

**RETURN ON INVESTMENT IN TRAINING** 

# The State of the Art Report

Project-Pilot P/02/B/F/PP - 125502

A PILOT-PROJECT AIM AT CONCEIVING AND DEVELOPING A METHODOLOGY AND A SET OF TOOLS ALLOWING TRAINING PROVIDERS, COMPANIES AND OTHER STAKEHOLDERS TO EVALUATE THE RETURN ON TRAINING INVESTMENT





#### **RETURN ON INVESTMENT IN TRAINING**

#### **PROJECT PROMOTER**

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## PORTUGAL

Confederação do Comércio e Serviços de Portugal www.ccp.pt

Associação para a Formação Profissional e Desenvolvimento de Montijo/ Escola Profissional do Montijo <u>www.ep-montijo.rcts.pt</u>

Instituto de Desenvolvimento Rural e Hidráulica <u>www.idrha.min-agricultura.pt</u>

#### AUSTRIA

BFI - Austria Berufsforderungsinstitut (BFI) Steiemark www.bfi.or.at

# BULGARIA

Znanie – Centre for Vocational Training <u>www.znanie-bg.org</u>

#### CZECH REPUBLIC

Tempo – Training & Consulting, ltd. www.tempo.cz

FINLAND TULOSSILTA OY www.tulossilta.fi

**GREECE** IDEC – Industrial Development & Education Centre <u>www.idec.gr</u>

WEGRE - Western Greece Development Centre <a href="http://www.wegre.org">www.wegre.org</a>

ROMANIA Romania Society for Lifelong Learning www.srep.ro



Leonardo da Vinci Pilot projects



## **RETURN ON INVESTMENT IN TRAINING**

#### THE STATE OF THE ART REPORT

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# Title

Return on Investment in Training: State of the Art Report

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## Abstract

In the context of a mutant European Union with different degrees of social, economic and legal demands, the education and vocational training system is a primary concern of each member government and the European institutions. The problem is even more complex since the education and vocational training systems vary considerably from country to country.

The European Institutions are structured in different knowledge networks with decentralized programs and initiatives aiming to promote a common education and vocational training policy. The ROI – Return on Investment in Training Project is designed to promote the quality and reinforce the innovation process of the vocational training. The project aims to achieve a down-top approach.

In order to obtain a representative sample of the vocational training field, the partnership is composed by different frameworks; in fact, the partners came from Northern, Central, East European and Southern countries. On the other hand, the partners have been working at different sectors like industry, trade and services and agriculture; some of them have also experiences with equality between man and women projects.

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# **1. PROJECT DESCRIPTION**

# 1.1. Objectives

The project aims to conceive and develop a methodology and tools allowing training providers, companies (namely the SME's) and other stakeholders to evaluate the return (skills, performance, turnover, organization structure) on training investment.

# **1.2.** Total Duration

30<sup>th</sup> months

# **1.3. Project Partners**

# 1.3.1. Project Promoter

# Centro de Formação Profissional para Comércio e Afins (Portugal)

#### Objectives and Mission

CECOA – Vocational Training Centre for the Trade (Centro de Formação Profissional para Comércio e Afins) was created by a protocol signed in July 1986 between the Institute for Employment and Professional Training (Instituto do Emprego e Formação Professional - a public institute that reports to the Portuguese Ministry of Social Security and Labour) and the Confederation of Trade and Services (Confederação do Comércio e Serviços de Portugal - a social partner





that represents the trade and service sector).

CECOA aims at promoting training activities and can be distinguished as an organization of reference, innovative and competitive for the trade and services sector. With a national scope, CECOA has its head-office in Lisbon and two other branches Porto and Coimbra. in CECOA 42 200 has employees and nearly trainers. In July 1999, the Board of Directors approved CECOA's quality policy. CECOA trained, in the last 4 years, about 13.800 trainees.

CECOA's mission is to contribute for the development and upgrading of trade and services at a national level; to carry out vocational training for young people and employed people; to promote studies and projects which aim is the development of innovative contents, methodologies and tools to support vocational training and indicators for the characterization of the sector. Since 1993, the institution participated in many European transnational projects as Petra, Socrates, Adapt, Leonardo da Vinci, Equal).

# Project role

CECOA is responsible to coordinate all the project activities (administrative, technical and financial); to elaborate intermediate and final reports; to disseminate the project results, especially the methodology conceived to evaluate the return of the investment in the vocational training.

# 1.3.2. Northern European Partner

# Tulossilta OY (Finland)

# **Objectives**

Tulossilta have the goal to guide customers to find their path toward success, namely, by organize and implement training programs and also consultations for education institutions and enterprises. The institutions has been gathered in development of training methods and systems likewise in development of training materials and programs, and addresses opportunities for unemployed and qualification of human resources in local enterprises.

The institution is aimed at promoting activities in the following areas:

 Training of trainers; teachers, employed people for educational institutions and managers. There are also many training courses targeted to enterprises and other implemented in collaboration with the public institutions from Finland;
Equality between men and women projects.

In fact, the institution has a strong role in the increasing and promotion of the women's in the labour market. To achieve this goal, the institution have been developing training programs as following: a) EntreFemme project, aims to develop entrepreneurship training materials for Open and Distance Learning; b) Business women, aims to help women to develop their companies and entrepreneurship skills; c) Female Intervention to Technology, aims to promote





women to choose technical career and proceed into leading positions; d) Mentor and Tutor programs, aims to orient different target groups.

# Project role

Tulossilta OY is responsible for the project internal evaluation, namely in terms of the processes of quality and their monitoring and also providing a framework of the state of the art of the evaluations of vocational training system in Finland.

# 1.3.3. Central European Partners

# Berufsforderungsinstitut (BFI) Steiemark (Austria)

#### *Objectives*

BFI Steiermark is founded by the Austrian Trade Unions Organisation and the "Arbeiterkammer" (an organisation representing the legal interests of employees in Austria).

BFI Steiermark is classified as an association, whose activities are non-profit oriented. Main activities of the institution are: plan and implement training courses and other educational activities; develop and monitoring vocational training courses, and other activities in the context of adult education and rehabilitation. The BFI Steiermark offers training and qualification in the field of engineer, informatics, construction and wood, transport, office/administration, languages, sales/marketing.

This training organisation have been involved in many transnational projects: Together NOW, EuropeanBIQ, VICET, ARCS, EDAD, Com Train, EKC, etc.

#### Project role

The partner is responsible to contribute to the development of new tools of vocational training evaluation and also to test these methods in Austrian national companies; to contribute with data to the State of the Art Report and to disseminate the project results.

# Tempo – Training and Consulting, Itd (Czech Republic)

#### Objectives

The Tempo was established in Ostrava. Since 1986, the institution work to become a centre of reference in vocational training for the area of computing. On the other hand, two years later, the institution is accomplishing this goal by organizing activities in the framework of the European education projects and other consultancy activities to business partners.

The institution is aimed to promote activities in the following vocational training areas:

- Computing and Information and Communication Technology (ICT);
- Enterprise and management skills qualification skills;
- Language distance courses;
- Computer programming and Web design courses;





Others in the framework of the European Union. \*

## Project role

The partner is responsible for the development of the methodologies and new assessment tools and also to test these innovative methods in the context of the Czech Republic companies.

## 1.3.4. East European Partners

## Znanie – Centre of Vocational Training (Bulgaria)

#### **Objectives**

Znanie Centre of Vocational Training is an institution aiming at promoting vocational training, established department of Znanie Association for adults and continuous training and qualification. It provides initial and continuing vocational training of young workers, unemployed and persons with disabilities. It's an association of teachers, students, university professors and other experts. Amongst the priorities of the Centre are also: training diagnosis and labour market analysis; training courses in the country and abroad, lifelong acquisition of skills. The Centre participated in European transnational projects as PHARE, Leonardo da Vinci, Socrates, Culture 2000).

#### Project role

The partner is responsible for the development of the methodologies and new assessment tools and to test these innovative interventions inside the Bulgarian enterprises.

#### Romania Society for Lifelong Learning (Romania)

#### **Objectives**

The Romania Society for Long Life Learning is a non-profit institution, founded in 2001, aiming at promoting vocational training targeted to the Information and Communication Technology field.

This organism is an important partner concerning the offer provided to the vocational training field in Romania, to the following areas: development and software up-date and the conception of integrative systems (including hardware, networks and software solutions).

#### Project role

The partner is responsible for the development of the methodologies and new assessment tools, to check these innovative interventions in the Romania enterprises and to disseminate the project results.





# 1.3.5. Southern European Partners

# **IDEC – Industrial Development & Education Centre (Greece)**

#### **Objectives**

IDEC Ltd was founded in 1989 by SME consultants and is oriented to promote its clients with a wide range of support services. The institution main activities are: management consulting, telecommunication and computers networks, software and multimedia development, training, advanced internet solutions and international co-operation projects. Clients of IDEC are both SME's and bigger Greek mostly textile and clothing companies, Entrepreneurs' Associations, Trade Unions and Chambers of Commerce and Industry.

#### Project Role

IDEC aims at developing 2 case-studies in the industrial sector, at providing a characterization of the State of the Art of the evaluation in vocational training system and to disseminate the project results and establish strategies and future measures in order to achieve the project goals.

## Wegre – Werstern Greece Development Centre (Greece)

#### **Objectives**

The institution was established in 1992 with headquarters in Patras. Wegre is a non-profit making organization directed to the following main areas of activities: a) Preparation and development of programs for initial and continuous technological and vocational training;

b) Creation of the necessary environment for the participation of the enterprises in European Programs;

c) Creation of stable co-operation bonds between the work of industry and the university sector, including the technology transfer between Greece and other European Community members.

Since 1992, Wegre has been working in the following activities: regional development; vocational training and continuous training activities; information technology applications; consultancy on information technology issues; interregional cooperation at the SME's level and equal opportunities issues and participation in E.U. Programs.

The institution is the National Co-indicator representative of WITEC (Women in Technology in European Community) European Network in Greece. Wegre gives to women in Greece the opportunity of easy access to WITEC's services of information and all the current vocational training issues in technological sectors.

#### Project role

The partner is responsible for the development of the methodologies and new assessment tools, to participate with indicators to the State of the Art Report and to disseminate the project result and strategies.





# Associação para a Formação Profissional e Desenvolvimento de Montijo / Escola Profissional de Montijo (Portugal)

## **Objectives**

Escola Profissional de Montijo is a professional school founded in 1991; however, in 1999, was settled the Associação para a Formação Profissional e Desenvolvimento de Montijo.

The institution is aimed at promoting long training courses for youths and short training courses for adults. The institution has been involved in many European and national projects.

## Project role

The partner is responsible to contribute to the conception and development of new assessment tools of the evaluative return in the vocational training system within 2 target groups: youths and employed adults from diverse activity sectors.

## CCP - Confederação do Comércio e Serviços de Portugal (Portugal)

#### **Objectives**

Confederação do Comércio e Serviços de Portugal (Confederation of Trade and Services) is a social partner that represents the objectives and interests of the trade and service sector in Portugal. The association represents 200.000 enterprises; most of them are SME's. CCP is also responsible for the social bargaining process with the Portuguese government and the other social partners of the vocational training sector.

#### Project role

CCP is responsible for the dissemination of the project, especially, at the divulgation level through the enterprises network. In fact, a space should be created to disseminate the tool of return evaluation and the achieved results.

# IDRHa – Instituto de Desenvolvimento Rural e Hidráulica (Portugal)

#### **Objectives**

Instituto de Desenvolvimento Rural e Hidráulica is a public organism created in November 2002, which belongs to the Ministry of Agriculture, Rural Development and Fishing. The main attributions of this institute are the coordination and elaboration of the vocational training programs, to support the policy and define measures to promote the development of the Portuguese rural world and to guarantee the implementation of the design strategy for innovation to the sector.

Other task is to collaborate in the Permanent Commission responsible for Certification and the Technical Commission for the Agro-alimentary sector.





Project role

IDRHa is responsible for accomplishing the adequacy of the methodology to the rural word needs and also to test the product with target population of the institution.

# 2. STATE OF THE ART REPORT GUIDELINES

The present document is aimed at describing the State of the Art of the Evaluation in the Vocational Training in all the countries involved in the project. After the 1<sup>st</sup> transnational meeting, and in accordance with the objectives established, the present report will present a conceptual and legal framework, some practical measures and results achieved by the different countries. On the other hand, it will be divulgate a characterization of the evaluation criteria and assessment conditions by partner.

In this sense, it will present first a synthesis of the information presented by the partners and their respective training system; second, the report will focus essentially on the evaluation, and in particular, based on the following issues:

- When the evaluation is done?
- What is evaluated in each moment?
- Who is evaluated?
- How the evaluation is done?
- What for the evaluation?
- Which tool is used to compare the effective cost of the training and the impact after the training?

# 3. OVERVIEW OF THE VOCATIONAL TRAINING SYSTEMS

# **3.1. Situation in Finland**

The main aim of the Finnish education system is to ensure that the entire population has access to education and training. The principle of lifelong learning, the idea that people are always capable of learning new things at all stages of life, is an important principle for all education provision, from basic schooling to adult education.

In 1998, public spending on education accounted for 6.2% in Finland (against an OECD average of 5.3%). Finnish people have a high standard of education. Young people, in particular, have been rated very highly in international rates<sup>1</sup>.

The Finnish education system offer professional education and training for all young people after either compulsory<sup>2</sup> or upper secondary general education<sup>3</sup>.

<sup>&</sup>lt;sup>3</sup> Upper secondary school is mainly intended for students aged 16-19. The schools select their own students, based on their comprehensive school grades. It takes from two to four years to complete upper secondary school. Studies are divided into courses, and the choice of courses partly determines the progress that a



<sup>&</sup>lt;sup>1</sup> The OECD Programme for International Student Assessment (PISA), which evaluates the educational achievement of children of school age in the OECD countries, placed Finland among the top countries in 2001.

<sup>&</sup>lt;sup>2</sup> The Compulsory Education starts with comprehensive school (generally in the year children turn seven). Comprehensive school lasts for nine years and ends once a young person has completed the curriculum of the comprehensive school or when ten years have passed since the start of their compulsory education.



 Initial Vocational Education provides a 3 year instructions in 113 study programs in all the field of working life arranged both in education institutions and in the form of Apprenticeship;

✤ The *Higher Education* system consists of universities and polytechnics. The universities rely on the connection between research and teaching. Their basic purpose is to perform scientific research and to provide higher education connected with it. The Polytechnics provides instruction for expert functions in several sectors during 3.5 and 4 years studies;

✤ In Additional Vocational Training it is possible to take further and specialist vocational qualification;

• *Apprenticeship* is based on a contract of employment with studies to gain initial or additional vocational qualifications.

Adult education has become an important part of Finnish education policy, particularly during the last twenty years. The education level of older generations is lower than that of the younger generations, so there is clear need for supplementary and further education.

Adult education is arranged for instance at universities, polytechnics, vocational schools, vocational adult education centres, folk high schools, adult education centres and summer universities. The types of study offered include teaching for basic qualifications, open access to studies which are part of degree programs, training for competence-based tests (e.g. language tests and vocational qualifications), apprenticeship training, and additional and supplementary training in support of vocational skills.

Most adult education students study alongside their work. New options for independent study and distance learning are constantly being developed in order to make it easier for people to work and study at the same time. Information technology brings constant advances in distance learning.

Adult re-employment training is an important form of adult education. Its aim is to improve the supply of skilled labour and make it easier for the unemployed to re-enter the labour market. The long-term unemployed are a special group in re-employment training, which increased particularly rapidly during the 1990s, when the worldwide recession reached Finland, causing a rise in unemployment.

The Ministry of Labour is responsible for re-employment training, procuring courses and training from different educational institutions for the unemployed or for people under threat of unemployment. Re-employment training is free of charge for students.

More recently, there has been the need to reform the Vocational Training System in Finland. In fact, the vocational education and training (VET) system has experienced and it still experiencing major changes and developments, in broad terms such as:

- Restructuring the institutional structure of VET;
- ✓ Reforming the curricula and study programs of upper secondary VET;
- ✓ Including competence-based tests in new study programs;
- ✓ Strengthening collaboration between working-life and VET institutions;

student makes. Due to the course-based system, there are no year-classes in upper secondary school. The subjects taught include various compulsory studies, advanced studies and practical studies.





- $\checkmark$  Extending the adoption of competence-based qualification system for adults;
- Preventing social exclusion of youngsters;

 $\checkmark$  Evaluating the learning achievements and other outcomes of the VET system and institutions;

 $\checkmark$  Reinforcing the formula-based funding system.

Finally, Finland is a member of the European Training of Trainers Network<sup>4</sup> (TTNet). Since 1999, in the beginning, the emphasis was in the co-operation between vocational teacher training institutions, but the network is also expanding to include more trainers of on-the-job trainers.

The Training of Trainers Network is aimed at assembling and divulgate information about the trainers training system. On the other hand, it promotes the acquisition of information on the best international practices and experiences and the contact with an international community of experts. Austria, Greece and Portugal also belong to the network.

# 3.2. Situation in Austria and Czech Republic

# Situation in Austria

The Federal Ministry of Education, Science and Culture is divided into several areas of responsibility, sub-divided into divisions which are again sub-divided into departments. However, some decisions are delegated to the individual provincial governments as the Regional Board at the provincial level and the District Education Board at the level of the political districts.

In terms of offer, there is a variety of educational and training options. School attendance is compulsory for all children permanently resident in Austria irrespective of their nationality and lasts for 9 years. The 9th year may in turn be completed by attending a pre-vocational year, a secondary academic school or a technical and vocational school or college. Students may choose among a variety of secondary academic, technical and vocational schools and colleges. Basically all types of secondary academic schools prepare for university education. The various types are to meet the individual needs and skills of students and provide for the possibility to specialize in certain areas.

Technical and vocational schools and colleges pave the way for the transition from compulsory education to the world of work. The flexible and highly practice-oriented Austrian apprenticeship training system is permanently adapted to the needs and requirements of the labour market.

The Austrian apprenticeship training is unique throughout the countries of Europe and thanks to their sound training and their good qualifications Austrian skilled workers are highly esteemed all over the world.

<sup>&</sup>lt;sup>4</sup> TTNet works as a communication, co-operation, and expert forum for the trainers of vocational teachers and trainers.





1 - *Reforms of the dual system*<sup>5</sup> are leading to an increased integration of economic and technological innovations. Moreover, they aim at motivating companies to invest in existing and to create new vacancies for apprentices<sup>6</sup>. And last but not least they also want to foster the young people's willingness to develop new concepts of studying and working.

2 - Secondary technical and vocational schools and colleges enjoy quite some popularity. And even though education and training in these schools and colleges requires quite a lot of hard work on the students' side it seems to be worth the effort for it also provides for a sound education and high-quality vocational training.

By means of not just offering basic vocational training but also more specialized courses, technical and vocational schools and colleges provide for training in various fields and for various occupations.

Post-secondary courses provide short study programs for people holding standard entry qualifications for university. These courses run for four or eight (for people under employment) semesters, impart technical and practical qualifications to be acquired at technical and vocational colleges and end with a diploma exam. Post-secondary colleges offer high-quality training for occupations in the social and services sector.

3 - *Adult education* is the only field of education in Austria for which there are no legal provisions. Public and private providers offer a variety of complementary courses on personal as well as vocational matters. Further vocational education and training is determined by the type and size of the respective companies and is often organized by the companies themselves. Regional non-profit organizations offer courses which impart key qualifications and provide people with life skills. Federal Centres for the Promotion of Adult Education provide assistance to regional providers, large and small alike, increasing their qualitative standards and their efficiency.

Other important characteristic of the Vocational Training System in Austria is the role of the social partners in the vocational training system, namely, in the initial training system. The apprenticeship centres attached to the chambers of commerce and industry also serve as first-instance vocational training authorities. They are an example illustrating that statutory bodies representing social partner interests can act as decision-making administrative bodies.

The activities of the social partners here are based on powers which are partly original and partly delegated. The establishment of the apprenticeship centres meant the delegation of certain State responsibilities to the chambers of commerce and industry. Apprenticeship centres are federal agencies and indirect elements of the federal

<sup>&</sup>lt;sup>6</sup> Companies which train apprentices are obliged to provide apprentices with the skills and know-how stipulated in the occupational profile; this ensures a uniform minimum standard of training. Companies which are not able to provide training which covers the whole occupational profile may avail of the possibility of complementary training within a training network. Thus, even small companies may contribute their share to apprenticeship training.



<sup>&</sup>lt;sup>5</sup> In Austria apprenticeship training takes places at two different sites: company-based training of apprentices is complemented by compulsory attendance of a part-time vocational school for apprentices [Berufsschule]. Thus, apprenticeship training is also referred to as "dual vocational training system" or as "dual system". Education in part-time vocational schools for apprentices provides for the theoretical background necessary for company-based work.



administration, i.e. examples of State powers being exercised through the nongovernmental institutions to which they are attached.

The apprenticeship centres are supported in their work by the apprenticeship and youth welfare units of the chambers of labour. Mandated to defend the interests of apprentices, the main tasks of these units are to monitor the training provided by employers and to appoint delegates to important bodies responsible for apprenticeship.

The role of the social partners in apprenticeship extends finally to the organization of examinations. Under the Initial Vocational Training Act, the social partners are alone entitled to draw up proposals for the composition of the examination boards for final apprenticeship examinations and training aptitude examinations.

# Situation in Czech Republic

The Education and Vocational Training in Czech Republic is responsible for the planning and implementation of the legal measures for the sector and all the strategic policies. The ministry is also responsible for the vocational education, with the exception of the agro-alimentary training courses.

Since 1997, the Czech Republic has been successfully participating in the Socrates, Leonardo da Vinci and Youth programs. The Czech universities are also taking part in the Jean Monet project to develop new activities focused on European integration and on European Studies programs.

In 1999, a new law on Higher Education establishes the private higher education organism and creates the conditions for the development of the non-university sector. It also deals with the quality of university administration. This law was amended in 2001, making it compulsory to complete undergraduate studies before beginning postgraduate studies.

Again in 1999, the Czech Republic also agreed on a Youth Policy until 2002, an overall framework for youth policy, however, the document is vague as regards responsibilities and timetable and mentions no specific funding.

On the whole, the Czech Republic made good progress in the area of training during 2000, having set up an institutional framework encompassing and made progress in decentralizing the education and training system to the regions and local councils. The participation rate in education for people aged 16 years was over 95%, the highest among the Acceding Countries, but the resources for education and training are still limited.

Vocational and training has already been an important part of the educational system given the high proportion of completers basic education entering secondary VET (about 81,5% in 2000), among the highest in Europe. Over the previous years there has been a shift towards educational programs leading to higher qualifications. According to national data, in addition to the 18.5% of basic education graduates entering secondary general education, 36.4% have chosen programs in secondary technical schools leading both to a professional qualification.

On the other hand, there were two important changes at the Initial *Vocational Education and Training* (IVET) and the *Continuing Vocational Training* (CVT). First, the reform of IVET was mainly determined by a bottom-up approach (the liberalization of





regulatory frameworks and the establishment of regional self-governing bodies). Second, as a result of the emergence of a training market and the considerable expansion of CVT the training courses become more close to the training offer and set up responses to the newly involving needs and up-dated skills and competencies. Another favourable factor is the enterprises' investment of resources for staff development.

In spite of all recent improvements, the experts consider that it is necessary to modernise the system and to adapt it to the needs of the labour market, requirements of the knowledge-based economy and society. They argue that it is crucial to increase the involvement of the social partners in the process of vocational training and in continuous education and to promote the links between the schools and the enterprises. Furthermore, it is necessary to prevent skill gaps, namely by supporting lifelong education and to guarantee equal access to education for all citizens.

To achieve the above statements, the responsible organisms stressed the following goals:

1) To implement the European Union policy of economic and social cohesion and to develop human resources on the regional level;

2) To improve the links between the system of education and the labour market;

3) To contribute to the minimization of the deficiencies of the acquired skills of the students at risk of drop-out school and to facilitate their transition into the practical life; 4) To develop the module system of the organisation of the educational programs, new teaching methods and study materials;

5) To promote life-long learning;

6) To guarantee the equal access to education for persons with disabilities and ethnic minorities and migrants programs.

# 3.3. Situation in Bulgaria and Romania

# Situation in Bulgaria

School education in Bulgaria is compulsory up to the 16<sup>th</sup> years of age and school education is general and vocational. Both of them offer school-leaving certificates (diploma for secondary education) upon successful completion of the last grade and final exams in one subject.

One of the most significant problems in the Bulgarian society is the increased level of unemployment. This is the primary reason why the *Education or Vocational Training for unemployed adults* is so prominent in the country those days.

However, the other types of vocational training are also present in Bulgaria: the vocational training of young people seeking for their first job is still basically a task of the schools from the formal educational system; the trends in the *Education or Vocational Training for employed people* are defined by the companies and differ seriously from one another; the *Vocational Training for Trainers* (initial, upgrading and new qualifications) is usually done by special departments of the universities.





In 1999, Bulgaria made progress particularly with regard to the reform of its education and training system. It introduced some European standards and during this year adopted a law on degrees, minimum general education and curricula. In addition, it made improvements to the systems for certification of vocational qualifications and accreditation of vocational training institutions. Despite this progress, further measures are nevertheless required in various areas to ensure the implementation of the system and to decentralise it.

As a matter of priority, the school system and the vocational training system should be strengthened at regional level and the teacher training system should undergo genuine reform. Furthermore, Bulgaria must tackle the problems of young people dropping out of school and ensure that there is greater cooperation between schools and the world of work.

Progress is also still needed in the field of vocational training. A clear link needs to be established between the needs of the labour market and the skills acquired by those graduating from vocational schools. With regard to vocational training, it is necessary to consolidate the legal basis encouraging employers to guarantee continuing training for their employees in order to gain maximum benefit from the existing infrastructure.

Mičincová (2001) also argue that the vocational training system should become more flexible to the training needs. In her opinion, it is important to define a strategy to qualify professors, trainers and other professionals of the education and vocational training system and to involve students who have a strong probability of abandon the system. The development of the continuing training activities for employees, as an integral part of the active labour market measures, especially for those populations groups at risk of unemployment and social exclusion as to improve the equipment and development of methods for training of adults, wider implementation of modules and distance trainings.

In fact, the Bulgarian government adopted recently norms and conditions settled by the European Union that aims to bring the training system into line with EU standards:

1) Education for all the children, based on the Bulgarian traditions, which becomes consistent with the international and European requirements;

2) The expansion of the foreign language education with the purpose of satisfying the needs of all the age groups;

3) Establishment of the civic education in Bulgarian schools;

4) The national strategy on information and communication technologies.

With regard to the Vocational and Education Training and the Labour market laws, there have been the following developments: 1) a new Law for Employment Incentives was adopted in 2002 and a draft Law to amend and complement the Vocational Education and Training Act (VETA) has been forwarded to the Council for Ministers.

# Situation in Romania

The most important point in the national education strategy is the reform of the education and public vocational training, which is developing a new frame enabling trainers and trainees to achieve effective learning.

The Romanian educational field's reform aimed to prepare the public and private training organizations to address the changes on the national labour market, with the





competence requirements of the European market and with the changes due to the information society.

After 1989, Romanian changes in political and economic areas, the main co-ordinates of the transition to the market economy as the privatisation, the new structure of the economy and the implementation of new technology. However, a lot of social issues were generated such as: unemployment, new qualifications' requirements and difficulties in finding the social utility.

In fact, the education and vocational training field suffers a transformation toward a new qualification skills and a higher level of competence required by the technological and organizational changes and a strong connection to the enterprises. The vocational training system evolve upon private initiative and promote a more flexible conception in order to meet the market requirements and, on the other hand, the preparation of new curricula.

## Compulsory Education

In Romania, the compulsory level of education consists of 8 years of schooling divided into the primary and lower secondary school.

#### Initial Vocational Education and Training

In Romania, the Vocational Training System is organised on two levels: vocational schools and apprentice schools and vocational high schools.

The vocational schools organised day and evening courses and the access to this system is possible for students with the capacity diploma. In this sense, graduation is obtained by a final examination and offers a vocational certificate;

The apprentice schools are organised within vocational training to a more oriented approach. The training duration is between 1 and 3 years depending on the profile. The final evaluation requests a practical exam and the students receive a certificate;

The attendance of vocational high schools promotes a compulsory diploma and the certification depends on the final capacity mark. The students have to pass the practical examination and receive an occupational/vocational certificate, enabling them to apply for a job. The graduation of the vocational high schools is achieved also a bachelor degree.

The vocational upper secondary schools network is organised by the state under the direct co-ordination of the Ministry of Education and Research. The vocational training ensures more than 300 trades in different economic fields. The practical activities are developed in school workshops or in enterprises, depending on the contracts signed by the school with specific economic companies.

The *Continuous Training* is organised in vocational training centres at different levels. The access to the courses is open depending on the level of competence required (capacity, bachelor degree or licence diploma).

The information available about the vocational training system is characterized under the proficiency principle. In this context we can focus the following actions:





1) The traditional training in the classroom destined to training individuals from the workplace;

2) Training at the work place, which is only at the beginning in Romania and which represents orientation, training on site - it is most frequent with sales, where agents often benefit of the job training;

3) Coaching training, which is the main tendency featured at international level. This is permanent training based on a stable relation between counsellors and counselled persons, between superiors and subordinate employees.

# **3.4**. Situation in Greece and Portugal

# Situation in Greece

The Education and Vocational Training in Greece can be divided into two sub systems: 1) the Formal Educational and Vocational Training and 2) the Informal Educational and Vocational Training.

The Ministry of National Education and Religious Affairs supervises formal vocational education and training, through the National Vocational Education and Training System, established by Law 2009/1992. This system observes the changing needs of the labour market, the economic and social trends of the country at national and local levels as well as the scientific and technological developments.

The main goals of the National Vocational Education and Training System are:

- The organisation, development and provision of vocational training;
- The formal certification of vocational training;
- The harmonization of vocational training with the educational system;
- The implementation of various national or European Union vocational education and training programs.

Within the framework of the National Vocational Education and Training System, the "Organisation for Vocational Education and Training" has been established, which is an autonomous legal entity. It provides formal vocational education and training and has the overall responsibility for the Vocational Training Institutes which have been operating in our country since 1992.

The Ministry of Labour, through the Manpower Employment Organisation (OAED) is in charge of Technical Vocational Schools (such as Apprenticeship Schools) and Vocational Training Institutes, whose specifications and curricula are defined by the Organisation for Vocational Education and Training. OAED also runs continuing vocational training courses for adults in Vocational Training Centres.

Other Ministries and agencies, such as the Ministry of Agriculture, the Hellenic Tourist Organisation (EOT) and others, run Vocational Training Institutes, which cover particular needs of their specific areas.

The Formal Education System is provided in well-organised state or private institutions, of which general and vocational education can be distinguished. The first distinctions is the duration of the studies: the elementary school is 6 years; the gymnasium take





three years; the technical vocational schools (TEE) is two and three years; the lyceum is three years; the higher technological institution is three and a half years; and finally, the universities courses durations are four years. On the other hand, the curriculum is established by the Ministry of Education and the title of studies gives the student the right to go to the next rung of education or enter in the labour work according to the criteria the law has established.

In terms of the informal education system, the factors are somehow different: the rules aren't run so stricter as far as the studies duration, curriculum and title of rights. It includes every private or state educational activity that does not belong to formal education. The Continuous training in the Hellenic Republic is non-formal and is faintly supervised by the Ministry of Education.

In fact, Greece has shown special interest for development of an informal education during the last fifteen years because it recognizes that this form of training is much more substantial for certain cases and it is offered in a quite wide network of state and private units. This interest is reflected in law 200/1992, according to which OEEK (Organisation of Vocational Education and Training) has been established and developed.

# Situation in Portugal

The Portuguese Education and Vocational Training System has been facing a transformation in the sense of a better cooperation between the two fields of intervention. In fact, the XV Portuguese Govern created a new legal framework and one of the most important innovations is the articulation between the Ministry of Education and the Ministry of Solidarity and Work. On the other hand, during 2003-2006 the investment should be also on the qualification of the Portuguese in a lifelong perspective. To achieve this goal the Portuguese authorities established a closer relationship between the education, training and the employment.

# Compulsory Education

In Portugal, the compulsory level of education consists of 9 years of schooling divided into 3 sequential cycles of education of 4, 2 and 3 years; the first cycle of basic mandatory education covers years  $1^{st}-4^{th}$ ; the second cycle years  $5^{th}-6^{th}$ ; the third cycle years  $7^{th}-9^{th}$ .

# The Post-compulsory Education or Secondary Education

It is only after the 9<sup>th</sup> grade of basic mandatory schooling that the Portuguese General Education System branches out into different secondary programs, one college-oriented (general secondary courses/programs) and the other more work-oriented (technological secondary courses/programs). The conclusion of the secondary education (general and technologic courses) with passing grades confers a diploma, which will certificate the qualification thus obtained and for the work-oriented programs the qualification for specific jobs.

#### Special Modalities of School Education

The programs offered by vocational schools, those of the apprenticeship and those of recurrent studies are considered as a special modality of school education. These





programs are not regular, because they are not included in the mainstream regular progression of the education system to which they are an alternative given that they were designed to respond to specific educational needs to different target-groups of the population.

All of these programs offer initial vocational and education training, although the recurrent studies<sup>7</sup> also offer general education. In abstract, any of the secondary courses, vocational courses, apprenticeship courses, recurrent courses and others (artistic and those of technological school) share a three dimensional structure:

- a) general/socio-cultural;
- b) specific/scientific;
- c) technical/technological/practical/vocational.

Initial Vocational Education and Training

In Portugal initial vocational education and training can be divided into two main modalities:

••• The Initial training education and training in the education system (under the regulation of the Ministry of Education)

The courses of initial qualification can be promoted by the schools lecturing the third cycle of mandatory education or, in some cases, establishing protocols with other institutions as the vocational training centres. These courses are open to: youngsters who have the 9<sup>th</sup> grade diploma, without any vocational qualification and the ones who have reached 15<sup>th</sup> years of age and attended the 9<sup>th</sup> grade but did not achieve the basic education certificate.

The Initial training education and training in the labour market (under the \* regulation of the Ministry Social Solidarity and Labour through the Institute of Employment and Vocational Training and their Vocational Training Centres as CECOA)

In the apprenticeship system courses are part of an initial vocational training system alternating between the school and the workplace, addressing mainly youngster aged between the 15<sup>th</sup> and the 25<sup>th</sup> years old that are not included in the mandatory school system. The training process alternates between the professional/vocational and the workplace (where the practice training in work context takes place).

In terms of the qualification training with the goal of insertion in the labour market there are two situations:

The initial qualification courses (Level I and II) are initial courses for qualification purposes, focused in a target population as youngsters and young adults (more than 15<sup>th</sup> years old) and applicants for their 1<sup>st</sup> job with compulsory education.

The technological qualification courses targeted on young adults and adults seeking for their 1<sup>st</sup> job with certification of the secondary school or a level III vocational training course.

<sup>&</sup>lt;sup>7</sup> Recurrent education consists of non-regular programs of study or modular or single units because they are not complete training cycles and are not included in the regular progression of the education system; provides a secondary opportunity of training for those who did not undertake training at the normal age or who left school early.





- The education and training courses for young people with a low level of schooling. These training courses aim to young people at risk of abandoning their education.

Concerning the qualification of the active Portuguese population, the level of training courses has been evaluated positively. In fact, the average number of training hours by adult was 17, 8 hours in 2000 and 18 hours in the 1<sup>st</sup> semester of 2001. However, a recent agreement between the Policy of Employment, Labour Market, Education and Training establish that, during 5 years, 10% of the Portuguese active population should receive vocational training and all the Portuguese employed adults should have 20 hours in 2003 and 35 hours in 2006.

# 4. EVALUATION OF VOCATIONAL TRAINING SYSTEM

The present report aims to describe the evaluation of vocational training in the different countries of the partnership and a special focus will be given to the framework analysis of the evaluation in each country through the inference of the partners' State of the Art Reports. To achieve this goal, each partner participates with some contributions and all the partners respond to a questionnaire especially developed to this purpose.

Nevertheless, it is important to present definitions before show the results of the questionnaire and disseminate some qualitative aspects. First, what we mean by return of the investment in training?

Recently, in February of 2003, INOFOR, Instituto para a Inovação na Formação - the Portuguese public organism responsible for the certification of the training system in Portugal – published a glossary of evaluation in training. In this sense, the return of the investment in training is defined as the quantification and relation between the monetary value produced by the training impact with and its costs (in percentage).

At this point of the work, it is important to inform that the analysis settled by the present report is focused on qualitative information; at this project stage, we do not have the details needed to establish a result as the one suggested by the definition. However, through the use of the present questionnaire, we can infer about the trainee's performance, the organizational changes and impact of the vocational training in a largest socio-economic context.

At the same time, it is important to present the different levels of analysis at the Return of Investment in Training (ROI) framework and the most predominant types of evaluation:

- 1<sup>st</sup> Level Reaction (which are the trainees' level of satisfactions with the program?)
- 2<sup>nd</sup> Level Apprenticeship (what are the degree of apprenticeship expressed by the trainees?)
- 3<sup>rd</sup> Level Behaviour (in what sense the new acquisitions were transferred to the labour contexts?)
- 4<sup>th</sup> Level Results (how the new skills promote the organizational changes?)
- 5<sup>th</sup> Level Return of the investment (besides the evaluation of the results is important to assess the return of the investment and the analysis of cost/ benefit)





In what concerns the types of evaluation, the literature stresses the following:

1) The summative evaluation aims to control the training system and to evaluate if the objectives were reached;

2) The training evaluation aims to verify if the pedagogic goals were reached in order to introduce innovation during the learning process.

3) The evaluation introduces to promote the development of the knowledge.

In generic terms, the process of evaluation promotes the improvement of the quality of the training system.

# 4.1. Situation in Finland

Education or Vocational training for young people seeking for the first job

The job seekers courses are promoted for the young people seeking for the first job. The courses' evaluation is established as a multifactor strategy, all the actors of the vocational training system are included: the trainees, the trainers, the provider organization, the tutors and even the company environment.

In relation to the moments of evaluation the vocational training system valorise the measures of:

- a) Diagnostic evaluation, the assessment before the training course aims at producing information's about the trainees profile and to check the target population training needs;
- b) The training evaluation during the course aims to check if the course is developed and implemented in according to the pedagogic and technical objectives and to introduce improvements in the learning process;
- c) The evaluation of the reactions aims to control the trainees degree of satisfaction and theirs results achieved through the training course;
- d) The impact evaluation aims to access the trainees' new skills and the organizational changes after the vocational training program.

In terms of what is assessed, all the items are considered evaluated except: 1) the methodologies and methods; 2) the period between the end of the training and the hiring by a company and the trainees' skills in the company. However, the evaluation of these items is relevant to understand the success of the training courses and their adequacy to the trainees needs; especially the second items provide information about the impact evaluation, one of the most important types of assessment within the *vocational training system for young people seeking for the first job.* 

The methods used for evaluative purposes are diverse and, for that reason, stimulate the assessment from different perspectives, which is a positive measure. It is important to say also that from all the methods used (questionnaires, learning diary, portfolios and problem solving exams) the interviews and the discussion groups promote a open and interactive space for the training system evaluation.

In terms of the existence of a tool that compare the effective cost of the training and the effects after the training, Finland created and developed mechanisms in order to achieve the quantitative and qualitative results from the same structures and by the same tool. The firs step of the proceeding was to define the main indicators and predictors of the training success:

1) Results, how good was the training?

2) Course planning: what we can do better?





3) Effectiveness: how many get work place?

4) Costs: costs/trainee, costs/work place.

The last indicator is used to predict the real costs by trainee in training. As previously, the survey is a relevant step to design an evaluation mapping, but a greater investment should be focused on the factors related to the other elements of the training system (inputs, processing and out puts) under favourable or adverse conditions.

## Education or Vocational Training for unemployed adults

In the context of the self-employment courses, the evaluation is done during the training and after the training. On the first case, the assessment is done several times, at the beginning, at the end and after the in-company period. On the second case, the evaluation takes place on the last day and 6 months after the training course. However, before the training the evaluation is absent just because the adults are afraid of this situation. At this moment, it is important to argue that the justification is somehow not adjusted with the career guidance policies. In cases like this, is expected that the person is more susceptible, nevertheless, the professional in charge for the diagnosis evaluation should apply the behavioural approaches that promote an open space to discuss needs, expectations, motivation and self-esteem. If this aspects are neglected the trainees can become reactive to the training during the course.

In the vocational training system for unemployed adults are evaluated the trainees, the trainers, the provider organization, the tutor, the company environments and other aspects related to each adult as the definition of an action plan for employment (business ideas, personal factors and skills) aimed at promoting their (re)insertion in the labour market.

The factors evaluated and the methods used for this purpose in the *Education or Vocational Training for unemployed adults* are identical to the aspects mentioned above in the *Education or Vocational training for young people seeking for the first job.* A small difference can be pointed out to the prediction of the training results. In fact, the self-employment courses reflect the indicators as the results obtained, the course planning and the effectiveness, but a particular attention is given to the training costs. The costs are estimated in three dimensions: the costs/trainees; the costs/work place and the costs/company. The real costs of the training are given under this framework and the relation between cost/new workplace is also considered.

# Education or Vocational Training for employed people

The in-service training in Finland is promoted usually by the training entity but organized inside the companies. The observation of the trainees' improvements and the acquisition of new knowledge and skills, in addition to the questionnaires, the interviews and the new methods (learning diary, group discussions, dialogue exam, portfolio, and problem based exam) in a combination with the external evaluation.

At the same time, this modality of training is the one where the evaluation is more frequent. The evaluation is done before the training, during the training and after the training (in the last day, 3 months later and a year later). The most relevant aspect in the vocational training for employed people is the follow up measures given by the company. Then, to measure the real cost by the trainees in training is also of the company's responsibility, in fact, the trainees are working already for the company. So,





the companies are very keen on costs and follow the changes after the training with attention (cost saving, quicker work, cost per unit, better quality, etc).

The case study described above can be one example of the advantages of the involvement of the diverse actors (public and private) to achieve the success of the vocational training measures. The training initiatives became more effective if the all the elements of the training system know exactly what is expected, how to obtain the training objectives and how to motivate the target population to the training courses.

Vocational Training for Trainers

In terms of the evaluation of the Vocational Training for Trainers in Finland the situation is almost the same as the situation present previously to the other measures. On the other hand the vocational training system aims at working with trainers for the dissemination of good practices.

In summary, the vocational training system in Finland is based in three dimensions inside the productivity of the education: the effectiveness, the efficiency and the economic factors. It is evaluated the educational accountability. In Finland, the evaluation assumes many forms as: diagnosis, formative, summative, qualitative, quantitative and self-evaluation.

# 4.2. Situation in Austria and Czech Republic

# Situation in Austria

The information provided to the State of the Art of the evaluation on the vocational training in Austria confirms the data of the education and vocational structure: the system is essentially based on the strong connection between the educational and vocational training entities and the companies. The Austria education and vocational training organisms promotes an approximation to the experiences and performances with real workplaces, since the first's steps of the students in the system.

First, it is important to explain that the information received from the partners does not allow the distinction between the 4 educational and vocational training measures in study. For that reason, the results will be presented as a summary of the strategies implemented by this partner for the vocational training of young adults, employed adults, unemployed people and of trainers. Since the institution work in the promotion of active employment measures in Austria, we would like see more detailed information about these measures by target population.

In the context of when the evaluation is done (moments of evaluation) the procedure is designed, since the beginning of the process, with the agreement of the employers and in accordance with the companies' missions. So, the companies get the draft of the concept of the training before the training to specify their training needs with information of the training objectives, contents, duration and requirements. This concept will be evaluated by the participants after the training and how useful are the content of the training for the daily work.

In some cases, especially in the field of computer training for companies, it's checked the knowledge of the participants before the training to develop a very precise curriculum. The participants get a form where they answer questions how to use





different features of software. In courses, lasting more than 2 months, an evaluation during the training is necessary. The evaluation is done by using a paper form or feedback discussion.

The strategy shows a strong commitment to diagnoses of the real training problems and to develop and implement diverse action plans in order to achieve the improvement of the trainees' skills. The companies are aware that qualified employees are the best way to increase the productivity and the competition in the labour market.

The training courses are evaluated at the end of the training in the aspects of the contents of training, the trainers' performance, the trainers' skills, the methodologies, the methods, the facilities (the training room and the available equipment) and the scripts.

In abstract, each course is evaluated at least at the end and the evaluation is done with the participants before the final training unit starts. Not all, but a lot of courses are evaluated some months after the training (using paper form, telephone and e-mail). In spite of the assessment of the elements of the vocational training system (trainees, trainers, the provider organization, the company environment in the case of the inhouse training courses and the vocational advisers) should be considered the follow up measures and the commitment with the impact evaluation. For sure, this measure can be one of the aspects aimed at promoting the improvement of the Austrian vocational training system.

On the other hand, the methods used for evaluation purposes are the traditional questionnaires, inquiries by phone and mail after the training to customers and participants, the interviews of feedback discussion and other. A special attention is given to the periods of the complaint management. It is a very positive measure taking in consideration these aspects because allows the improving the system quality.

The Austrian vocational training aims to achieve the following objectives:

- 1. The trainers get a feedback of each training (those parts of the evaluation form dealing with the knowledge and methods);
- 2. The customers and companies get a summary of the evaluation form of the course they ordered;
- 3. Each course with a quality rate (customer satisfaction) below 90% is analysed and the reasons have to be discussed;
- 4. The evaluation results are a source of the quality management system to improve the performance and quality of processes;
- 5. At the computer training centre a "best trainer award" is carried based on evaluation results.

At an operational level, the Vocational Training System in Austria do not have a tool to compare the effective cost of the training and the effects after the training. On the other hand, the report does not mentioned information about the certification of the training courses. This is a very important issue since the trainees are actually investing to their own qualification and at the productivity and company competitiveness.

#### Situation in Czech Republic

In the Czech Republic educational and vocational training system is evaluated the training itself, the trainers profile and the training providers. It is promoted the





evaluation of the overall training system. The assessment is focused in the trainers' professionalism, presentations and communication skills and pedagogic approach.

The training entities provide the training of the trainers and the environment together with the additional provided services. The evaluation is done internally by an employer, the training department or the Human Resource Manager, and externally, by the trainers' provider.

The training providers are assessed in relation to their facilities and services. The results achieved are followed by an analysis and consequent improvement of the training services. In both cases, the evaluation is done before and after the training.

The evaluation, before the training, is settled to guarantee if the training is appropriate for the trainees' needs, to influence on the increase of productivity, to assert a better orientation to consumers, to scope of the training, to control the time and course duration, the organizational issues and to check the trainers' professional skills.

The evaluation after the training is usually done on the last day of the training in the form of a simple questionnaire. In some cases is requested to fulfil a more complex questionnaire and send within several weeks.

The absence of the assessment period during the training courses is relevant; this type of follow-up is particularly important since the information received can be used to improve the pedagogic, technical and behaviour factors of the training courses.

Another important issue is the evaluation of the employer. The Czech Republic State of the Arts Report describes this aspect as the most difficult parts of the evaluation. It is argued that sometimes it is easy and a short-term problem, but often, difficult when considered as a long-term process and even impossible to determine if the achieved outputs are results of the training or from the trainees motivation.

However, the expressed difficulty at the evaluation of the vocational training results can be related to the assessment methods, in fact, the evaluation of the training impact through a unique tool is an underestimate strategy. As mentioned, there are many other active methods of assessing the trainees' improvements and their self-perceptions as the interviews after training, the groups discussions and the dialogue with career guidance technicians as jobseekers, counsellors from the employment agencies or human resources managers from the companies.

The questionnaires is a cheap and easy method but very unreliable. The use of the previous methods allows the evaluation of the changes in trainees' behaviour and the task achievement. Another special method is the mystery shopping aimed at promoting the overall evaluation, the assessments of the key factors (cleanness, lucidity, price and area marking), lucidity if advertising materials and stuff behaviour (service speed, knowledge and effort). The method is a very reliable and accurate strategy to assess the training impact but somehow expensive and appropriate only got for certain organizations and training courses.

In summary, since the evaluation of the training system is done most of the time before and after the training, it is important to focus the lack of assessment during the training period, which should be considered to promote a better follow-up of the trainee's skills acquisitions and performance. Second, the educational and vocational training is





oriented mostly to follow the trainers profile and the efficiency of the trainers' providers and it does not refer to the trainees' needs and achievements. Third, it should be defined a strategy to fulfil the vocational training evaluation impact.

# 4.3. Situation in Bulgaria and Romania

# Situation in Bulgaria

The evaluation moments of the vocational training courses are most of the times carried out after the training. However, the Bulgarian vocational training system also consider the training during the course development and implementation and at the diagnostic stage (before the each training section) - situation less frequent.

As we said previously in relation to the evaluation of the vocational training actors:

• The trainees are evaluated during the training

Through the available information, the trainees' results are achieved during the training course usually by the trainers. The trainers used tests, practical tasks and other pedagogic methods to assess their students. At the same point, we have the information that other elements of the vocational training system are accessed. For instance, the evaluation of the training institution (the provider organization) is also considered at the highest level of frequency. At the same time, the Bulgarian report mentioned the trainers' evaluation (at a frequent assessment level) and the tutors and company environment (not often evaluated).

The above process of evaluation is basically characteristic for the courses which are organized by the Employment services for the unemployed; those courses are financed by the government so the Employment services open a tender, and the educational institutions apply for organizing the training.

There are two types of evaluation after such a course:

1) The evaluation of the training results in such courses (i.e. acquainted knowledge and skills by the trainees) is done by the classical way of a test and a practical task at the end of the course. The tests and the tasks might be composed by:

> the author/s of the course curriculum from the training organization; in this case is tested not only the level of skills and knowledge of the trainees, but also if the trainer has completed the course according to the requirements of the curriculum;

> the trainer of the course himself – in this way the testing is more flexible and gives the trainer the possibility to give tasks which are more adequate to the particular level of the trainees from the group.

Usually representatives of the promoter – the Employment service – are also present during the practical tasks in order to monitor the trainees' progress. They also may ask some questions concerning the readiness of the trainee to practice the new profession. During this type of evaluation, usually the trainer is not assessed.

2) The evaluation of the training process as this type of courses are based on a tender, the evaluation process of the training is organized and implemented by the promoter, in our case – the local employment service. They design a questionnaire, which is filled by every trainee at the end of the course.





The questionnaire covers not only the process of the learning/practicing, but the overall training process: the compliance of the training with the needs of the trainees, the adequateness of the curriculum towards the expectations of the trainees, the classroom management, the equipment, the performance of the trainer, the sufficiency of the knowledge and skills acquisitions. Sometimes there are also questions for the level of satisfaction of the trainees.

So it is basically not focusing the results of the training, but the performance of the training institution.

The questionnaire anonymous; it is filled by the trainees, and sometimes by the course monitor, who is a person from the Employment service. Then it is summarized and analysed by the employment services (and later, theoretically, used as a criterion for the next tenders).

In the case of the *Education or Vocational Training for unemployed adults* the evaluation of the courses are done by the employment services using questionnaires. On the other hand, in terms of what issues are evaluated, it can be argued that the information is diverse and congruent with the previous data. The trainee's knowledge is the most evaluated issue, followed by the training contents and the facilities of the training institution. Once again, the focus on the target group evaluation goes to trainees and provider organization. It is important to consider the trainees needs and their level of acquaintance but the trainers' skills should not be less considered. It should be more followed the trainees' transitions to the company and the rate of employment mobility after the training.

In Bulgarian Education and Vocational Training system, as referred previously, there is significant number of changes especially for two reasons: first in order to implement the European standards in the education and vocational training sector; second to respond to the recent changes in the socio-economic structure of the Bulgarian society, the labour market deficits and emergent functions and the measures to reach the satisfaction and necessities of the different target-groups populations, in particular the unemployed adults and the groups at risk of unemployment and social exclusion.

The last political and strategic decisions in the education and vocational training system were stressed to solve the problem of the growing unemployment. Nevertheless, the role of the companies and the social partners were relevant to identify and solve the problem, the return of the investment in vocational training was analysed in relation to the aspects of the evaluation of the results of the trainees and evaluation of the courses. It seems like the evaluation process does not give the same importance to the others agents but we will discuss this point below.

In summary, in spite of all the innovative aspects in the vocational training system in order to respond to the European standards and the changes at the Bulgarian social and economic framework, the Bulgarian vocational training system is more oriented to the functional and developmental indicators of the training system and less oriented to the results and the impacts of the training courses at the qualification growing of the Bulgarian population.





#### Situation in Romania

Education or Vocational Training for young people seeking for the first job

The evaluation in the vocational training for young people seeking for the first job in Romania is done before, during and after the training courses. The evaluation has the following objectives:

1) To identify the training necessities, whose key elements resides in exploring the participant's acquaintances, to assess their knowledge level and to design the course structure in congruent form and based on the results of the diagnosis;

2) To verify the results after one, two or three months and the knowledge level of the participants is assessed also and considering their attitude and skills.

On the other hand, the aspects evaluated are essentially the trainees characteristics and development and the ones related to the procedures and training process, respectively, the results of the training measured in terms of the trainees acquaintances and their insertion in the company (period between the end of the training and the hiring by a company) and the methodology, methods and documentation offered to the target population. The methods used are the questionnaires in the paper and online format, interviews and tests.

In Romania, vocational training system for young people has a methodology to measure the return of the investment of the training courses. The real costs of the training process are difficult to estimate in quantitative results, but the follow-up is focused of the qualitative aspects: the trainee's new knowledge acquisitions and competitiveness. It is explicit that the tool to check the effective cost of the training is the trainees insertion on the labour market. The effectiveness of the courses they attend is assessed in relation with the degree of absorption on the labour market.

#### Education or Vocational Training for employed people

The vocational training for employed adults is most of the time included in a context of companies with more than 250 employees by providing courses on the job; on the other hand, small enterprises in Romania are on the last position with 8%. In exchange, the periods spent by the persons that attend training and qualification courses are the longest in the entire East European region. The most active sector, concerning the training of their employees is represented by the financial sector (banks and insurance).

The evaluation in the vocational training for employed people in Romania is realized after the training courses, some months after. The evaluation aims at settling a modality of acquiring knowledge. Since the enterprises are involved, it is important that the manager of an organization should know that the training attended by the employees has reached its goal and the employees have acquired the necessary knowledge to face the new function demands.

The factors evaluated are: the contents of the training; the trainees' knowledge; the trainers' skills in the company; the methodologies and methods; the employment mobility trainees' employment mobility after (inside the company or in another one); and the connections between the training area and the tasks performed.

Once again, the training system only assesses the trainees. These evaluation levels make the use of paper and on-line questionnaires and the interviews are not referred.





There is no reference to the trainer's or the training entity evaluation. On the other hand, should be considered a tutor that aims to follow the route of the training course since the beginning until the training period in the company. The perfect condition is the possibility of tutor inside the company.

In terms of the return of the investment in training there is a strong connection between the trainees training needs and the companies' characteristics and new demands; in particular, the training costs must be in accordance with the benefits to the company by better trained employees.

The new acquired knowledge will have a major impact upon the organizational culture and the work process. At the organizational level, the increase of the training level will simplify the work manner with the employees, will allow their involvement with responsibility positions and will stimulate the work by means of new technologies. By consequence, the organizational culture of the company will acquire new valences. The resistance opposed to changes by the employees will be smaller and the initiative and innovation can be shaped. Reorganizing the organization will be made in relation to the new competences that the employees have acquired.

In general, in Romania the training provided by organizations to their own employees on the job is not approved by a certificate. Each organization trains its own employees depending on their current necessities. Most of the courses focus on learning how to use a new software which operators will have to use in their work (Ex : banks, SMEs, etc.). The improved training of the employees does not necessarily lead to their /hierarchical promotion, but mainly serves the current needs of the respective organization.

In summary, the levels of the evaluation of the vocational training for employed adults are guarantee of the accuracy of the apprenticeship and the results of the training and the return of the investment of the training, but a lack of focus is emergent at the certification level.

# Vocational Training for Trainers

The trainers are the only actors assessed by the Romania vocational training system and after the training (as long as the job is carried out). The trainers' evaluation aims at establishing a modality of acquiring knowledge. These evaluations can be the basis of the establishing what knowledge is defective and what other knowledge would be necessary to improve the vocational training system. It is underlying that the effectiveness of the training developed can be assessed in relation with the extent of the knowledge acquired by the trainees.

In the vocational training system, since the trainers are the only elements assessed, the level of partiality is considered high. The evaluation should be expressed in a multifactor perspective in which each elements of the system should be evaluated, so, the trainees and training entity should be also assessed.





## 4.4. Situation in Greece and Portugal

#### Situation in Greece

The evaluation training system in Greece is most of the time done in three moments: before, during and after the training. The assessment before the training is aimed at diagnosing the trainees' needs and expectations of the training; the questionnaire is the most frequent tool used in the evaluation. The follow-up during the training period is done at the half of the training program through interviews; the main objective is to address how the course is going and what aspects should change. The evaluation after the course aims at analysing how many times and when the training was done; it is done through questionnaires and occurs on the last day of the training course and some months later, normally, after 3 months.

The evaluation is rarely done during the training by an external trainer or another professional and is usually (if not always) implemented at the end of the training course (usually the last day of the training with a distribution of a questionnaire to the trainee and the trainer or a few weeks after).

The aspects mostly evaluated during the assessments periods are:

1) The pedagogic factors related to the training courses as the contents and training methods;

2) The aspects related to the trainees new acquisitions during their practice in a receiving company as the skills and the trainers' performance;

3) The logistics aspects of the training as the course facilities (training room, available equipment, etc) and documentation;

4) The impact evaluation as the employment mobility after the training (inside the company), the period between the end of the training and the hiring in a company and finally the connection between the training area and the tasks performed in the context of the labour market. This information is essential to characterize the impact of the training system, the effective cost of the training and the outcomes of the course after the training.

The actors usually subject to evaluation are: a) the trainees; b) the provider organization and c) the company environment where the trainee training is done during almost a yearly practice.

The evaluation is addressed to the trainees and later to the employers in order to measure and evaluate the qualifications they have obtained during the course. The evaluation results are collected by the Training Institute and are sent to the National Council for Vocational Training and Employment to study them and make the necessary amendments to the contents of the training course according to the opinions of the trainees.

To measure the real costs by trainee in training, each category of trainee (*young people seeking for the first job; unemployed adult people; employed people; trainers*), the real cost by trainee is estimated according to the qualifications of him/her. However, this definition is somehow vague.

1) The vocational training for young people seeking for the first job: the cost by trainee is measured according to his studies and he is funded in a percentage of 20%





overheads based on the basic salary of an employee in the same position. There is also funding for the trainee's Social Security and the cost of the trainer per group of trainees;

2) The vocational training measure for unemployed adults: the costs are assumed at the same proportion, plus some bonus for the adult trainee regarding the size of his family, possible disabilities, etc;

3) The vocational training measure for employed people: the cost for the training of employed people is only the cost of the trainer per trainees;

4) The training of the trainers: the cost of the trainer is measured in the same way with the cost of the first category trainees.

On the other hand, some institutions of Greek Vocational Training System estimate the real costs by trainee in training by the following rule: the wage per hour plus the providers' costs plus the trainers' costs plus the documentation' costs plus the coffee and the depreciation of equipment plus the material.

In terms of the existence of a tool aimed at measuring the training real costs and to compare the effective cost of the strategies and the outcomes of the course after the training, the framework is based on the initial aims each course has set and the post course period for the trainee. For that purpose, is evaluated the trainees need and the degree of satisfaction after the training course and also the capability of integrating the trainee knowledge obtained in the self-introduction. Other indicator for unemployed adult is the percentage of people who found a job appropriate to the thematic of the training course. To the employed people the success can be measured in percentage of productivity improvements.

# Situation in Portugal

Education or Vocational Training for young people seeking for the first job

• The trainees are evaluated at three different moments which emphasized the evaluation after the training:

1) At the end of each training section and at the end of the year;

2) At the end of the theoretic training;

3) At the end of the practical training in the training institution and at the end of the period of practical training in the company.

In the first case, the evaluation is realized by the trainer. The trainers evaluate the skills acquired by the trainees during the training courses and the assiduity, punctuality, motivation and participation level. The methods and tools used for assessment are essentially tests and the continuous work done by the trainees.

In the second case, the evaluation is assured by a jury and the students are submitted to 2 final exams: a final exam qualification and a professional skill test. The jury is a structure composed by the following elements: one person from the IEFP - Instituto de Emprego e Formação Profissional (Portuguese public Institute for the Employment and the Vocational Training); one instructor, that belongs to the instructor team and the tutor responsible for the trainees follow-up during the period of training in the company.





In the third case, a tutor is responsible for the trainee's follow-up. In fact, the issues evaluated are the technical and behavioural trainee's experiences, namely: the integration in the company; knowledge acquisition and application; interest in the training experience; autonomy and the adaptation to new situations; the relationship with customers, supervisors and peers. At this moment, the trainees are submitted to a practical evaluation survey.

After the evaluation process the student's achieve a training certificate for their apprenticeship (level II) and, for that reason, is assured their compulsory education.

• The training courses are evaluated after the training in a short and long term period:

- 1) At the end of each training module;
- 2) At the end of the course;
- 3) At the moment of the administrative and financial evaluation<sup>8</sup>;
- 4) 11 months after the end of the course.

In the first case, the assessment is realized by the trainees. The trainees evaluate their course expectations; the objectives, course contents, methods and techniques used; and, finally, the trainer's skills as the technical knowledge, relationship between trainees and instructors, motivation, pedagogical and communication skills. In order the to obtain these information the trainees filled up a questionnaire. The information received by all the trainees allows the introduction of some changes and improvements in the training system.

In the second and the third case, the evaluation is assured by the course coordinator (thought the contact with the trainees) and both situations are stressed at the promotion of the quality of the training courses and to fostering the students' insertion and integration on the labour market. These two evaluation periods have the objective of assembling data, however, for different purposes.

The evaluation done at the end of the course aims at reporting up-date information to the Instituto de Emprego e Formação Profissional (Portuguese public institute responsible for the reception and treatment of the statistical data of the vocational training courses promoted under the qualification and employment measures). At the moment of the administrative and financial evaluation, the assessment is done in order to collect information (the administrative and financial report) to the sponsor program or initiative.

In the fourth case, the entity provider is responsible for the trainee's follow-up. The planning department of the training entity fills up a questionnaire with data related to the insertion of the trainees in the labour market; their 1<sup>st</sup> job after the training; the present professional situation and the relationship between the employment and the training.

• The training entity are evaluated at the end of the course

In this situation, the assessment is realized by the training entity. At the end of each year, the quality area of the training entity fills in a questionnaire which evaluates the

<sup>&</sup>lt;sup>8</sup> This information is elaborated in the cases of the co-financed training, when the reports are presented to the Institute for Employment and Professional Training.





global image of the institution, the quality of the services and products, the efficacy and the satisfaction level.

Education or Vocational Training for unemployed adults and Education or Vocational Training for employed people

In spite of the differences between the two training modalities, mainly, in terms of need of the target population, nevertheless, we will assume the two modalities in the same category of analyse since the differences in terms of evaluation is small.

- The trainees are evaluated in two different moments:
- 1) At the end of each training modules;
- 2) At the end of the course.

In the first case, the evaluation is realized by the trainers. The trainers evaluate the acquisition and knowledge domain and are also in charge to fulfil a knowledge test and evaluate all the work done along the training course. On the other hand, the participation level is also evaluated, the responsibility and the relationship with all the actors of the training system.

In the second case, the evaluation is assured by a jury. This person is in charge to measure the knowledge level. In this context, the trainees conceive and develop a final project which is evaluated by jury. The jury is the instructor responsible for the project module and normally someone that belongs to training provider.

• The training courses are evaluated after the training in a short and long term period:

- 1) At the end of each training module;
- 2) At the end of the course;
- 3) At the moment of the administrative and financial evaluation;
- 4) 11 months after the end of the course.

Both in the *Education or Vocational Training for unemployed adults and Education or Vocational Training for employed people*, the assessment is realized by the trainees and the instructors of the training course<sup>9</sup>. In fact, the main difference is the inclusion of another actor in the evaluation scenario – the instructors also evaluate the objectives, contents, methods and the course organization.

On the other hand, in what concerns the other evaluation moments, the situation is the same as the one describe by the *Education or Vocational Training for young people* seeking for the first job.

• The training entity are evaluated at the end of the course

At the end of each year, all the courses are evaluated by quality area of the training entity provider. It is a case of evaluation of the summative evaluation aimed to control the training system and to evaluate if the objectives were reached.

<sup>&</sup>lt;sup>9</sup> In the *Education or Vocational Training for young people seeking for the first job* are involved the trainees, the courses coordinator and the training entity. The instructor is not involved in the evaluation process.





#### Vocational Training for Trainers

The trainees are evaluated differently if we consider an initial or continuous vocational training for trainers.

In the first case, we can point out three intervention moments: 1) in the first module during the trainers' evaluation to proceed to a diagnosis of the competences; 2) at the end of the module, to evaluate the technical knowledge acquisition, the self-confidence, the team spirit, punctuality, responsibility and other factors; 3) at the end of the training course, to evaluate all the developed skills. In all the moments, the trainees and the instructors use the marks for behaviour observation. When the trainees finished the training courses with success they receive a training certification.

In the continuous vocational training to training for trainers, there are two evaluation moments: at the end of each module and at the final end of the training course. The difference with the previous training courses is that since they are contiguous training there is no need to do the first evaluation (diagnosis of the competences).

The training course is evaluated

In the training for trainers' context, the training course is evaluated: a) at the end of each module, both by the trainers and by the trainers; b) eleven months after the training course, the assessment is done by the trainers provider entity but only when the training course have more than 100 hours.

At the end of each module, trainees evaluated the training action considering the following indicators: expectation, objectives, training content, methods and means, the technical and behavioural trainers' experiences, namely, their relationships with the trainees; motivational, pedagogic and communication skills and organization. On the other hand, the trainers evaluated the objectives, contents, methods and instruments and the course organization.

The training entity is also evaluated

The training entity is responsible to evaluate all the quality of the course and if the goals were achieved by the actors and professionals of the vocational training system. So, at the end of each year, the quality area of the training entity provider proceeds to a summative evaluation.

# 5. CONCLUSIONS

The present chapter has the intention to summarize the indicators related to the evaluation aspects. First, it will be presented a comparative analysis and a summary by country (5.1.). Second, it will be disseminated European Union main objectives, policies and decentralised strategies at the educational and vocational training level (5.2.).





### 5.1. Final Overview

The previous description by country is somehow detailed and focused on the specificities of each European region. However, in order to reach a general framework, the same conceptual indicators should be compared to the different European countries. In this sense, we will summarise the most relevant factors from the analysis.

#### WHO is evaluated? -----

Target population	NEP	CE	CEP		EP	SEP	
Target population	FIN	AT	CR	BG	RO	EL	PT
Trainees	Х	Х	Х	Х	Х	Х	Х
Trainers	Х	Х	Х	Х	X (5)	Х	Х
Provider organisation	Х	Х	Х	Х		Х	Х
Tutor's	Х			Х		Х	X (3)
Company's training environment	X (1)	X (2)		Х		Х	X (4)
Vocational advisor		Х					

#### Table 1: Target population by country

Legend:

NEP - Northern European Partner: FIN - Finland

**CEP** – Central European Partners: AT – Austria; CR – Czech Republic

EEP – East European Partners: BG – Bulgaria; RO – Romania

SEP – Southern European Partners: EL – Greece; PT – Portugal

(1) Only for in-service training; it is also define an Action Plan for Unemployment.

(2) Only if the training is done in-house.

(3) and (4) Is done in a no formal way; the coordinator of each training course visit the companies and check their conditions and do a follow-up of the training in company which allows to have an idea about the work of the tutor and the company environment.

(5) Only in the vocational training for trainers.

The results mentioned that the trainers and the trainees are evaluated in all the vocational training systems; the partners evaluated also the organization provider, except in Romania.

Finland, Bulgaria, Greece and Portugal proceed to the trainees' follow-up in the company during an eventual practice period; the Austrian system is committed to assess the labour market insertion involving a vocational advisor in the process. Both systems are efficient when:

- 1) The tutor proceed to the evaluation diagnosis and to the apprenticeship level of evaluation (degree of apprenticeship expressed by the trainees) and the company's training environment give information about the behaviour and results evaluation;
- 2) The vocational advisor is in charge of the trainee (re)insertion on the labour market. The vocational qualification mentor should be someone appointed to guide a candidate through a program of development.





#### WHEN the evaluation is done? -----

#### Table 2: Timing of evolution by country

NEP	CEP		EEP		SEP	
FIN	АТ	CR	BG	RO	EL	РТ
Х	Х	Х	X (1)	Х	Х	X (2)
	Х				Х	
Х	X (3)		Х	Х		X(6)
Х	Х	Х	Х	Х	Х	Х
						Х
X (4)	X (3)				X (1)	X (5)
	FIN X  X X 	FIN     AT       X     X        X       X     X(3)       X     X	FIN     AT     CR       X     X     X        X        X     X(3)        X     X     X            X     X(3)        X     X     X	FIN     AT     CR     BG       X     X     X     X(1)        X         X     X(3)      X       X     X     X     X       X     X     X     X	FIN     AT     CR     BG     RO       X     X     X     X(1)     X        X          X     X(3)      X     X       X     X     X     X     X       X     X     X     X     X       X     X     X     X     X	FIN     AT     CR     BG     RO     EL       X     X     X     X(1)     X     X        X       X     X       X     X (3)      X     X        X     X (3)      X     X        X     X     X     X     X     X           X     X

Legend:

Not very often.
Only in Training for trainers.

(3) Not in all courses.

(4) The evaluation of the "job seekers courses" and the "self-employment courses" is done 6 months after the end of the training.

(5) In the evaluation of the courses to "young people seeking for first job", "unemployed people",

"employed adult courses if more then 100 hours" and "training for trainers if the training has more then 100 hours" is done 11 months after the end of the training.

(6) Only in initial vocational training, it means medium and long term courses

In terms of evaluation moments, all the partners mentioned the assessment before and after the training actions, however the evaluation during the training is not an universal procedure: 1) Czech Republic do not have any evaluation strategy during the training course; 2) Austria and Greek vocational training system only design one moment of assessment during the training initiative.

The formative evaluation is fundamental since is designed to improve a program while the program is being developed. This type of evaluation aims at providing data about the quality assurance and the degree of adaptation of the trainees and trainers to the program in order to achieve the training goals and should be guaranteed to any vocational training modality.

To measuring the impact evaluation is also important to establish the indicators that describe the situation before and after the training. So, the knowledge and skills before the training are compared to the expected knowledge and skills after the training. According to the data, this type of evaluation occurs in Finland and Portugal, respectively, 6 months and 11 months after the end of the training.

This measure should be applied in the training courses, independently, of the contents and target population. Nevertheless, to reach this goal and implement those follow-up measures it will be necessary to redefine the training technicians teams in terms of responsibilities and tasks; we are confidant that the evaluation of the vocational training impact promotes the assessment of the performance changes at an individuals and organizational level and, eventually, at a socio-economic level.

More, this type of assessment occurs after the training program, but can also be done during the training and at the end of each training module (training in alternance) in order to: allow the assessment of the real changes of the context of reference; justify a





continuous development and implementation of the training program, or they reformulation, or even, they extinction; evaluate the return on investment in training.

	NEP	CEP		EE	EP	SEP	
Agents of evaluation	FIN	АТ	CR	BG	RO	EL	РТ
Trainer	Х	Х	Х	Х	Х		Х
Jury			Х		Х		Х
Tutor	Х	Х	Х				Х
Trainee	Х	Х		Х		Х	Х
Coordinator	Х	Х					Х
Provider organisation						Х	Х
Company	Х	Х					

#### WHO does the evaluation? -----Table 2: Agents of evaluation by country

The agent responsible for the evaluation inside the training system varied considerably from country to country, as presented in the table 3. All the partners mentioned that the trainers are committed to evaluate the training actions, except in the Greek vocational training system.

Finland and Austria are the partners most oriented to evaluate the connection between the training and the trainee's insertion in a company. In both countries the vocational training system are target to the insertion on the labour market; those counties go further in this respect since they assessed the employment mobility after training. There are other countries, like Bulgaria, less concerned with the follow-up of the trainees after the training (table 4), because, probably the system in not focusing the results of the training but the performance of the training institutions.

It is important to argue that not all the training measures aims at establishing the (re)integration on the labour market as a first reach goal, however, in a long term perspective this information is essential to redefine the intervention strategies, to plan alternative vocational training measures and to promote changes in those systems in accordance to the needs of future generations.

The evaluation made by the trainees is another aspect that should be established as a universal requirement, independently of the vocational training system. In fact, the trainees' needs and improvements should be a main concern in the training context: the training courses should be plan to the acquisition of new knowledge, especially, those skills that promote major impact upon the organizational culture and work progress.

Other relevant indicator is that some countries, Greece and Portugal, involved the provider training organisation in the evaluation process; others, like Finland and Austria, promote the involvement of the company that received the trainees during the training period. It is fundamental to reach the provider training organisation perception about the success of the training program, but is essential the company perception in order to obtain an independent version of the impact evaluation.





		CE	ΞP	EEP		SEP	
Elements of evaluation	FIN	АТ	CR	BG	RO	EL	РТ
Contents of Training	Х	Х	Х	Х	Х	Х	Х
Trainer Performance	Х	Х	Х	Х		Х	Х
Trainer skills	Х	Х	Х	Х			Х
Trainees acquaintances	Х	Х		Х	Х	Х	Х
Trainees attitudes					Х		Х
Trainees attitudes in company							Х
Trainees skills in company		Х		Х	Х	Х	Х
Methodologies		Х	Х	Х	Х	Х	
Methods	Х	Х	Х	Х	Х	Х	Х
Facilities	Х	Х	Х	Х		Х	Х
Documentation	Y/N	Х		Х	Х	Х	Х
Achievement of the aims of the training		Х	Х		Х		Х
Period between end of Training and hiring	Х	Х		X (1)	Х	Х	Х
Connection between training and tasks in company		Х		X (1)	Х	Х	Х
Employment mobility after training	Х	Х		X (1)	Х		X (2)
Quality/Helpfulness of consulting		Х					
Employability rate			Х		Х	Х	Х
Provider organisation performance							X

### WHAT is evaluated? -----Table 4: Elements of evaluation by country

Legend: (1) Not very often; (2) In the evaluation of the courses to "young people seeking for first job", "unemployed people", "employed adult courses if more then 100 hours" and "training for trainers if the training has more then 100 hours" is done 11 months after the end of the training, the trainee is asked about his/her employment situation.

In relation to the evaluated factors, the "Contents of training" and the "Methods" are assessed by all the partners. The results also show that the "Methodologies", "Facilities" and "Documentation" are more or less evaluated by the partners. The trainers' performance and skill are assessed in all the countries to the exception of Romania. On the other hand, the trainees' evaluation is somehow neglected in some countries. Once again, these data reflected, at a first point, the necessity of improvement in terms of training actions adequacy to the need and specificities of the target population.

The evaluation of the performance improvement, as a systematic process, aims at analysing human performance improvement gaps, planning future improvements, designing and developing cost-effective and ethically-justifiable interventions to close performance gaps, implementing the interventions, and evaluating the financial and non-financial results. In fact, the strategy should assume a button-to-top perspective: the training should be essentially a process that aims at improving knowledge, skills, attitudes and behaviours in a person to accomplish a specific job task or goals.

In terms of calculate the financial and non-financial results, is essential to attribute monetary values for program benefits and define which is the evaluate level of evaluation (see chapter 4). ROI calculation is based on converting both hard (output increases, guality improvement, costs savings and time savings) and soft data (work habits, climate, new skills, development, satisfaction and initiative) to monetary values.





Under this framework, we can consider hard data the following variables:

a) Output increases category:

- "Connection between training and tasks in company";
- "Employment mobility after training";
- "Employability rate".

b) Quality improvements category:

• "Quality/Helpfulness of consulting".

Some other factors can be categorized as soft data:

<u>a) Climate:</u>

- "Achievement of the aims of the training";
- "Trainees attitudes";
- "Trainees attitudes in company".

b) New skills:

•

- "Trainees acquaintances";
- "Trainees skills in company".

c) Development:

• "Provider organisation performance".

A solid strategy of intervention aims at promoting the production of the appropriate indicators. The intangible training benefits are harder to transform into monetary values, however, since we are focus our analysis of the return on investment in training to the employed persons, is important to proceed to a more detailed description of the indicators. So, it is suggested the introduction of other organisational indicators as:

- Increased job satisfaction;
- Increased organizational commitment;
- Improved teamwork;
- Improved customer service;
- Reduced complaints.

#### HOW the evaluation is done? -----

Table 5: Evaluation instruments by country									
	NEP	CEP		EEP		S	EP		
Evaluation instruments	FIN	AT	CR	BG	RO	EL	РТ		
Questionnaire	Х	Х	Х	Х	Х	Х	Х		
Inquiry by phone		Х				Х			
Interviews	Х	Х			Х	Х	Х		
Tests	Х	Х		Х	Х	Х	Х		
Feedback discussion	Х	Х		Х			Х		
Business Plan Evaluation	Х								
Mystery Client			Х				X(2)		
Tools to compare training costs	Х				Х	Х			
Others	X (1)								

Legend:

- (1) New methods: Learning diary, group discussion, dialogue exam, portfolio and problem based exam.
- (2) Only in Taylor-made courses ordered by companies





The evaluation instruments are used to determine the trainees' achievements. The selection of the instruments is one of the steps of the results-based model. It is important to design the instruments before the program is developed<sup>10</sup>: the instruments to be designed not to alter course development and content. On the other hand, the methods should be selected based on factors as: budget; available resources; program objectives; time frame; ability of trainees, program developers and trainers and training location.

Under the present research, the most referred methods are the questionnaires, followed by the tests. Finland, Austria, Greece and Portugal used a "kit of methods" in the evaluation context, which is a positive strategy; however, the "Business Plan Evaluation" is only done in Finland. This data is correlated with the information discussed previously: the evaluation on investment in training is design under constructive perspective, which allows the responsibility of the trainees and promotes the feedback discussion.

Other data is the existence of "Tools to compare training costs", nevertheless, focused on different aspects: 1) Finland adopts a combination of the quantitative and qualitative strategy to measure the results, course planning, effectiveness and costs and predict the training success; 2) Romania referred the used of qualitative methods of evaluation to estimate skills improvement and degree of insertion on the labour market; 3) Greece estimate a cost calculation per target population based on the difference between the skills before and after the training course.

The tendency to the adoption of quantitative versus qualitative methodologies is an interesting issue because the decision is related to the question: what for is the evaluation? In abstract, the choice of the instruments is somehow related to that is expected to be measured. The quantitative evaluation aims at achieving a characterization of the training context through quantitative methods. For a summative evaluation purpose the quantitative approach aims at identifying the concrete indicators of evaluation measures and processes and dissociating variables of impact evaluation. The qualitative method allows a detailed characterization of the training context, frequently accessed by the following methods: direct observation, documentation analyses, interviews, and teamwork and focus groups. However, the two approaches should be perceived under a complementary perspective.

	NEP	CEP		EEP		SEP	
Evaluation agents	FIN	АТ	CR	BG	RO	EL	РТ
To certify trainees	Х						Х
Feedback to trainers	Х	Х	Х		Х		Х
Information to customers/companies		Х	Х				
To improve training	Х	Х	Х	Х	Х	Х	Х
To contribute to QM system		Х			Х		
To give awards	Х	Х					
To correct contents of training	Х	X (1)					
To give statistic information						X(2)	X(2)

#### WHAT FOR is the Evaluation? -----Table 6: Evaluation agents by country

**Legend**: QM – Quality Management; (1) In Computer Training; (2) Namely, to the National Statistic Departments

<sup>&</sup>lt;sup>10</sup> Additional information might be uncovered that will alter course development and content.





In order to design and implement a method of measure the return on investment in training is important to define: What is level of ROI in measure? Which are the favourable and unfavourable factors? How these factors work together in a training context? So, the evaluation model should:

1) Define the problem objectively;

2) Promote a frame of alternatives based in a constructivist presupposes;

3) Conceive a systemic framework, which considerer the inputs, processes, outputs and outcomes;

4) Promote frequent up-dated to the new contingencies.

The data show that all the partners are concerned to improve training initiatives; and to promote the trainers feedback. These are essential concerns, however, should not be neglected the strategies aimed at fostering trainees improvements: according to this proposition, it should be obtained the trainees' certification after the training, even for non-formal apprenticeship systems. In fact, this measure should be implementing in order to improve the quality of the training system and, by consequence, to foster the adequacy between the skills acquisition, the trainees' insertion in the labour market and the promotion of organisation innovation inside the companies.

-----

----- 1. Finland established as a multifactor strategy in the context of vocational training evaluation. All the actors of the vocational training system are included: the trainees, the trainers, the provider organization, the tutors and even the company environment. Other important measure is the definition of the main indicators and predictors of the training success: results, course planning, effectiveness and costs.

----- 2. Austria reach the vocational training goals by the establishment of a system essentially based on the strong connection between the educational and vocational training entities and the companies. The companies are aware that qualified employees are the best way to increase the productivity and the competition in the labour market. However, should be considered the follow-up measures and the commitment with the impact evaluation and the certification of the training courses and new skills.

----- 3. The Czech Republic promotes the evaluation of the overall training system: the training initiatives, the trainers profile and the training providers. Nevertheless, is relevant the absence of the assessment period during the training courses since this type of follow-up is particularly important to promote information about the apprenticeship level. On the other hand, the return of the investment in vocational training was analysed in relation to the aspects of the evaluation of the results (trainees new skills) and should be defined a strategy to fulfil the vocational training evaluation impact.

------ 4. In Bulgaria, in spite of all the innovative aspects in the vocational training system in order to respond to the European standards and the changes at the Bulgarian social and economic framework, the vocational training system is more oriented to the functional and developmental indicators of the training system and less oriented to the results and the impacts of the training courses at the qualification growing of the Bulgarian population.





----- 5. In Romania vocational training system the real costs of the training process are difficult to estimate in quantitative results, but the follow-up is focused of the qualitative aspects: the trainee's new knowledge acquisitions and competitiveness. It is explicit that the tool to check the effective cost of the training is the trainees' insertion on the labour market. The effectiveness of the courses they attend is assessed in relation with the degree of absorption on the labour market.

----- 6. In Greece, the return on investment in training is estimated by the degree of satisfaction after the training course and also the capability of integrating the trainees' knowledge. These indicators are related to the reaction and behaviour level of evaluation. Once again, it is measuring the training real costs and to compare the effective cost of the strategies and the outcomes of the course after the training: the framework is based on the initial aims each course has set and the post course period for the trainee.

----- 7. Finally, Portugal also establishes as a multidimensional strategy for vocational training evaluation: the trainees, the trainers, the provider organization, the tutors and company environment. Portuguese vocational training system should develop an instrument to evaluate the return on investment in training in order to reach a strong connection between the vocational training offer and the trainees and companies expectations. The big challenge is to fit the needs of a skills transfer to the enterprises environment and to promote the evaluation as a strategic tool to help the decision making process under a quality framework.

# 5.2. New challenges

In Europe, the research and the practical studies related to the evaluation of the training system are more or less integrated in generic view of the training system and the organizational factors of the companies, vocational training centres or universities and researcher applied centres.

This means that a focused and oriented study is needed in order to promote improvements at the vocational training system, namely in the evaluation domain and to show to the employers and human resource directors the advantages of the training and increased qualification of their employees. In particular, aimed at growing their capacities and skills when is involved the conception of a new methodology that shows the results and new measures of intervention.

The role of the education and training to achieve the Lisbon Strategy goal a) and the enlargement of the European Union

Education and training are crucial to achieve the strategic goal set for Member States at the Lisbon European Council to make European Union the most competitive and dynamic knowledge-based economy and society in the world. The new focus at the European level on education and training policies issues gives a new context for relevant questions as the investment efficiency – a new paradigm of investment.





### RETURN ON INVESTMENT IN TRAINING The State of the Art Report

In order to achieve the previous goals, the European Union strategy demands the universal acquisitions of new basic skills and attitudes, equal access to education and lifelong learning opportunities. Other aspect to consider is the relationship between the training policies and the labour market needs; a strong commitment promotes a high social return of the investment generated by the educational and vocational training measures and a decrease of the costs with the unemployment benefits and others. In fact, it is a long term investment.

The globalization and the worldwide competition also affects the design, development and implementation of the education and vocational training measures and, as a consequence, the return of the investment in training. First, most of the research projects are funded by the European Union. Second, with the enlargement of the European Union it should be redefined a strategy of founding since there are strong discrepancies between the European members in their economic and educational performance. However, and in spite of the regional differences, the challenge is the involvement of all the European members to achieve this ambitious purpose.

b) The challenges of achieving a substantial increase in total investment and the strategies to spend the resources more efficiently

As mentioned by the communication from the commission "Investing effectively in education and training: an imperative for Europe", the investment is not yield the same returns at all levels of education and training systems. The same report says that the rate of return to both individual (private return) and society (social return) varies according to country and gender and that the comparation of estimated rates of return of various stage of education system indicates that upper secondary education is becoming the basic level of educational for knowledge society.

On the other hand, European education and training systems invests significantly less in total higher education than the United States of America. And again in Europe, there is a clear need for more private investment in continuing vocational training and adult education. Only 40% of the European employees participate in continuing vocational training courses (23% in SMEs) and only 62% of all the employers provide any type of training to their staff (56% in SMEs).

The same likely impact of enlargement on EU investment performance: enrolment rates tend to be high (often higher than in the European Union) up to upper secondary level, but they decline very sharply at higher educational level. Participation in higher education (in particular in areas relevant to the knowledge economy) in continuing vocational educational and training (in terms of beneficiaries, volume of courses and proportion of training companies) and active labour market measures lies in most cases below the European Union average even though they may be higher in some new members than in some current member states.

In abstract, there is the increased need coming from a combination of targeted public investments and higher private contributions and the need to spend the existing resources more efficiently. The European Commission stressed the following measures:





- To implement a decentralization of the educational and training system and a flexible and permeable strategy within and between the various elements of the two systems;
- 2. To develop a partnership approach, in particular, governments and social partners should explore the possibility of developing various types of public-private partnership in order to mobilize additional human and financial resources;
- 3. To invest in curricular renovation, quality assurance and recognition in the context of the European knowledge area.
- c) Education and training in Europe: diverse systems and shared goal for 2010

Knowing critical factors that make a reform successful elsewhere is essential for transfer of good practices. In fact, the most important aspect of the work in this area consists in identifying the critical factors of success of good practice in certain countries, regions and institutions and developing knowledge networks aimed at disseminating the project results.

To achieve this goal, the European Commission, in particular the Directorate-General of Education and Culture, stressed a plan focused in the three strategic objectives:

- To improve the quality and effectiveness of education and training system in the EU, in the light of the new requirements of the knowledge society and the changing patterns of teaching and learning;
- To promote the access of all to education and training system, in the light of the guiding principle of lifelong learning, fostering employability and career development as well as active citizenship, equal opportunities and social cohesion;
- To open up education and training system to the wider world, in light of the fundamental need to foster relevance to work and society and to meet the challenges from globalization.

These objectives are ambitious but realistic. They mark the new paradigm and a new phase of development of the education and training policies in the European context, based on diverse systems and experiences sharing the same goal and work for the same result: *that the European Union becomes the most competitive and dynamic knowledge-based economy in the world, capable of sustained economic growth more and better jobs and greater social cohesion.* 





# 6. BIBLIOGRAPHY

CARDOSO, Z. (2003) - Avaliação da formação : glossário anotado. Lisboa: Inofor.

EUROPEAN COMISSION - <u>Detailed work programme on the follow-up of the objectives</u> of education and training systems in Europe. Key documents [on line], 2003. Available at WWW.:<UPL:http://ouropa.ou.int/comm/oducation/keydoc/2002/progebi.op.pdf>

WWW:<URL:http://europa.eu.int/comm/education/keydoc/2002/progobj\_en.pdf>

EUROPEAN COMMISSION - European Cooperation in Education and Training [on line],2003.AvailableattheWWW:<URL:</td>http://europa.eu.int/comm/education/introduction\_en.html>

EUROPEAN COMISSION - <u>Education and training in Europe : diverse systems, shared</u> <u>goals for 2010.</u> Publications [on line], 2003. Available at the WWW:<URL:http://europa.eu.int/comm/dgs/education\_culture/publ/pdf/eductraining/en.pdf>

EUROPEAN COMMISSION - <u>Investing efficiently in education and training : an</u> <u>imperative for Europe</u>. Key documents: Communication from the Commission [on line], 2003. Available at the WWW:<URL:http://europa.eu.int/eurlex/en/com/cnc/2002/com2002\_0779en01.pdf>

EUROPEAN TRAINING FOUNDATION - Sharing Expertise in Training [on line], 2003. Available at the WWW:<URL:http://www.etf.eu.int/>

MIČINCOVÁ, M. (2002) - <u>Formação profissional nos países da Europa Central e de</u> <u>Leste</u>. Lisboa: Inofor.

THE EUROPEAN UNION ON-LINE – Vocational Training [on line], 2003. Available at the WWW:<URL:http://europa.eu.int/scadplus/leg/pt/cha/c00003c.htm>

# Austria

BM : BWK - Bundesministerium Für Bildung, Wissenschaft und Kultur [on line], 2003. Available at the WWW:<URL: http://www.bmbwk.gv.at/start.asp>

INTERNATIONAL LABOUR OFFICE - <u>Vocational education and training in Austria</u> [on line], 2003. Available at the WWW:<URL:http://www-ilo-mirror.cornell.edu/public/english/employment/skills/recomm/publ/009.htm#Influence>

OECD – Organization for Economic Co-Operation and Development. <u>Information</u> <u>guidance counselling</u>. Review of the career guidance policies: country note Austria [on line], 2003. Available at the WWW:<URL:http://www.oecd.org/pdf/M00040000/M00040319.pdf>

# Bulgaria

COUNCIL OF EUROPE - European Centre for Modern Languages. <u>Member states:</u> <u>Bulgaria</u> [on line], 2003. Available at the WWW:<URL:http://www.ecml.at/documents/members/BulgariaNR.pdf>





EUROPEAN COMISSION – Education, Training, Young. <u>Bulgaria : adoption of the</u> <u>community acquis</u> [on line], 2003. Available at the WWW:<URL:http: http://europa.eu.int/scadplus/leg/en/lvb/e19101.htm>

UNESCO – United Nations Educational, Scientific and Cultural Organization. <u>Country</u> <u>reports : Bulgaria</u> [on line], 2003. Available at the WWW:<URL: http://www2.unesco.org/wef/countryreports/bulgaria/rapport\_3.html>

# Czech Republic

MINISTRY OF LABOUR AND SOCIAL AFFAIRS - Progress Report. <u>Joint assessment paper</u> progress report of the Czech Republic, May 2002 [on line], 2003. Available at the WWW:<URL:http://www.mpsv.cz/scripts/clanek.asp?lg=2&id=947>

NATIONAL TRAINING FOUND - <u>VET Reform programme in the Czech Republic</u> [on line], 2003. Available at the WWW:<URL:http://www.nvf.cz/vet/index\_gb.htm>

# Finland

CHINA EDUCATION ASSOCIATION FOR INTERNATIONAL EXCHANGES - <u>Vocational</u> <u>education</u> and <u>training</u> in <u>Finland</u> [on line], 2003. Available at the WWW:<URL:http://www.ceaie.edu.cn/whatsnew/e518pit.htm>

STATISTICS FINLAND – <u>Continuing vocational training survey : CVTS2</u> [on line], 2003. Available at the WWW:<URL:http://www.stat.fi/tk/he/yrhenkkoul\_etusivu\_en.html>

VIRTUAL FILAND – <u>Education and training in Finland</u> [on line], 2003. Available at the WWW:<URL:http://virtual.finland.fi/finfo/english/educat.html>

# Greece

EUROPEAN FOUNDATION FOR THE IMPROVEMENT OF LIVING AND WORKING CONDITIONS – <u>Vocational training and qualification : Greece</u> [on line], 2003. Available at the

WWW:<URL:http://www.eurofound.eu.int/emire/GREECE/VOCATIONALTRAININGQ UALIFICATION-GR.html>

EUROPEAN AGENCY FOR DEVELOPMENT IN SPECIAL NEEDS EDUCATIONS – <u>Overview</u>: <u>Greece</u> [on line], 2003. Available at the WWW:<URL:http://www.europeanagency.org/transit/access/overview/greece/overview.html>

# Romania

THE STOCKHOLM INSTITUTE OF EDUCATION - Office for Education and Research. <u>The</u> <u>vocational training system in Romania</u> [on line], 2003. Available at the WWW:URL:http://www.lhs.se/euvetnet/VETRomania.pdf>

EUROPEAN COMISSION - Education, Training, Young.Romania : adoption of the<br/>community acquis [on line], 2003.Available at theWWW:<URL:http://europa.eu.int/scadplus/leg/pt/lvb/e19108.htm>





# Portugal

EUROPEAN COMISSION -Portugal : OP Employment, vocational training and social<br/>developmentdevelopment[online],2003.AvailableattheWWW:<URL:http://europa.eu.int/comm/employment\_social/esf2000/ms/p-op-empl-<br/>doc-en.pdf>

EVT- European Training Village.Portugal : Education and vocational training courses[online],2003.AvailableattheWWW:<URL:http://www2.trainingvillage.gr/download/Cinfo/Cinfo398/C38R1EN.html>

EVT - European Training Village.O sistema de formação professional em Portugal[online],2003.AvailableattheWWW:<URL:http://www2.trainingvillage.gr/etv/publication/download/monograf/7009pt</td>/7009PT\_0.pdf

THE FERNUNIVERSUTÄT – University of Hagen. <u>Survey of distance training in Portugal</u> [on line], 2003. Available at the WWW:<URL:http://www.fernuni-hagen.de/ZIFF/V1-ch31.htm>

THE STOCKHOLM INSTITUTE OF EDUCATION - Office for Education and Research. <u>Education and training system in Portugal</u> [on line], 2003. Available at the WWW:URL:http://www.lhs.se/eurovetnet/VETPortugal.pdf>

