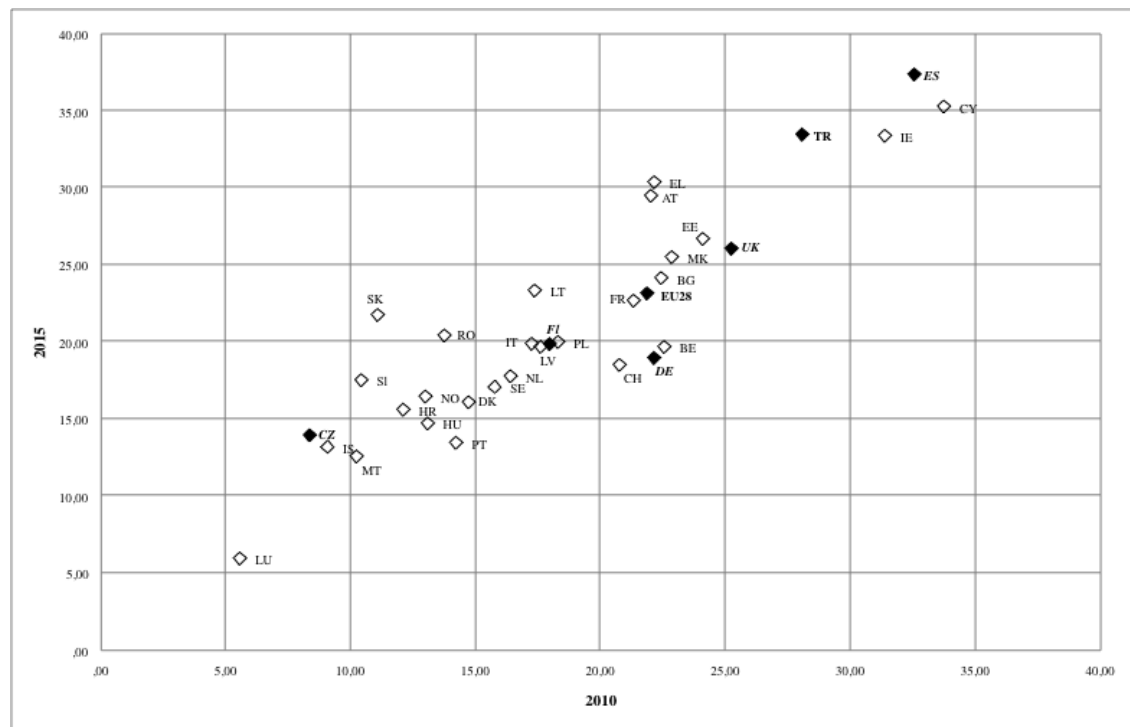


Source: own elaboration based on Eurostat data (Labour Force Survey)

The third element is the mismatch between education and occupation profile. Here we use as reference the occupational groups of the *International Standard Classification of Occupation* (ISCO 2008), asking how many of the people with higher education are not working in a occupation classified in the occupational groups 1 (*Managers*), 2 (*Professionals*) or 3 (*Technicians and associate professionals*). The high rate of sub-utilisation of high-educated work forces - that means their employment in occupations no corresponding to their classification - is a clear indicator of the fact, that the economic system has absorbed well the highly educated people. That means there is a mismatch between the economic development and the education evolution of a country.

We observe that in all studied countries, the mismatch rate has increased between 2010 and 2015 except in Germany. There is also a considerable difference in the performance of the countries. While Spain, Turkey and the United Kingdom have a considerably high mismatch rate, which in both years is higher than the EU-28 average, Finland, Germany and the Czech Republic have moderate to low mismatch rates, which are in both years of reference below the EU-28 average or nearby. But it seems that the Czech Republic has problems to absorb the increasing number of high educated people, in spite of the share of high educated people being low compared to other European countries.

Figure 10 Higher education mismatch rate of the population aged 25 to 39 in 2005 and 2015



Source: own elaboration based on Eurostat data (Labour Force Survey)

An example will help to illustrate how mismatch may occur in relation to ‘creeping credentialism’ where the job requirements do not fundamentally change, but the credentials required are inflated. A recent report in the UK by the Chartered Institute of Personnel Development (CIPD) provides some evidence to support this contention.⁵⁸ Some specific examples are provided:

- 35% of bank and post office clerks have degrees, 10 times the percentage in 1979.
- 43.9% of police officers entering the force at the rank of sergeant or below have a university qualification, up from 2% in 1979.
- 41% of new jobs in property, housing and estate management are graduates, compared with 3.6% in 1979.
- The number of newly-employed teaching assistants with a degree has increased from 5.6% to 36.9% since 1979. (Elliott, 2016)

According to Peter Cheese, CIPD chief executive: “This report shows clearly how the huge increase in the supply of graduates over the last 35 years has resulted in more and more occupations and professions being colonised by people with degrees, regardless of whether they actually need them to do the job.” (*Op. cit.*)

It is suggested that these three elements provide indicators of the difference of the labour market for graduates in the country analysed to which the higher education systems and the universities

⁵⁸ https://www.cipd.co.uk/Images/over-qualification-and-skills-mismatch-graduate-labour-market_tcm18-10231.pdf

must respond but this would often appear to be overlooked when encouraging undergraduate level study and upskilling.

4. Case study fiches

4.1. Spanish Cases

First Spanish Case: Master in Global Management
<p>Postgraduate programme – tailor made – long duration</p> <p><u>Enterprise:</u> INDRA - International technology firm with headquarter in Spain <u>University:</u> Technical University of Madrid</p> <p><u>Short Description:</u> The tailor made programme has the objective to improve the technical and social competences of people from the middle management, the acquisition of social capital bringing together people from different operational areas, obtaining a vision of the different management processes in the enterprise and to serve as an incubator of new business ideas. The programme forms part of the internal human resource strategy to select and train persons for high management positions</p> <p><u>Type</u> Blended learning; project based learning; modularised</p> <p><u>Duration</u> 600 hours = 30 ECTS = 14 month</p> <p><u>Target Group</u> Own staff, middle management People with higher education degree Participation: around 20 persons</p> <p><u>Teaching Staff</u> In-house personal (selected by the company) Academic staff (selected by the university)</p> <p><u>Certificate</u> Own university certificate; previous evaluation process</p> <p><u>University-Business Cooperation</u> Led by the enterprise University as Training provider</p> <p><u>Fee</u> Programme paid by the enterprise</p> <p><u>Evaluation Process:</u> Managed by the enterprise Focused on the student satisfaction End of the programme</p>

Second Spanish Case: Master in Water Management
Postgraduate programme – tailor made – long duration
<p><u>Enterprise:</u> AGBAR Multinational Technology and Service provider University: Technical University Cataluña</p> <p><u>Short Description:</u> Tailor made training programme for professionals of the company. The master aims to prepare company's staff for the management of the water and environmental business in a global and dynamic environment. The program gives an overview of the management of the integral water cycle and provides the tools to direct and assess projects with criteria of quality, time and cost optimization. It is focused on the acquisition of technical and social competences and the acquisition of social capital bringing together people from different operational areas. It facilitates a vision of the different management processes in the enterprise and serves as an incubator of business ideas. The programme forms part of the internal human resource strategy to select and train persons for high management positions</p> <p><u>Type</u> Blended learning; project based learning; modularised</p> <p><u>Duration</u> 700 hours</p> <p><u>Target Group</u> Own staff, middle management People with higher education degree Participation: around 20 persons</p> <p><u>Teaching Staff</u> In-house personal and external experts (selected by the company) Academic staff (selected by the university)</p> <p><u>Certificate</u> Own university certificate, previous evaluation process</p> <p><u>University-Business Cooperation</u> Led by the enterprise University as Training provider</p> <p><u>Fee</u> Programme paid by the enterprise</p> <p><u>Evaluation Process:</u> Managed by the enterprise Focused on the student satisfaction End of the programme</p>

Third Spanish Case: Valorisation and Accountability of enterprises

Postgraduate programme – tailor made – short duration

Enterprise: Cuatrecasas – International Lawyers office

University: University Pompeu Fabra – School of Management (university owned foundation for Continuous Training)

Short Description:

The short tailor-made post-graduate programme aims promoting specific technical knowledge considered as relevant for excellent performance of the legal services and which are not included in the higher education for lawyers (Bologna cycles). The objective is that the participants obtain a consolidated vision of this field in theoretical and practical aspects. For new entrance in this area, the participation in the programme is obliged. The programme is framed in the firm’s strategy to develop professional development, which is strongly based on internal knowledge transfer.

Type

Face-to-face learning with one online introduction sessions; 3 modules

Duration

48 hours

Target Group

Own staff, new entrances

People with higher education degree

Participation: around 20 persons

Teaching Staff

Academic staff with professional experience outside the university

(selected by the university)

Certificate

Own university certificate, previous evaluation process

University-Business Cooperation

Leaded by the enterprise

University as training provider

Fee

Programme paid by the enterprise

Evaluation Process:

Managed by the enterprise

Focused on the student satisfaction

End of the programme

4.2. German Cases

First German Case: TRIAL
Undergraduate programme – Open university – long duration
<p><u>Enterprise:</u> Diverse</p> <p><u>University:</u> University of Bremen (ITB)</p> <p><u>Short Description:</u> Institute for Technology and Education (ITB) from Bremen University together with CVET adult education provider “Handwerk Bremen” (run by the chamber of handicraft) and supported (or at least tolerated) by the employers of the students started in 2012 the 3 years open study programme “TRIAL”. Successful students receive a double qualification, a Bologna bachelor degree in engineering and a CVET-certificate as a vocational pedagogue, both on EQF-level 6. Programme combines and recognises the learning outcomes of three learning venues: university, CVET-courses and workplace.</p> <p><u>Type</u> Traditional seminars; project based learning; modularised</p> <p><u>Duration</u> 3 years (180 CP)</p> <p><u>Target Group</u> Technicians and Masters (both CVET-degrees) without university entrance diploma Participation: around 20 persons each year</p> <p><u>Teaching Staff</u> In-house personal (selected by CVET-provider) Academic staff (selected by the university)</p> <p><u>Certificate</u> Normal Bachelor Degree & CVET-diploma (Vocational pedagogue)</p> <p><u>University-Business Cooperation</u> Initiated by university (to increase amount of students) University & CVET-provider as Training providers, recognition of LO from working life</p> <p><u>Fee</u> Free</p> <p><u>Evaluation Process:</u> Managed by university Focused on student satisfaction and challenges Formative</p>

Second German Case: Master of Industrial Engineering

Postgraduate programme – tailor made – long duration

Enterprise: Diverse

University: University of Bremen (aib)

Short Description:

Study programme Master of Engineering “Industrial Engineering” (MIE) was developed to bridge this gap between competencies from first (technical) studies and the expectations of management positions.

Programme is designed parallel to work and equals 120 Credit Points (CP) as almost all German Master programmes. These 120 CP correspond to 2 years of full-time studies; as the target group of programme is employed and from all over Germany, regular period of studies was extended within this programme to 3 years.

Type

Blended learning; project based learning; modularised

Duration

3 years (120 CP)

Target Group

Middle management

People with higher education degree

Participation: around 10-15 persons

Teaching Staff

Academic staff (selected by the university)

Certificate

Master degree

University-Business Cooperation

Developed and led by university

University as Training provider

Fee

Programme (18000€ per student) paid by enterprise and/or student

Evaluation Process:

Managed by university

Focused on student satisfaction

Formative and at the end of programme

Third German Case: HCAT-Pro: Hamburg Centre of Aviation Training Propaedeutic course

Undergraduate programme – propaedeutic – mid-term duration

Enterprise: Airbus Hamburg

University: Hamburg University of applied sciences (HAW)

Short Description:

Case is a propaedeutic measure of one semester, offering a low-threshold insight into engineering studies at Hamburg University of applied sciences (HAW) alongside work. Programme was originally developed to increase the amount of female students in engineering disciplines (Pro Technische); around 15 young women participate, funded by city council of Hamburg. But there was space for more students, Airbus Hamburg decided to join programme and to send 5 apprentices in their last (third) year of apprenticeship to programme.

It was agreed that achieved Learning Outcomes (LO) resp. Credit Points (CP) will be recognised and accredited by HE (HAW) and CVET-providers. A successful student, who passes all examinations receives 21 CP, equalling lectures from different semesters (not only 1st semester.)

Type

Traditional lessons combined with practical work, 6 core areas

Duration

1 semester, (21 CP)

Target Group

Airbus apprentices in their last (third) year of apprenticeship

Participation: 5 persons per year

Teaching Staff

Academic staff

VET-teachers

Certificate

Certificate of participation by university

University-Business Cooperation

based on mutual trust & experiences

Fee

Programme (~2000€ per student) paid by the enterprise

Evaluation Process:

Informal by the enterprise (interviews of participants)

Focused on amount of participants who start to study afterwards

End of programme

4.3. UK/Scottish Cases

First UK Case: Bachelors in Community Development
Undergraduate programme – three years duration -
<p><u>Partnership/collaboration:</u> Community Learning Development Standards Council, Scotland; various placement organisations in public or third sector</p> <p><u>Short Description:</u></p> <p>Programme was designed to provide professional accreditation to workers in the field of community learning and development; and as it is a work-based programme all applicants must have at least two days per week of paid or unpaid work in the field. In addition to degree is accredited by professional standards agency.</p> <p><u>Type</u></p> <p>Full-time; F2F with VLE supported learning; modular; Level 5 EQF/Level 9 SCQF; 60% academic/40% practice assessment</p> <p><u>Duration</u></p> <p>180 ECTS = 36 Month including 1540 hours of assessed practice; 1-1½ days per week</p> <p><u>Target Group</u></p> <p>Un-qualified or low qualified existing workers or volunteers in the field of community development, youth, migrant, disabled etc. Generally over age 25. 25 entrants per year. Direct entry routes to second and third possible through articulation from FE colleges</p> <p><u>Teaching Staff</u></p> <p>Academic staff in the School of Education; placement supervisors</p> <p><u>Certificate</u></p> <p>BA Community Development (routes to Honours and PG in development)</p> <p><u>University-Business Cooperation</u></p> <p>Led by academic staff with existing expertise in area – reacting to demand from Local Authorities to professionalise workforce – developed organically</p> <p><u>Fee</u></p> <p>Tuition free to students from Scotland and the EU</p> <p><u>Evaluation Process:</u></p> <p>Academic regulations on the award of degrees</p> <p>Placements assessed in relation to CLD competence to practice</p> <p>Module and course level evaluation plus system of Student Representatives</p>

Second UK Case: FD Electrical Power Engineering

Foundation degree programme – 3 year sandwich

Partnership/collaboration: Aston University and Scottish and Southern Energy with Scottish 1st year provision delivered by UHI (University of the Highlands and Islands);

Short Description:

Programme was designed to provide professional accreditation to workers in the field of community learning and development; and as it is a work-based programme all applicants must have at least two days per week of paid or unpaid work in the field. In addition to degree is accredited by professional standards agency.

Type

Full-time, block release (two week blocks: 13 per year), modularised

Duration

120 ECTS = 36 Month including 3rd year in industry; Level 5 EQF/Level 8 SCQF

Target Group

In house staff with lower level qualifications; school leavers and young adults – recruitment is through corporate partner and learners are employees – requirement for good mathematics

Teaching Staff

Academic staff at Aston and UHI; supervisors and mentors out with academic demands/requirements to deliver and evaluate industry required safety, training and competence development

Certificate

FD Electrical Power Engineering (routes to Honours and PG in development)

University-Business Cooperation

Original development between power generation sector and other utility (Gas) providers and Aston University

Fee

Tuition fees of £7560 per annum – but in reality this will be paid by SSE in addition to subsistence costs for attendance and regular wages/salary

Evaluation Process:

Academic regulations on the award of degrees

Placements assessed in relation to SSE competence to practice and sectoral professional body requirements

Module and course level evaluation

Third UK Case: Bachelor of Engineering (B.Eng.)
Undergraduate programme – flexible duration dependent upon learner
<p><u>Partnership/collaboration:</u> Unite the Union and the Open University in Scotland delivered in two Rolls Royce plants in Scotland</p> <p><u>Short Description:</u></p> <p>Programme and provision were driven by Unite the Union bringing in OUiS to deliver provision; employer buy-in after negotiation with trade union</p> <p><u>Type</u></p> <p>Part-time, supported distance learning, modular credit accumulation system within framework for programme</p> <p><u>Duration</u></p> <p>240 ECTS = 6 – 8 years at 60 credits (UK) per year plus full-time shift work employment</p> <p><u>Target Group</u></p> <p>Shop floor workers in Rolls Royce PLC – skilled workers with vocational qualifications – mature adults</p> <p><u>Teaching Staff</u></p> <p>Academic staff from the OUiS; supported by mentors and peers in workplace</p> <p><u>Certificate</u></p> <p>B. Eng. (routes to Honours and PG available)</p> <p><u>University-Business Cooperation</u></p> <p>Trade union driven in collaboration with Open University in Scotland which created a learning culture in the two plants and learning audit revealed demand for degree level opportunities among shop floor workers. Subsequent employer support.</p> <p><u>Fee</u></p> <p>Tripartite arrangements: Trade Union support = 40%; Employer = 40%; and, 20% from individual (£600 pounds per 30 credits)</p> <p><u>Evaluation Process:</u></p> <p>Academic regulations on the award of degrees</p> <p>Trade union and employer evaluation on progress and benefits</p> <p>Module and course level evaluation plus system of Student Representatives</p>

4.4. Turkish Cases

First Turkish Case: Safety Management Systems (SMS) Training
Tailor made – short duration
<p><u>Enterprise:</u> HEAŞ (Airport Management & Aeronautical Industries) and Turkish DO&CO</p> <p><u>University:</u> Anadolu University</p>
<p><u>Short Description:</u></p> <p>Safety Management Systems (SMS) Training is a mandatory course to be pursued by enterprises operating in all fields of aeronautics industries due to legal requirements. As far as ‘safety’ is concerned, all relevant service providers such as airports, ground handling companies, maintenance repair and overhaul (MROs), airlines companies, air traffic control and navigation service providers, catering companies, airport terminal operators and aviation fuel companies, including fuel storage and refuelling of aircrafts, become potential stakeholders and clients for the course. SMS Training is a tailor-made certificate program which aims to develop the professional, technical and transversal skills of the senior and mid-level managers and SMS staff who are actively working in the labour market in order to maintain the highest degree of safety in aviation.</p>
<p><u>Type</u></p> <p>Face to face learning</p>
<p><u>Duration</u></p> <p>30 hours</p>
<p><u>Target Group</u></p> <p>Carefully selected by the enterprises</p> <p>People having differing status</p> <p>Participation: around 20 persons</p>
<p><u>Teaching Staff</u></p> <p>Academic staff (selected by the university)</p>
<p><u>Certificate</u></p> <p>Certificate provided by Anadolu University</p>
<p><u>University-Business Cooperation</u></p> <p>Led by the enterprise</p> <p>University as Training provider</p>
<p><u>Fee</u></p> <p>Programme paid by the enterprise</p>
<p><u>Evaluation Process:</u></p> <p>Managed by the university</p> <p>Criterion-based evaluation</p> <p>Utilization of achievement tests</p>

Second Turkish Case: Basic Aircraft Knowledge and Flight Theory courses

Tailor made – non-degree – medium-length (180 hours) duration

Enterprise: Five Vocational High Schools in Turkey and BOEING

University: Anadolu University

Short Description:

Basic Aircraft Knowledge and Flight Theory courses are 180-hour certificate courses that are delivered face-to-face to teachers who are employed in Aviation High Schools in Turkey. The purpose of this training is to improve the theoretical knowledge level of the teachers of five vocational schools providing training and education on aircraft maintenance. The program is funded by BOEING, an American multinational corporation that designs, manufactures, and sells airplanes. The courses are instructed by the academic staff of the Anadolu University Faculty of Aeronautics and Astronautics. Therefore, the cooperation takes place among a global aircraft manufacturing company, vocational high-schools of the Ministry of Education, and a university.

Type

Face to face learning including workshops and laboratory work

Duration

180 hours

Target Group

Teachers employed in aeronautical high schools

People having differing status

Participation: 29 trainees

Teaching Staff

Academic staff (selected by the university)

Certificate

Certificate provided by Anadolu University

University-Business Cooperation

Led by the enterprise

University as Training provider

Fee

Programme paid by the enterprise, BOEING

Evaluation Process:

Managed by the university

Criterion-based evaluation

Utilization of achievement tests

Third Turkish Case: Logistics and Supply Chain Management Certificate Program (Advanced level)

Tailor made – non-degree – Medium-length (120 hours) duration

Enterprise: Enterprises vary, individual application is also possible

University: İstanbul Technical University

Short Description:

Logistics and Supply Chain Management Certificate Program is a two level non-degree course for employees who want to get advanced training, refresh their current knowledge, or benefit from the employment opportunities in the sector after acquiring the fundamental knowledge about logistics, merchandising, and supply-chain management can join this training. In this case study, the Advanced level course was investigated. The course has been offered many times in line with the needs since 1999-2000. Those who got the beginner certificate can be admitted to the advanced level training. The training lasts for 120 hours in 12 weeks. Those who attend the advanced level training includes trainees from a number of various sectors. At the end of the training, the trainees are given certificates. The course presently investigated has been delivered by İstanbul Technical University.

Type

Face to face learning

Duration

120 hours

Target Group

Employees various enterprises and those seeking for a job in the field

Participation: 30 trainees

Teaching Staff

Academic staff (selected by the university)

Certificate

Certificate provided by İstanbul Technical University

University-Business Cooperation

Led by the university's Continuing Education Center

University as Training provider

Fee

Programme paid by the trainees

Evaluation Process:

Managed by the university

Criterion-based evaluation

Utilization of achievement tests

4.5. Finnish Cases

First Finnish Case: The Study Program in Administration and Management of Higher Education (KOHA)
Non-degree programme – partially tailor made – part-time – 1-2 years
<p><u>Enterprise:</u> <i>Finnish and International universities ordering training for their employees</i></p> <p><u>University:</u> University of Tampere</p> <p><u>Short Description:</u></p> <p>The Study Program in Administration and Management of Higher Education (KOHA program) is a part-time non-degree program for those who have work experience in university administration and would like to upgrade their skills (40 -50 ECTS). The practical content of the program is tailor-made to the students' needs based on their real-life cases.</p> <p><u>Type</u> research-based; modularized</p> <p><u>Duration</u> 40-50 ECTS = 1-2 years (part-time)</p> <p><u>Target Group</u> Administrators, managers and researchers who work in universities, universities of applied sciences or other organizations involved in higher education. Participation: around 30-35 persons</p> <p><u>Teaching Staff</u> Academic staff and experts from Higher Education Management field (selected by the university)</p> <p><u>Certificate</u> Own university certificate; based on exams and essay/group work evaluations in each module</p> <p><u>University-Business Cooperation</u> University offers the program as open-access one for individual students and as tailor-made to other universities for their employees (in this case the negotiations may be initiated by the</p> <p><u>Fee</u> 10 euro per ECTS for self-paying students and 78 euro per ECTS when employer pays for training their employee. PhD/master students and staff members of UTA are waived from tuition fees.</p> <p><u>Evaluation Process:</u> Initiated by providing university Focused on the student satisfaction and added value of the program to graduate's career Ongoing for each course + End of the programme survey</p>

Second Finnish Case: Global Health training

Non-degree programme – partially tailor made – intensive 4 weeks (8 ECTS)

Enterprise: The Finnish Medical Society Duodecim (NGO)

University: University of Tampere

Short Description:

- Global Health Program's aim is to train medical doctors, dentists, veterinarians and students of these disciplines in global public health issues, such as health care delivery systems, infectious and non- infectious diseases epidemiology and health care management. Training is organized in Chile, Finland, the Philippines, Nepal and Tanzania.

Type

The training is annually organized in four-five week certificate courses, including 2-3 weeks of theoretical training and 2 weeks of practical part with site visits.

Duration

40-50 ECTS = 1-2 years (part-time)

Target Group

medical doctors, dentists, veterinarians and students of these disciplines

Participation: around 30-35 persons

Teaching Staff

Academic staff and experts from the field (selected by the stakeholders)

Certificate

Own university certificate; based on exam and learning diary on site visits

University-Business Cooperation

The course is coordinated by Finnish Medical Society Duodecim and University of Tampere School of Medicine in association with other NGOs and universities in Finland and partner countries. Steering committee has representatives of all stakeholders and is responsible for decision making.

Fee

350 for Finnish students. Free for students from developing partner countries

(Program funded by the Ministry of Foreign Affairs)

Evaluation Process:

Course evaluation, alumni survey and self-evaluation carried out as part of as part of the monitoring system for development cooperation projects funded by the Ministry of Foreign Affairs

Third Finnish Case: Finnish language and new career paths for ICT professional

Non-degree programme – tailor made – intensive 8 months (30 ECTS)

Enterprise: Employment Office

University: University of Tampere, Tampere University of Technology

Short Description:

The program aims to enhance the employment opportunities of foreign ICT professionals who lost their job in Finland (after Nokia downsizing). The course involves 100 days of Finnish language training to prepare the students for passing the National language certificate test and two modules aimed at expanding one's horizons of companies to work for (Business module or -Technical module) + Employability/entrepreneurship module +internship.

Type

Full-time tailor-made program

Duration

30 ECTS = 8 months (full-time)

Target Group

Foreign ICT specialists who are currently unemployed

Participation: 30-students

Teaching Staff

Academic staff and experts from the field (selected by the s)

Certificate

Own university certificate; +results of National language test

University-Business Cooperation

The course is coordinated by the University of Tampere. It was developed in response to the Public tender announced by local Employment office

Fee

free

Evaluation Process:

Course evaluation, alumni survey at the end of the program and 1 year after + report to the Employment office

4.6. Czech Cases

First Czech Case: Obligatory internship
Tailor made – short duration
<p><u>Enterprise:</u> ZD Hosín</p> <p><u>University:</u> Jihočeská univerzita České Budějovice</p> <p><u>Short Description:</u> The internship is part of the faculty curriculum and each subject field has own guarantor who manages the cooperation with the enterprises. The guarantor manages the contracts and the timing of the internships. Some learners have to undergo an internship every year for four continuous weeks during the summer, some learners have to undergo one week during the semester (it is up to the learner to choose the winter or summer semester) and three weeks during the summer. After this, the learners receive credits.</p> <p><u>Type</u> Face to face learning</p> <p><u>Duration</u> 40 hours</p> <p><u>Target Group</u> All learners at the university</p> <p><u>Teaching Staff</u> Trainers (selected by the enterprises)</p> <p><u>Certificate</u> Credit</p> <p><u>University-Business Cooperation</u> Led by the university Enterprises as Training provider</p> <p><u>Fee</u> Programme is not paid</p> <p><u>Evaluation Process:</u> Managed by the university</p>

Second Czech Case: Technology transfer

Tailor made – non-degree – long-length (3 years) duration

Enterprise: Lomos s.r.o.

University: Jihočeská univerzita České Budějovice

Short Description:

The program is primarily focused on developing a tight cooperation with the business in order to monetize academic research and development. The university has its own PR instruments enhancing the cooperation between the academic and private sector. Most enterprises already know what kind of help they might need for their business development but others still move forward with their business activities without a concrete idea. If enterprises agree with the university proposal a contract is made. Co-workers from the academic field are educated by professionals from the private sector and from the state organization in the Czech Republic and abroad. The academic staff involved is educated in decision making and business processes in enterprise's units. The core of this education is the technology transfer and the protection of the intellectual property.

Type

Face to face learning including workshops

Duration

3 years

Target Group

PhD graduates and university teachers

Enterprises developing their business through technologies

Teaching Staff

Enterprises staff (selected by the university)

Certificate

Not certificated

University-Business Cooperation

Led by the university

Enterprises as Training provider

Fee

Cooperation is paid by the enterprise but training is paid by university

Evaluation Process:

Managed by the university

Numbers of the involved enterprises developing their business

Third Czech Case: Lecturing and practical training

Tailor made – non-degree – Medium-length (3 months) duration

Enterprise: IBM

University: České vysoké učení technické (ČVUT)

Short Description:

The program focusing on ČVUT students provides practical information from practice (as part of a particular course) and then allows students to become part of the particular project inside the enterprise/IBM company (as part of the three month long internship). The program highlights the potential of management roles in the IT sector and aims at potential future experts with a complex understanding of the IT environment.

Type

Face to face learning

Duration

3 months

Target Group

Learners

Teaching Staff

Enterprises (selected by the enterprises)

Certificate

Learners are allowed to reach a certificate when they submit this request and pass a practical test

University-Business Cooperation

Led by the university's but program is designed by enterprises

Fee

Program paid by the enterprises and certification is paid by student

Evaluation Process:

Managed by the university

5. Tentative typology

In international social research typologies are frequently used to compare different configurations of social, economic and or political contexts. Overall for the international comparison of national or regional political, social or economic systems or strategies, typologies have a high value. Mayor examples are the approaches of *Welfare Regimes* (Esping Anderson) and *Varieties of Capitalism* (Hall & Soskice 2001). Both have been referenced for developing steps towards a typology of skill regimes (see Busemeyer, M. R. & Trampusch, C. (2012): *The political economy of collective skill formation*; Oxford) and of adult education (see Desjardins & Rubenson 2013).

There is a broad consent on what typologies are. They are mental constructs or heuristics based on previously explained and justified criteria with the objective to classify selected social phenomena (see Pries 1997, Reinhold 1990). It is also a strategy to classify perceived patterns of behaviour and generalization of observations, which an individual adopts in their day-to-day life.

An example may be found in the work of A. Schütz (1932), who included types and typologies as an essential element of his sociological approach. He anchored typologies in the day-to-day life of the individuals, who are using them for the cognitive structuring of the world. In this sense, day-to-day typologies are necessary for individuals to construct their own life and to live in it. It is a continuous process making a distinction between typical and non-typical, revising the scheme constantly and as such the basis for the interpretation of situations and the capacity for individual action.

Schütz (*Ibid.*) distinguished between the above first order typologies and second order typologies, which are based on theories, concepts, methods and concrete evidence oriented questions. These typologies are not directly linked to interactions and follow other standards of evaluation. While day-to-day typologies are revised through daily practices, second order typologies are evaluated by scientific standards of quality. Following Schütz second order typologies must (1) show a certain logical coherence, (2) have a subjective mean, to which the typologies can be linked; and, (3) be related in a meaningful sense to the life-world (*Lebenswelt*) in the sense that it is comprehensible outside of scientific discourse.

In the 1930's, Hempel & Oppenheim (1936) argued in a similar way working on types from the perspective of logic. They considered that any typology is an order of differentiated criteria in n -dimensions: a n -dimensional order. They differentiated between

1. Typologies, which are based on subjectivity and intuition and which, in so far, do not fulfil the scientific criteria of inter-subjectivity.
2. Typologies based on the empirically founded and scientifically reasoned estimation.

By nature types must have at least two characteristics, which the researcher considers relevant in general or more specifically to compare. Two of the most famous typologies in international social science are actually these of welfare regimes and of varieties of capitalism.

The use and application of typologies based on theoretical considerations about relations between different dimensions (variables); or, used to compare empirical findings is common in international comparative institutional analysis (Lange 1991). Typologies can be constructed inductively based on patterns in the set of cases or deductively by defining categories through prior theoretical consideration. In so far, typologies can serve different aims: a) testing theories

and hypothesis or b) classifying observed social phenomena; thereby reducing observed complexity to a few types, which share more common characteristics than differences (see Ebershausen 2012: 2).

One essential of the development of typologies - not usually discussed in respect of typologies - is its relation to the specific research interests and questions under investigation. In our project central questions were:

1. How the university lifelong learning contributes to effective labour market transitions of learners?
2. How enterprises and universities are cooperating in adult education, and if this cooperation contributes to the social effectiveness of university adult education in terms of access to jobs and quality of work (learners' perspective) and quality of work performance (enterprise perspective)?
3. Does this cooperation include fostering work related aspects of the learning process and improves this the social effectiveness of the programmes?

However, in a project with limited time and budget as ours, only a limited number of cases can be analysed. These cases could not be selected by criteria of representativeness, as explained in the section before. We opted therefore for the criteria of apparently good practice in adult education based on university – enterprise cooperation. The cooperation between university and enterprises has been the central criteria. Another criterion has been that the programmes addressed adult learners who have finalised their initial education including higher education and re-entry in the education system as part-time or full-time students. These two criteria reduced substantially the number of cases among which the national research teams could select.

However, the concrete selection followed individual criteria of the relevance of the case for the proposal to have insights on cooperation and work oriented learning in this specific field of adult education. All the national research teams have experience in this specific field. Some of them have also research experience in the field of vocational education and training. This experience allowed them to find cases and make an adequate selection. But the selection expressed also the particular research interest of the national teams reflecting the national or regional situations, which can be explained using the examples of Germany and Spain.

In Germany the selection of the cases included a case, which facilitated those with VET-certificates access to university programmes. This reflects a long standing public discussion in Germany on the permeability between different education and training subsystems. This discussion is linked to the specific historical rooted configuration of the German education system as a whole, which obliged pupils or parents to make a selection about education pathways very early compared to other national education systems. So permeability between different subsystems, or the flexibility given to the pupils to change from one education track in another, is a very important issue in the German discussion under the perspective of social justice. On the other side, the German education structure is characterized compared to the other European countries by its relatively moderate level of people with a higher education certificate and a high level of people with a vocational qualification at the ISCED levels 3 to 5. This circumstance reinforces the discussion of permeability considering the up-grading of the

education level of people with VET-qualifications to satisfy the increasing demand for a highly qualified work force.

In Spain case selection was oriented to postgraduate programmes with strong enterprise-university cooperation. This reflects the context, whereby Spanish universities have developed lifelong learning programmes for graduates, who want acquire additional certificates to improve their labour market opportunities. The main issue of the public debate on higher education and lifelong learning is the employability of students to resolve a) high unemployment, which also affects young people with higher education certificate and b) the underuse of people with higher education certificates in the labour market. This is one reason, why the Spanish cases focused mainly on postgraduate programmes designated as adult education.⁵⁹ This is linked to the specific development of the Spanish education system in the last decades, and characterised by the decline of vocational education and training and the generalisation of higher education. On the other hand, permeability is not an issue in the public debate for two reasons: the education systems offered at the levels of primary and compulsory education has only one education track for all pupils with the only distinction based on funding between public, private schools receiving public funding and pure private schools. Only after the compulsory secondary track, must the pupils (and their families) decide if they want to leave the education system, follow a mid-level VET or a school education, which leads to a certificate allowing access to higher education or higher VET. The pupils, who opt for the mid-level VET can opt later, when they have successfully finalised this VET cycle, for the higher VET previous entrance examination. The higher VET-qualification allows access to university education. In other words permeability seems to be an exclusive issue within the VET subsystem regulating the access from mid-level VET to higher VET.

In so far, the selection in both countries would reflect the particular research interest of the respective research team linked to the specific configuration of the national education systems and national labour markets. While in Germany the research team focused more on permeability, the Spanish research team selected post-graduate programmes. This reflects the different social reality in both countries. For this reason, the project discussed also different ways to develop a typology for the international comparison taking different orientations as reference points. In other words, the development of typologies has not only the objective to advance social science development. It allows also the analysis of properly comparable phenomena in a highly complex environment based on scientific criteria. The development of typologies is, in so far, part of the learning process among social researchers.

The typologies are not only the result of the empirical research in the project; but also the previous research experience of the different national research teams, with some limited to national research issues while others have a broader range of comparative international research. This is also a reflection of the national evolution of education systems putting in the foreground the national or regional concerns. However, as in other European projects, the use of typologies does not aim primarily to contribute new theoretical developments, but to present the cases in a coherent way attached to ongoing discussions in the different countries.

We will now present two typologies, which have been developed alternatively in the course of the project with reference to the case studies

⁵⁹ This is also linked to the fact, that university adult education programmes are not under state regulation, which allows the university and program coordinators to set their own fees. On the contrary, for official education programmes the Spanish Government fixed a maximum of the fees by type of programme.

The first proposal for a typology is based on three dimensions:

1. The programme is restricted to people with an education certificate allowing access to university education or not;
2. The programme awards a state recognised qualification or not;
3. The students must pay fees or not.

Tab. 17 1st Typology of University Lifelong Learning Programmes				
Type	National Programmes	Entry requirements	Award	Payment
1	DE 1 (BP@KOM), UK 1 (BAC D)	open	Qualification	Free
2	-	traditional	Qualification	Free
3	-	open	Certificate	Free
4	CZ 1 (AGRI), CZ 3 (IBM) FI3 (ICT)	traditional	Certificate	Free
5	UK 2 (unite)	open	Qualification	fees
6	DE 3 (MEI), UK 3 (SSE)	traditional	Qualification	fees
7	-	open	Certificate	fees
8	DE2 (HCAT_PRO), ES1 (Tec.), ES2 (Water), ES3 (KP), TR1 (Safe), TR2 (Air), TR3 (Log), FI1 (KOHA), FI2: (GL-Health), CZ2 (TTP),	traditional	Certificate	fees

The first criterion refers to the openness of the programmes for non-traditional students. In other words, it classified the programmes if they are exclusively for people with a regular education certificate allowing access to university or it is also open for non-traditional students coming for instance from the VET-track. This criterion expressed the degree to which the programme contributes to the permeability among different education subsystems or in a broader sense, to the openness of university education.

The second criterion refers to the status of the certificate, which the learner obtains at the end of the programme. The term qualification signifies that it is a state recognised certificate, which give access to subsequent official education tracks or which allows access to certain segments of the labour market. In the other cases, the certificates have no official value or transferability within the educational systems, but might be of higher relevance for labour markets.

With Finland, Czech Republic, Germany and Scotland (differing from England) 4 of the 6 LETAE-countries don't charge tuition fees for "normal" students; in Spain and Turkey students have to pay. But unconventional (subsuming dual study programmes or mandatory internships under conventional) cooperation between universities and enterprises are in all countries considered as an additional offer and are not covered by the basic funding of universities; additional funding is needed. The third criterion, the question of additional funding is usually project (programme)-based, assured only for a short period for some tracks and is either paid by

federal bodies (for instance by projects or from adult education funds), by the companies that send their employees to the programme or by the students themselves.

But in countries such as Spain, where the students at public universities have to pay fees calculated by credits, the students of adult education programmes must also pay fees. In the case of postgraduate Non-Bologna programmes, the fees are not regulated by the state as in the case of the Bologna programmes. This happens also in other countries, for instance in Germany, Finland and Turkey in the case that the adult education programmes are not part of the official higher education offer.

The second proposal uses also three criteria, in this case:

1. The access to the programmes is restricted to people, which have at least bachelor or a similar degree or not;
2. It is a formal HE education programme or not;
3. The lecturers of the programme are exclusively academic personal or not.

Concerning access it asks if the programme addresses only graduates or if it is open for a wider range of people. Compared to the first proposal, it doesn't focus on the permeability or openness of the HE-system, but on the contribution to the up-grading of knowledge, competences and skills of graduates. For this reason it asked if the students must have a higher education degree to enter.

Regarding the awards, it makes a similar distinction as the first proposal asking if the programmes emits an official HE education certificate or not covering then a wide range of possibilities from certificating participation towards a professional certificate of achievement by an university certificate. The difference between both possibilities is that the first type of award allows the student to access to other formal education programmes (formal HE-programme); meanwhile the second type of certificate does not. In the best case (non-formal continuous training programmes), some parts are recognised partly as prior learning in formal education programmes.

Finally, the third criterion introduces a quality criteria asking if the teachers are recruited only among academic staff or include also persons from outside the academia. This is taken as an indicator for its labour-market orientation.

The allocation of the studied cases showed that the last two types do not refer to university adult education programmes, but to the normal Bologna programmes (Bachelor, Master or PhD).

Revisiting these two models, we observed that they are proposing typologies in four dimensions making reference to some essential questions in relation to social effectiveness:

Tab. 18 2 nd Typology of University Lifelong learning Programmes				
Type	National Programmes	Entry requirements	Award	Teaching Staff
1	TR1+TR2+TR3	Non-HE-Degree	Continuous Training	Only academics
2	DE3	Non-HE-Degree	Continuous Training	Mixed
3	DE2	Non-HE-Degree	Higher Education	Only academics
4	UK1+DE1+CZ1+CZ2	Non-HE-Degree	Higher Education	Mixed
5	ES3	HE-Degree	Continuous Training	Only academics
6	ES1+ES2+FL1+ FL2+FL3+CZ2	HE-Degree	Continuous Training	Mixed
7	UK2+UK3	HE-Degree	Higher Education	Only academics
8		HE-Degree	Higher Education	Mixed

- Financing

The first model includes the issue of self-financing students. Payment can be made directly by the student/his enterprise or by others (entrepreneur associations, trade unions or by public funding). It may thus be seen as an indicator whether programme is financially supported structurally or individually.

- Access

We noted that both models refer to educational level as entrance criteria. The first typology takes up the question of permeability in relation to access for non-traditional students in the sense that they do not fulfil the traditional criteria to access initial higher education. The second typology questions if the programmes are conceived as continuous training for people, who have a higher education degree. Both approaches are focused on a continuum, so they can be integrated in one model.

- Benefits

Both proposals refer to the formality of the programme. Generally learning is differentiated between formal learning, non-formal learning and informal learning. Here we can introduce as additional criteria if the certification received on successful completion has

- full recognition in the education system e.g. as a higher education certificate;
- partial recognition in the education system e.g. in form of ECTS for other HE education tracks (recognition of prior learning);
- recognition in the labour market as a full qualification,
- recognition in the labour market as an additional qualification (compulsory or voluntary),
- no official recognition or transferability.

- Work related learning

This could refer to the enterprise- university cooperation in the design and implementation of the programmes. This could be covered by the question if the programme is tailor-made or not. But the fact that a programme is tailor made does not indicate the degree of the engagement of the enterprise in the design and implementation of the programme.

In our project we asked for the integration of real work practice or simulation of work practice in the programme. The second typology proposed here as a proxy the integration of non-academics as teaching staff; although another possibility would be asking for the respective use of teaching and learning approaches such as problem based learning, project based learning, collaborative learning etc.

As we explained before, our typologies do not pretend to contribute to a theoretical discussion about adult education programmes. But both typologies are based on essential dimensions in the education and training debate: funding, access, benefits and relation to work. In this sense, both typologies are empirically founded. However as explained before, the main reason to elaborate the typologies was to classify the programmes in a coherent way in relation to the concrete objectives of the researcher and establish criteria for comparison. But beyond this objective, establishing essential dimensions of university adult education contributes to the creation of a coherent framework to classify such programmes and allow a more appropriate European wide analyse of university adult education programmes.

6. Potential of university-business cooperation in the field of higher education

In this section we discuss the potential of university-business-enterprise cooperation and collaboration in the field of education to improve the quality of university adult education and traditional adult education based on the examples of the 18 cases analysed in the LETAE project. As noted in the introduction, the analysed cases of enterprise-university cooperation are not representative but indicative of the respective national university adult education strategies. We consider that they offer a valuable insight to appreciate the potential of university-business-enterprise cooperation in the field of higher education.

We found some programmes with strong cooperation between university and enterprise; for example the third Spanish case, the second Finnish case, the first Czech case, or the first and second Turkish cases: short programmes based on strong business-university cooperation led by enterprises. This type of programmes is more relevant for a quick adaptation to labour market requirements fulfilling specific gaps in regular higher education, partial rather by Continuous Vocational Education (CVET), responding to new qualification requirements, or offering mandatory (by law for certain professions) skills and knowledge. But these short programmes also indicate that the success of learning is highly depending on the linkage to daily work. The question, which we will treat later, is, if these kinds of programmes, but with open access could be adequate instruments to improve the employability of graduates in the short-term, to improve their labour market opportunities, and under which conditions.

We will pay more attention to the long programmes, like the first and second Spanish case, the first and second German cases, or the Scottish cases. The reason is that long programmes are historically the pillar of universities' offers. This type of programme offers to the graduates the possibility to complement their knowledge, skills and competences acquired in the course of the traditional university education (bachelor and master) *or* from Vocational Education and Training (VET).

An important issue that we can learn from the studied cases is that a relevant success factor seems to be the qualification of the lecturers. As in the long programmes, short programmes also require a mix of academic and practical orientation. In the selected long programmes, this was achieved by having lecturers coming from academia and from enterprise (in-house staff or external experts with practical experience). In the analysed short programmes this objective was achieved by most lecturers having a mixed background as academics and from working in the private sector.

Focussing now on learning in a work environment, we observe that the cases studied underline the relevance of work place learning for a successful learning process, especially if students have a vocational background like in the first German case or the first and third Scottish cases. The linkage between learning and applicability in the work place is a strength; and, the opportunity to apply what has been learnt in the programme in the daily work is considered crucial. Moreover previous studies on this issue show strong indicators for this interrelation, like the critical statements of learners in non-tailor made programmes, who aren't working in work places relevant to the program contents (see Krüger et al 2013).

Internships like the first or the third Czech cases are obviously an alternative in these cases, where the intention of the learners is to be prepared for a new step in their professional trajectory. But this requires a strong commitment from the enterprises to assure high quality internships. Another condition is the linkage of content to the tasks, which can be realised in the internship. So a stronger relationship between enterprises and universities seems to be a precondition for successful internships. The advantage for the enterprises would be that the programmes offer a pool of qualified people, who can be easily incorporated in the working processes of the enterprise. In other words, assuring quality of internships and its interlinkage to the learning programme is essential for the success of workplace learning. This requires a strong commitment from the enterprises side.

Some of the selected cases adopt ‘*blended learning*’ which offers greater flexibility in time and space. Students, teachers and enterprises agree, however, that face-to-face sessions are crucial to create an adequate learning environment for cooperative learning among the students. In all these cases, the development of team projects is an important part of the learning process.⁶⁰

Most programmes are not only transmitting professional and/or technical competences, but also social competences; with new social contacts and interactions considered as an important element of participation.

The practical experience (through work place learning or internships) and networking with professionals working in the same sector or enterprise reinforces the acquisition of competences; and, allows a better evaluation of the competences and skills which have real relevance in different labour market segments.

On first view, the short programmes seem to be an exception. They focus on very specific technical issues complementing knowledge and competences; which the participants have not acquired in their traditional education. However, these programmes aren’t oriented to transmit only technical competences in the strictest sense, which can later be applied in practice; rather they are focused more on the comprehension of the processes of valorisation and accountability of enterprises, in the sense of social-technical competences.

In a nutshell, university-business cooperation seems to be a crucial element to develop and implement university adult education programmes with a high degree of learning effectiveness.

A previous study (see Krüger, 2014 at themp.eu) on university strategies in the field of adult education found that:

- (i) that this isn’t a priority in the agenda of Spanish universities; and
- (ii) that the initiative to develop such programmes comes mainly from the academics, not from the institution. Now, this can also be confirmed for the other five participating countries. We conclude that in such context it seems quite difficult to apply a systematic approach to develop a university offer for adult education with a strong labour market orientation – but the rich variety of examples of university-business cooperation studied in this project show its potential to bring university education closer to changing labour market requirements and demands.

The aforementioned study also concluded that universities and especially Spanish universities must develop structures to promote professionalization so that the skills, competences and

⁶⁰ It is important to underpin that ‘blended learning’ is not *per se* cheaper than face-to-face learning. The investment in time preparing the online sessions, the tutorship and monitoring the cooperative learning sessions is considerable.

knowledge can be constantly adapted to the quickly changing requirements of the labour market. From the perspective of the students, their participation in such programmes is an investment of time and/or money, which must offer the possibility of a return on investment by improving their labour market position. The cooperation between university and business/enterprises and other actors active in the labour market to predict training needs and job opportunities and to improve the learning processes is one pre-condition to improve the chances of a return on investment.

Another challenge is to increase the vocational orientation of ‘traditional’ higher education. Higher education (HE) and Vocational Education and Training (VET) have in the last few decades experienced a considerable transformation, which can be identified by two trends: a) Academic drift in the sense of traditional vocational education at secondary and post-secondary level becoming ‘professional’ at tertiary ‘academic’ education level (Kyvik, 2004; Harwood, 2010); and, b) Vocational drift whereby VET principles are integrated into higher education in the form of new teaching and learning methods, internships and different types of dual studies and sandwich programmes (Kyvik, 2008; Hippach-Schneider, 2014). The vocationalisation of higher education is a particular challenge for all higher education systems.

These trends are linked to the changes in the graduate labour market caused by the massification of higher education. This has been accompanied by changes in the structure of the labour markets for graduates: the traditional labour market for graduate as public education, health system, jurisdiction, public research and higher education are more and more contested terrain and other private labour market segments became more and more relevant for graduates. This change has its reflection within the higher education system in the debate about the redefinition of curricula bringing them nearer to the labour markets and about the relevance of workplace learning.

We observe in several of the studied countries strategies to reinforce workplace learning in traditional higher education settings (Bologna cycle programmes). In Germany dual studies have gained momentum in the last decades. Also in Great Britain initiatives exist to strengthen the cooperation between enterprises and universities in education (e.g. Sandwich programmes or in England the “degree apprenticeships”, which are similar to the German dual studies and presupposes that students receives payments/wages for participating in these programmes). And in Spain there is a strong tendency towards workplace learning in university education, focused on master programmes and doctoral programmes (industrial doctorate). These types of programmes, to which we can add the French experience of *Higher Education in Alternance*, are based, generally, on strong cooperation between universities and enterprises including in many cases labour contracts or apprenticeship contracts with enterprises.

Another potential response is the reinforcement of university lifelong learning. In its 2011 resolution on modernising universities for Europe’s competitiveness in a global economy, the Council claims:

“to improve the identification of training needs, increase the labour market relevance of education and training, facilitate individuals’ access to lifelong learning opportunities and guidance, and ensure smooth transitions between the worlds of education, training and employment.” (Council of the European Union, 2011: p2)

The need to increase lifelong learning opportunities, widen access to higher education, boost employability and upgrade the skills of the population was underlined. This includes the broader

integration of non-traditional learners in the programmes of the Bologna scheme, but also the offer of specific programme for adult learners, which will have a primarily labour market orientation. In the strategy paper *Supporting growth and jobs – an agenda for the modernisation of Europe's higher education systems* (EC, 2011) one of the key policy issues is to encourage a greater variety of study modes (e.g. part-time, distance and modular learning, continuing education) for adult returners and others already in the labour market.

But the answers given by the systems are conditioned by their configuration. For instance countries like Germany, Finland or the UK have a diversified higher education landscape, compared to Spain or in a certain degree also the Czech Republic⁶¹. In Spain - excluding the higher vocational training and specific education fields such as music, sports and arts – there is only one type of public higher education institute: the university as proper higher education institution differentiated on the line of public or private ownership. In Czech Republic, in general all public higher education institutions are universities, with the exception of two institutions. But there is a range of private higher education institutions, which are mainly non-universities. The Turkish universities are a particular case, as they can also include Centres of vocational training. Moreover the political environment can play a considerable role. For instance, in Finland lifelong learning is included as part of the third mission in the Finnish university legislation. These elements are some of the explanations why the Finnish and Spanish universities are among the frontrunners developing university lifelong learning strategies.

Meanwhile in other countries like the United Kingdom and Germany, the issue of permeability – meaning the access to university education programmes – seems to be more relevant. And the Czech universities are still in a starting position in respect to lifelong learning by putting more emphasis on the modernisation of the higher education system. Turkey is a particular case as the universities provide more vocational training for a wide range of learners; meanwhile the training offers for graduates seem less developed as also permeability strategies.

Generally, this issue is discussed under the header of employability. Following a recent Eurydice report (2014: 61ff), there are two main strands to achieve this concept. The first focuses more on employment and seems to be the mainstream in European policy. For instance, in the Council conclusions of 11 May 2012 on the employability of graduates from education and training, it is defined as “*a combination of factors which enable individuals to progress towards or enter employment, to stay in employment and to progress during their career*” (ibid page 4) This perspective is shared by the Bologna working group on employability (2009, page 5) defining it as “*the ability (of graduates) to gain initial meaningful employment, or to become self-employed, to maintain employment, and to be able to move around within the labour market*”.

However, a more promising focus is on ‘skills’ and ‘competences’ considering employability as “*a set of achievements – skills, understandings and personal attributes – that makes graduates more likely to gain employment and be successful in their chosen occupations*’. *Such skills and competences are usually understood as needed (and demanded) by employers. In essence, the student exhibits employability in respect of a job if he or she can demonstrate a set of*

⁶¹ Both countries have a clearly differentiation between higher vocational and general education. In Spain, the qualification of higher technician is done in vocational schools and in the Czech Republic we found ‘Tertiary professional schools’ “mostly developed out of upper secondary technical schools (střední odborné školy) and usually form a single legal entity with them” (Eurydice Czech country report consulted May 2016 at: https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Czech-Republic:Types_of_Higher_Education_Institutions)

achievements relevant to that job” (Yorke 2006, p. 8). This strand of thinking advocates a more specific role for higher education, for instance, in the provision of vocationally oriented skills and competences. Under this perspective, the participation of employers in developing and evaluating higher education study programmes seems extremely relevant.

In this context, however, the question emerges as to why an enterprise should participate in the development, implementation and evaluation of a bachelor or master programme? This is not the place to discuss this question in detail. But the fact that the number of dual studies (which is in some extent a transposition of dual IVET to higher education) and the number of students involved in such programmes has increased in the last years in Germany, is an indicator that German enterprises perceived that such programmes and the respective investment provides benefits⁶². The same can be said about the recent governmental initiative to promote in the UK the “degree apprenticeships”, some ‘industrial Master and Doctorate programmes’ in Spain and the French Higher Education in *Alternance*, indicate that the enterprise expect benefits participating in these type of programmes – and these established structures provide hope that some of the grass-root initiatives analysed in the 18 LETAE case studies might become sustainable.

Conclusions

We have noted above that there are signs of work-based and –related learning taking place in each of the partner countries involved in the LETAE project. Much of what was presented is dependent upon the specific historical context in which vocational and tertiary education developed and the role that Lifelong Learning and adult education more specifically plays. However, as we have noted it is not easy to understand the scale and scope of WBL since it is not measured as a discrete activity of universities and there are considerable problems of universal definitions in relation to duration, level and certification or the award of credit.

It is suggested that the current calls for closer collaboration between higher education and employers and other partners is not new and 20 years ago similar calls were emanating from Europe about structural change and global competition (Saunders, 1995; Brennan and Little, 1996; Somerlad, 1996). As we have seen, many of the hopes for progress in the areas of work based learning have still to come to fruition. While there are now national qualification frameworks linked to the EQF (European Qualifications Frameworks) and links to Bologna, true credit accumulation and transfer within borders, never mind across borders, is still in its infancy and remains limited in the main to rhetoric rather than reality. The same could also be said to characterise the moves towards anything resembling the universal application and implementation of any substantial form of accreditation of prior learning and/or experience despite again much rhetoric and even policy recommendations.

We must also say something about the extent to which the predictions of labour market demand, particularly in relation to the demand for high skills as noted in various EU documents cited earlier, have played out against the backdrop of the financial crisis in 2008 and its aftermath.

⁶² The majority of the German dual study programmes are not organized by universities, but by universities of applied science or other higher education institutes. The distinction between both is, following the German legislation, that the first ones have the right to emit education certificates of doctor. In other words, not all universities or higher education institutes have the same interest on dual study programmes, but the institutional diversity of the higher education systems allows that some institutes opt for the dual study programmes to develop their own profile.

In many member states the terms and conditions employment of many have worsened and much of recent labour market demand has been fuelled by low quality jobs with poor terms and conditions and precarious prospects with Cedefop noting an increase in temporary and fixed term contract especially for young people. In addition, funding for adult education and lifelong learning are often easy targets when it comes to governments wishing to make cuts in public funding.

We have already noted the increasing mismatch between qualification levels and employment outcomes with large numbers overqualified for the labour market positions they occupy and unless there is considerable economic growth it is unclear where the posited high quality jobs are going to come from. This would appear to be confirmed by the Europe 2020 indicators for June 2016⁶³ which suggested that as a result of weak employment demand, intensified by the economic crisis, people are increasingly taking jobs below their qualification or skills level. They also noted contraction in a number of sectors with construction employment falling by around 20% between 2008 and 2015 and agriculture and manufacturing declining on average by 11.5% in the same period.

While it may not be representative it could be argued that in the UK which was in the forefront of the use of austerity economics in attempts to stimulate the economy the future looks rather bleak and perhaps mirrors some of the cautions noted above. It was widely promoted that unemployment in the UK had fallen in the aftermath of the crisis, but according to O'Connor (2015) many of the jobs were in low-paid, low-skill sectors with a knock on effect in terms of lower tax revenues; while Elliott (2015) cited a Bank of England report that suggested low-skilled migration and a failure to invest alongside the skewing of employment toward the low paid and low skilled as possible factors depressing wage growth and productivity since the crisis of 2008.

⁶³ http://ec.europa.eu/eurostat/statistics-explained/index.php/Europe_2020_indicators_-_employment#Short-term_employment_and_unemployment_trends

7. Literature

Project homepage: www.letae.eu

Behringer, F. and M. Coles (2003), "The Role of National Qualifications Systems in Promoting Lifelong Learning", OECD Education Working Papers, No. 3, OECD. http://www.oecd-ilibrary.org/education/the-role-of-national-qualifications-systems-in-promoting-lifelong-learning_224841854572

Bélanger, P. and Valdivielso, S. (1997) *The Emergence of Learning Societies: Who Participates in Adult Learning?* Oxford.

Bélanger, P. and Bochynek; in collaboration with FARR (2000) *The Financing of Adult Learning in Civil Society: A European Exploratory Study*. Hamburg. <http://www.unesco.org/education/uie/pdf/europe.pdf>

Brennan, J. and Little, B. (2006) *Towards a strategy for workplace learning: Report to HEFCE* by CHERI and KPMG. Higher Education Funding Council for England, Bristol, UK

Brooks G. and Burton, M. (2008) *European Adult Learning Glossary, Level 1. Study on European Terminology in Adult Learning for a common language and common understanding and monitoring of the sector*. Call Number: EAC 11/2008. www.ec.europa.eu/epale/sites/epale/files/adultglossary1_en.pdf

Busemeyer, M. R. and Trampusch, C. (2012) *The political economy of collective skill formation*, New York: OUP

DANIELS, S.E. and WALKER, G.E. (1996) Collaborative Learning: Improving Public Deliberation in Ecosystem-based Management. *Environmental Impact Assessment Review*, 16, pp.71-102

Desjardins and Rubenson (2013) Participation Patterns in Adult Education: the role of institutions and public policy frameworks in resolving coordination problems; *European Journal of Education*. 48, 2: p 262–280.

Ebbinghaus; B. (2012) Comparing Welfare State Regimes: Are Typologies an Ideal or Realistic Strategy? Draft Paper presented at European Social Policy Analysis Network, ESPAnet Conference, Edinburgh, UK, September 6 - 8, 2012. http://www.law.ed.ac.uk/_data/assets/pdf_file/0005/89033/Ebbinghaus_-_Stream_2.pdf

Elliott, L. (2015) UK wage growth stifled by tepid investment and low-skilled migration, *The Guardian*, Wednesday 23rd September 2015. <https://www.theguardian.com/business/2015/sep/23/uk-wage-growth-stifled-by-tepid-investment-and-low-skilled-migration>

Elliott, L. (2016) Huge increase in number of graduates 'bad for UK economy', *The Guardian*, Tuesday, 11th October 2016. <https://www.theguardian.com/money/2016/oct/11/huge-increase-in-number-of-graduates-bad-for-uk-economy>

Esping-Andersen, G. (1990) *The Three Worlds of Welfare Capitalism*. Oxford: Polity Press.

EUROPEAN COMMISSION (EU-Commission) (2001) *Making a European Area of Lifelong Learning a Reality*. COM(2001) 678 final, viewed 19 July 2013; <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52001DC0678:EN:NOT>.

EUROPEAN COMMISSION (EC-Commission) (2006) *Adult Learning: It is never too late to learn* – COM(2006)614 final, viewed 19 July 2013, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2006:0614:FIN:EN:PDF>

EUROPEAN COMMISSION – DG Education and Culture (2008) *The European Qualification Framework for Lifelong Learning (EQF)*. Luxembourg

EUROPEAN COMMISSION (EU-Commission) (2011) Supporting growth and jobs – An agenda for the modernisation of Europe’s higher education systems. COM (2011) 567 final. Brussels

Eurydice (2015) Fees and financial support for higher education
<http://eacea.ec.europa.eu/education/eurydice/img/covers/189EN.pdf>

European Commission/EACEA/Eurydice (Eurydice), 2014. Modernisation of Higher Education in Europe: Access, Retention and Employability 2014. Eurydice Report. Luxembourg.

EU (2012) Council conclusions of 11 May 2012 on the employability of graduates from education and training (2012/C 169/04). Brussels

EU (2011a): Council conclusions on the role of education and training in the implementation of the ‘Europe 2020’ strategy,
<http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:52011XG0304%2801%29>

EU (2011b): Modernisation of higher education
<http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=URISERV%3Aef0030>

Eurostat (2011): Providers of non-formal education and training activities, 2011
http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Providers_of_non-formal_education_and_training_activities,_2011_%28C2%B9%29_%28%25%29_YB15.png

Eurostat (2015): Participation rate in education and training (last 4 weeks), Age from 25 to 64.
http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Lifelong_learning,_2009_and_2014_%28C2%B9%29_%28%25_of_the_population_aged_25_to_64_participating_in_education_and_training%29_YB15.png

Hall P.A and Soskice D. (2001) Varieties of Capitalism: The Institutional Foundations of Comparative Advantage. Oxford: OUP.

Harwood, J. (2010). Understanding academic drift: On the institutional dynamics of higher technical and professional education. *Minerva* 48:413-427.

Hempel, C.G. and Oppenheim, P. (1936) *Der Typusbegriff im Lichte der neuen Logik. Wissenschaftstheoretische Untersuchungen zur Konstitutionsforschung u. Psychologie*. Leiden.

Hippach-Schneider, U. (2014) Academisation or Vocational Drift? International developments in the tertiary sector of education. Bundesinstitut für Berufsbildung (BIBB). https://www.bibb.de/dokumente/pdf/BWP_4-2014_HS_en.pdf

Kolb, D.A. (1984) *Experiential Learning Experiences: the Source of Learning and Development*. Pearson: New Jersey.

Krüger, K. (Coord.) (2014) *Social Effectiveness of Tertiary Education for Adults in Mid-life*. Barcelona/Oldenburg.

Krüger, K., Parellada, M., Alvarez, M., Houston, M. & Osborne, M. (2013) *Core Dimensions of Social Effectiveness in University Adult Education*. Barcelona/Oldenburg.

Kyvik, S. 2004. Structural changes in higher education systems in Western Europe, *Higher Education in Europe* 29(3): 393-409.

Kyvik, S. (2008) The Non-University Higher Education Sector in Norway; In Taylor, J. S. & Ferreira, J.B. & Machado, M. Santiago; R. (eds.) *Non-University Higher Education in Europe. Higher Education Dynamics*; Volume 23; pp. 169-189

Lange, P. and Meadwell, H. (1991) Typologies of Democratic Systems: From Political Inputs to Political Economy, In Howard J. Wiarda (ed.) *New Directions in Comparative Politics*, Boulder, CO: Westview, 82-117.

Mariani, M. and Krüger; K. (2013) Methodology to analyse Social Effectiveness of Tertiary Lifelong Learning Programmes. Case studies, Mutual Learning and survey tools. Barcelona/Oldenburger. 2013. www.themp.eu

O'Connor, S. (2015) UK economy shows shift to low-skilled jobs, research finds, *Financial Times*, January 19, 2015 <http://www.ft.com/cms/s/0/6a8544ae-9d9e-11e4-8ea3-00144feabdc0.html>

Pries, L. (1997): Typenbildung in den Sozialwissenschaften. Eine Einladung zur Reflexion. In: *Zeitschrift für Sozialisationsforschung und Erziehungssoziologie*, 17. Jg., S. 437–441.

Saunders, M. (1995) The Integrative Principle: higher education and work-based learning in the UK, *European Journal of Education*, 30 (2) pp203-216

Schütz, A. (1932): *Der sinnhafte Aufbau der sozialen Welt. Eine Einleitung in die verstehende Soziologie*. Wien

Sommerlad, E. (1995) *Work based learning for enterprise renewal: panacea or problematic?*, Tavistock Institute Review, 1994/95.

UNESCO Institute for Statistics (2012) *International Standard Classification of Education. ISCED 2011*. Montreal, Canada. <http://www.uis.unesco.org/Education/Documents/isced-2011-en.pdf>

Working Group on Employment (2009) Report to Ministers. Bologna Conference, Leuven/Louvain-La-Neuve. 28-29 APRIL 2009. http://media.ehea.info/file/2009_Leuven_Louvain-la-Neuve/91/5/2009_employability_WG_report_594915.pdf

Yorke, M. (2006) *Employability in higher education: what it is – what it is not*. The Higher Education Academy. Learning and Employability Series 1. https://www.heacademy.ac.uk/system/files/id116_employability_in_higher_education_336.pdf

Yin, R. K. (2012). *Case Study Research: Design and Methods*. New York: Sage.

The following reference lists contain materials from each of the partner country sections and should be consulted alongside the respective National Reports available on the project website: www.letae.eu

Spain

CEDEFOP (2010): Spain, VET in Europe-Country Report 2010, http://www.cedefop.europa.eu/etv/Information_resources/NationalVet/

Comisión de Formación Continua (2010). *La formación permanente y las universidades españolas*.

Consejo de Universidades (2010), Acuerdo del pleno del Consejo de Universidades del día 6 de julio de 2010, refrendado por la Conferencia General de Política Universitaria en su sesión del día 7 de julio de 2010 sobre “Las Universidades y la Formación Permanente en España”.

European Commission/EACEA/Eurydice, 2014. *Modernisation of Higher Education in Europe: Access, Retention and Employability 2014*. Eurydice Report. Luxembourg.

Fundación CYD: Informe CYD. La contribución de las universidades españolas al desarrollo, varios años.

<http://ec.europa.eu/eurostat/> (accessed in June 2015) *Labour Force Survey, Adult Education Survey, Continuing Vocational Training Survey*

<http://www.fundaciontripartita.org/> (accessed in June 2015)

<http://www.ine.es/> (accessed in June 2015) *Encuesta de Población Activa (EPA)*

<http://www.oecd.org/> (accessed in June 2015) *Education at a glance 2010. OECD indicators.*

<http://www.redtrabaja.es/> (accessed in June 2015)

<http://www.sepe.es/> (accessed in June 2015)

Jabaloyes, J. M. (coord.), López Sieben, M., Carot, J. M., Romero, R., Ripoll, C., Montesinos, P., Conchado, A. y M.C. Bas (2010) “La respuesta universitaria a la demanda de formación permanente”, enmarcado en el Programa de Estudios y Análisis del Ministerio de Educación, convocatoria de 2009, proyecto EA2009-0053.

Krüger, K. (coord.) (2014) Social Effectiveness of Tertiary Education for Adults in Mid-life
Barcelona/Oldenburg. www.themp.eu and www.dia-e-logos.com

Krüger, K.; Parellada, M; Alvarez, M.; Huston, M. and Osborne, M. (2010) Core Dimensions of Social Effectiveness in University Adult Education. Barcelona/Oldenburg. www.themp.eu and www.dia-e-logos.com (accessed in June 2015).

Krüger, K & Molas Cardona, A. & García Estévez, J & Jiménez Esteller, L. (2013) Spain - Comparative Report. Discussion Paper 2013/7.1. Barcelona/Oldenburg. 2013.

Ministerio de Educación (2009): “El desarrollo y el estado de la cuestión sobre el aprendizaje y la educación de adultos”, Informe Nacional de España preparado para la conferencia Confitea VI 2009 de la UNESCO.

Neus Pons (2011), “Los retos de la formación permanente en España”, en *Fundación CYD (2011): Informe CYD 2010. La contribución de las universidades españolas al desarrollo.*

Rodríguez, M. (2008): “Evolución de la oferta educativa para adultos”. Revista Participación Educativa, núm. 9, Consejo Escolar del Estado, Ministerio de Educación.

Sanz, F. y J. Lancho (2002): Thematic review on adult learning. Spain. Background Report. OCDE.

SERVEF y CIERVAL (2009): Estudio comparado de los sistemas de formación profesional continua en Europa.

Germany

AG Bildungsbericht (2012): Autorengruppe Bildungsberichterstattung: Bildung in Deutschland 2012 Ein indikatorengestützter Bericht mit einer Analyse zur kulturellen Bildung im Lebenslauf, <http://www.bildungsbericht.de/>, p.306.

Bertelsmann (2015): https://www.bertelsmann-stiftung.de/fileadmin/files/BSt/Publikationen/GrauePublikationen/LL_PolicyBrief_Weiterbildungsfinanzierung.pdf

BiBB (2015): <https://www.bibb.de/de/37586.php>

CHE (2012): www.che.de/downloads/CHE_AP123_Studieren_ohne_Abitur.pdf

DESTATIS (2013) <https://www.destatis.de/DE/ZahlenFakten/Indikatoren/LangeReihen/Bildung/Irbil01.html>

DHBW (2014): <http://www.dhbw.de/die-dhbw/wir-ueber-uns/geschichte.html>

DS (2015): <http://www.wegweiser-duales-studium.de/>

EUROSTAT (2015): http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=trng_lfse_02&lang=en

Handwerk (2013): <http://www.handwerksblatt.de/handwerk/versorgungsluecke-bei-berufsschullehrern-droht-20996.html>

HCATPro Project Description: <http://www.haw-hamburg.de/ti-ff/aktuell/nachwuchsgewinnung/hcat-pro.html>

HCAT (2015) http://www.hh.shuttle.de/hh/g15/seiten/startseite/frame_grundaufbau.htm

HSB (2013): <http://www.hs-bremen.de/internet/de/studium/stg/nautik/>

MIE: <http://www.uni-bremen.de/industrial-engineering.html>

O-H_Bremen (2009): <http://www.offene-hochschulen-bremen.de/studieren-ohne-abitur/zugang-ueber-qualifikationen/>

OECD (2015): <http://www.oecd.org/berlin/publikationen/bildung-auf-einen-blick.htm> or
<https://data.oecd.org/eduatt/population-with-tertiary-education.htm>

O-H- 2015 (2015): <https://de.offene-hochschulen.de/>

Pro Technicale: <http://www.protechnicale.de/>

Spiegel (2016): <http://www.spiegel.de/lebenundlernen/uni/statistik-so-viel-kosten-studenten-ihre-unis-pro-jahr-a-1078683.html>

Trial project description: <http://www2.itb.uni-bremen.de/index.php?id=499>

Weg_hs (2014): <http://www.wegweiser-duales-studium.de/entwicklung-geschichte-statistik/>

WirtschaftsWoche (2014): <http://www.wiwo.de/erfolg/management/streitgesprach-fachkraeftemangel-gehen-deutschland-die-ingenieure-aus-/10979356.html>

Scotland/UK:

[https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/United-Kingdom-England:Organisation of Private Education](https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/United-Kingdom-England:Organisation_of_Private_Education)

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/207128/bis-13-900-privately-fundedproviders-of-higher-education-in-the-UK.pdf;

www.universitiesuk.ac.uk/Publications/Pages/Privateandforprofitproviders.aspx

<http://www.universitiesuk.ac.uk/highereducation/Documents/2010/PrivateProviders.pdf>

<http://www.timeshighereducation.co.uk/comment/leader/failing-to-look-listen-or-legislate/2017345.article>

<http://www.nao.org.uk/wp-content/uploads/2014/12/Investigation-into-financial-support-for-students-at-alternative-higher-educationproviders.pdf>

<http://www.collegesscotland.ac.uk/briefings-and-publications/publications/80-colleges-scotland-keyfacts-2014/file>

[http://www.sfc.ac.uk/web/FILES/Statistical_publications_SFCST042014_HigherEducationStudentsandQualifiersatS/Higher Education Students and Qualifiers at Scottish Institutions 2012-13 31 March.pdf](http://www.sfc.ac.uk/web/FILES/Statistical_publications_SFCST042014_HigherEducationStudentsandQualifiersatS/Higher_Education_Students_and_Qualifiers_at_Scottish_Institutions_2012-13_31_March.pdf)

<https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/United-Kingdom-Scotland:Overview>

<https://www.gov.uk/check-a-university-is-officially-recognised/overview>

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/207128/bis-13-900-privately-fundedproviders-of-higher-education-in-the-UK.pdf

http://eacea.ec.europa.eu/education/eurydice/documents/facts_and_figures/fees_and_support.pdf

<http://www.scottish.parliament.uk/parliamentarybusiness/Bills/25083.aspx>

<http://www.sfc.ac.uk/aboutus/aboutus.aspx>

<http://www.sfc.ac.uk/skills/LearningtoWork/LearningtoWork.aspx>

<http://www.sfc.ac.uk/skills/LearningtoWork/LearningtoWork.aspx>

http://www.sfc.ac.uk/web/FILES/Skills_LearningtoWorkTwo/Education_Into_Enterprise.pdf

<http://www.e-placementscotland.com/>

<http://www.3rdsectorintern.com/>

<http://www.mastersprojects.ac.uk/>

Eurostat: http://ec.europa.eu/eurostat/data/database?node_code=trng_nfe5#

Houston, M., and Osborne, M. (2013) *Tertiary Higher Education for People in Mid-life (THEMP) National Report of Case Studies UK: Scotland. THEMP Discussion Paper 7.6*. Project Report. Fundación Conocimiento y Desarrollo, Barcelona.

Osborne, M., Rimmer, R., and Houston, M. (2014) Adult access to higher education: an international overview. In: *Looking Back, Moving Forward: 60 Years of UNESCO in Hamburg*. UNESCO Institute for Lifelong Learning: Hamburg, Germany.

Osborne, M., and Houston, M. (2012) United Kingdom – Universities and lifelong learning in the UK – adults as losers, but who are the winners? In: Slowey, M. and Schuetze, H. (eds.) *Global Perspectives on HE and Lifelong Learners*. London: Routledge.

Parry G, Callender C, Scott P and Temple P (2012) *Understanding Higher Education in Further Education Colleges*, BIS Research Report 68. London: Department for Business, Innovation and Skills, 219 pp.

Reeve, F., Gallacher, J. and Ingram, R. (2007) A comparative study of work-based learning within Higher Nationals in Scotland and Foundation Degrees in England: contrast, complexity, continuity, *Journal of Education and Work*. 20 (4), pp. 305-318.

Turkey:

Anadolu University. (2015). <https://www.anadolu.edu.tr/acikogretim>

Anadolu University. (2015) <https://www.anadolu.edu.tr/acikogretim/acikogretim-sistemi/acikogretim-sistemi-1#>

Akyüz, Y. (2010). *Türk Eğitim Tarihi M.Ö. 1000-M.S. 2010*. Ankara: Pegem Akademi.

Atatürk University. (2015) <http://www.ataaof.edu.tr/hakimizda.aspx>

Bulut, B. (2009). Sürekli Eğitim Merkezlerinin Ülkemiz ve Bazı Ülkelerdeki İşleyişi. (Unpublished master's thesis). Kırıkkale University, Kırıkkale, Turkey.

Demir, S. B.; Doğan, S.; M. A. Pınar. (2013). 4+4+4 yeni eğitim sistemi'nin yansımaları: beşinci sınıflardaki eğitim-öğretim sürecinin branş öğretmenlerinin görüşleri doğrultusunda değerlendirilmesi. *Turkish Studies*, 8/9 Summer, p. 1081-1098.

Doğan, S., Varan, İ. (2014). Türkiye yetişkin öğrenme profilinin politika analizi kapsamında değerlendirilmesi. Turkish Republic, Ministry of Education: Ankara.

Istanbul Technical University. (2015) <http://www.itusem.itu.edu.tr/sayfa/egitimler-ve-programlar>.

Kürüm-Yapıcıoğlu, D. and Keser, A. D. (2015) Analyzing the cooperation between university and sector in education: strenghts, weaknesses, obstacles and suggestions. Paper presented at: 6th Nordic Conference on Adult Education and Learning, Tampere, Finland.

Ministry of Labor and Social Security. (2013). *Tehlikeli ve çok tehlikeli sınıfta yer alan işlerde çalıştırılacakların mesleki eğitimlerine dair yönetmelik*. <http://www.resmigazete.gov.tr/eskiler/2013/07/20130713-3.htm>.

Ministry of National Education. (2012). *Mesleki Eğitim ve Öğretim Sisteminin Güçlendirilmesi Projesi*. <http://mtegm.meb.gov.tr/www/mesleki-egitim-ve-ogretim-sisteminin-guclendirilmesi-projesi-megep/icerik/112>

Ministry of National Education. (2014). *Turkey Lifelong Learning Strategy Document*. <http://www.resmigazete.gov.tr/eskiler/2014/07/20140716-8-1.pdf>

Ministry of National Education. (2015). *Mevzuat*. <http://www.meb.gov.tr/mevzuat/>

Miser, R., Ural, O., Ünlühisarçıklı, O. (2013). Adult education in Turkey. *Adult Learning*, 24(4), 167-174.

Nohl, A. (2008). The Turkish education system and its history-and introduction In A. Nohl; A. Akkoyunlu Wigly and S. Wigly (Eds). *Education in Turkey*. New York/Münster: Waxmann Publishing.

OECD. (2014). Education at a Glance, OECD Indicators. <http://www.oecd.org/edu/Education-at-a-Glance-2014.pdf>.

Özer, B. (1989). Türkiye'de uzaktan eğitim: Anadolu Üniversitesi Açıköğretim Fakültesi uygulamaları. *Anadolu Üniversitesi Eğitim Fakültesi Dergisi*, 2(2), 1 – 24.

Sağlam, M., Özüdoğru, F., Çıray, F. (2011). Avrupa Birliği eğitim politikaları ve Türk eğitim sistemine etkileri. *Yüzüncü Yıl Üniversitesi Eğitim Fakültesi Dergisi*, 8(1), 87-109.

Sağlam, M., Çıray, F. ve Özüdoğru, F. (2011). *Türkiye'deki üniversitelerin sundukları yaşamboyu öğrenme uygulamaları ve olanaklarının incelenmesi*. 3. Uluslararası Eğitim Bilimleri Kongresi (22-25 June 2011). Doğu Akdeniz Üniversitesi, Gazimağusa.

Selvi, K; Baldan, B. and Alagöz, Y. (2015, March 25). *An Analysis of Training for Adults Conducted by 'Continuing Education Centers' of the Universities in Turkey*. Paper presented at: 6th Nordic Conference on Adult Education and Learning, Tampere, Finland.

The Council of Higher Education. (2015). *Üniversitemiz*. <http://www.yok.gov.tr/web/guest/universitemiz>

Tuncer, M. (2006). Yetişkinlerin mesleki eğitimi. *Doğu Anadolu Bölgesi Araştırmaları*, 5(1), 40-48.

Turkey Fulbright Education Commission. (2015). *Türk Eğitim Sistemi*. <http://www.fulbright.org.tr/PageDetail.aspx?id=105>

Turkish Statistics Institution. (2015). *Eğitim İstatistikleri*. http://www.tuik.gov.tr/PreTablo.do?alt_id=1018

Turkish Statistics Institution. (2014, October 1). Haber Bülteni. *Yaygın Eğitim Faaliyetleri Araştırması, 2013*. http://www.tuik.gov.tr/PreTabloArama.do?metod=search&araType=hb_x

Yayla, D. (2009). Türk Yetişkin Eğitimi Sisteminin Değerlendirilmesi. Turkish Republic, Ankara: Ministry of National Education, EARGED.

Republic of Turkey Ministry of Justice. (2004). Kanunlar. <http://www.adalet.gov.tr/> .

Czech Republic:

Zelenka M., Koucký J.: *Zaměstnatelnost a uplatnění absolventů vysokých škol na pracovním trhu 2013*, page 7.

Czech Statistical Office: *Czech Republic after 1989*, tab. 12.08 Czech universities, <https://www.czso.cz/csu/czso/ceska-republika-v-cislech-od-roku-1989-wau52m1y38>

Cedefop: *Structures of Education and Training Systems in Europe 2010*, http://orbi.ulg.ac.be/bitstream/2268/92473/1/041_BF_EN.pdf

EAEA: Country Report on Adult Education in THE CZECH REPUBLIC 2011, http://www.eaea.org/media/resources/ae-in-europe/czech-republic_country-report-on-adult-education-in-the-czech-republic.pdf

EUROSTAT, http://ec.europa.eu/eurostat/data/databasehttp://www.cedefop.europa.eu/etv/Information_resources/NationalVet/

Ministry of Education Youth and Sport: *Data about the Students, Firstly Registered and Graduates*, http://dsia.uiv.cz/vystupy/vu_vs.html

Navreme Boheme: *Mapping the Czech Landscape of Tertiary Lifelong Learning*, THEMP 2012, http://themp.eu/sites/default/files/userfiles/shared/DiscussionPapers/DP_2012_4_2_CZ.pdf

Finland:

Eurypedia, (undated). Adult Education and Training: Finland https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Finland:Adult_Education_and_Training

Finnish education in a nutshell, (2013). "Education in Finland" series published by Ministry of Education and Culture, Finnish National Board of Education, CIMO. http://www.minedu.fi/export/sites/default/OPM/Julkaisut/2013/liitteet/Finnish_education_in_a_nutshell.pdf

Finnish National Board of Education, web-site: <http://www.oph.fi/english>

Global health training programme evaluation report (2014). http://www.globalhealth.fi/Tulostusversio_GlobalHealthTrainingProgramme_EvaluationReport_Oct2014_FINAL_20102014.pdf

Ministry of Education and Culture, Finland web-site (undated). Adult education. http://www.minedu.fi/OPM/Koulutus/aikuiskoulutus_ja_vapaa_sivistystyo/?lang=en

Myllymäki, H-R. (2013). How Do Adults in Finland Pay for Higher Education? <http://www.evollution.com/opinions/adults-finland-pay-higher-education/>

Myllymäki, H-R. (2012). Moving from Factory-Style Course Production to Facilitating Learning http://www.evollution.com/program_planning/moving-from-factory-style-course-production-to-facilitating-learning/

Kouvo, T. (2010) *Adult Education in Finland*, <http://www.infonet-ae.eu/country-overviews/finland>

OECD (2014). Education at a Glance: OECD indicators. Paris: OECD. <http://www.oecd.org/edu/Education-at-a-Glance-2014.pdf>

OECD (2013). Education at a Glance: country note: Finland. http://www.oecd.org/edu/Finland_EAG2013%20Country%20Note.pdf

OECD (2009). Review of tertiary education. Finland. <https://www.oecd.org/education/skills-beyond-school/37474463.pdf>

OECD (2001). Thematic Review on Adult Lifelong Learning <http://www.oecd.org/education/innovationeducation/2697889.pdf>

Official Statistics of Finland (2015): Students and qualifications of educational institutions (epublication). ISSN=1798-7679. Helsinki: Statistics Finland. http://www.stat.fi/til/opiskt/index_en.html

Official Statistics of Finland (2014): University education (e-publication). ISSN=2324-0148.. Helsinki: Statistics Finland. http://www.stat.fi/til/yop/2014/yop_2014_2015-05-06_tie_001_en.html

Official Statistics of Finland (2014 a): Polytechnic education (e-publication). ISSN=1799-4012. Helsinki: Statistics Finland. http://www.stat.fi/til/akop/2014/akop_2014_2015-04-16_tie_001_en.html

Official Statistics of Finland (2012): Students and qualifications of educational institutions (epublication). ISSN=1798-7679. 2012. Helsinki: Statistics Finland. http://www.stat.fi/til/opiskt/2012/opiskt_2012_2014-01-29_tie_001_en.html



CR&DALL
St. Andrew's Building
University of Glasgow
11, Eldon Street
GLASGOW
G3 6NH
Scotland
or
E-mail: cradall@glasgow.ac.uk

CR&DALL Working Paper Series: WP201/2016; ITB-Forschungsberichte 64/2016

ISSN: 2397-057X

ISBN:



Patterns of cooperation between Higher Education and the World of Work by Saniter, A., Houston, M. & Krüger, K. is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.

Based on a work at www.letae.eu. Permissions beyond the scope of this license may be available at <http://cradall.org>.