

# Strategic Partnership for the development of dual system

Guide  
for actors of dual education  
edited by Anna Block and Iwona Machon-Pluszczewska

"This publication has been funded with the financial support from the European Commission. The content of this publication reflects the views and opinions only of the authors of the publication therefore the European Commission and the National Agency of Erasmus + cannot be responsible for any information contained therein."

## Project coordination

Fundacja Krzyżowa  
dla Porozumienia Europejskiego

Mrs. Iwona Machon-Pluszczewska

Tel.: 0048 74 8500123  
Mail: [iwona@krzyzowa.org.pl](mailto:iwona@krzyzowa.org.pl)  
[www.krzyzowa.org.pl](http://www.krzyzowa.org.pl)  
<http://dual.krzyzowa.org.pl/index.php/en/>

## Product responsibility

Grone-Schulen  
Niedersachsen GmbH

Mrs. Anna Block

Tel.: 0049 4165 80370  
Mail: [a.block@grone.de](mailto:a.block@grone.de)  
[www.grone.de](http://www.grone.de)

Title of the project: Strategic Partnership for the development of dual system  
Number of the project: 2014-1-PL01-KA202-003638

Project Start Date: 01.09.2014

Project End Date: 30.09.2016

under the Agreement no 2014-1-PL01-KA202-003638

implemented within a framework of:

Programme: Erasmus+

Key Action: Key Action 2 - Cooperation for innovation and the exchange of good practices

Action: Strategic Partnership

The most impacted field: Strategic Partnerships for Vocational Education and training

This Erasmus+project product was supported by the funds of the European Commission

**Prepared by:**

Anyksciu svetimo pagalbos tarnyba

CELF

Fundacja „Krzyżowa” dla Porozumienia Europejskiego

Grone Netzwerk Hamburg GmbH

Grone-Schulen Niedersachsen GmbH

Kuratorium Oświaty we Wrocławiu / Bildungskuratorium in Breslau

**Group of the Experts who worked on the Guide:**

Martina Borgwardt – Grone Netzwerk Hamburg

Claus Brand Cristensen – CELF

Dr Jan Kaminski - Kuratorium Oświaty we Wrocławiu

Gabriele Kuspiel – Grone Netzwerk Hamburg GmbH

Aleksandra Królak- Wąsowicz – Fundacja Krzyżowa dla Porozumienia Europejskiego

Alicja Przepiórska – Fundacja Krzyżowa dla Porozumienia Europejskiego

Peggy Weise – Grone-Schulen Niedersachsen GmbH

Aleksandra Wójcik – Fundacja Krzyżowa dla Porozumienia Europejskiego

Daiva Ziogene – Anyksciu svetimo pagalbos tarnyba

This project has been funded with support from the European Commission.

This publication [communication] reflects the views only of the authors, and the Commission cannot hold responsibility for any use which may be made of the information contained therein.

## Table of Contents

1. Introduction .....	5
2. The origin and aim of the project ‘Strategic Partnership for the development of dual system’ .....	6
3. Structure of the Guide .....	7
4. The program framework and the legal organisation of vocational training systems in partner countries .....	8
4.1. The Danish VET System (module 1+2) .....	8
4.2. The German VET System (module 1+2) .....	11
4.2.1 Introduction .....	11
4.2.2 German system of vocational education and training .....	11
4.2.3 The dual vocational education and training system in Germany .....	13
4.2.4 The legal framework for the functioning of the dual system in Germany .....	13
4.2.5 Partners and the scope of responsibilities in the dual education system ..	14
4.2.6 Financing of vocational education in Germany .....	15
4.3. The Lithuanian VET System (module 1+2) .....	17
4.4. The Polish VET System (module 1+2) .....	20
5. Establishment of partnerships and networks for the benefit of the dual vocational training (module 3) .....	24
5.1. Introduction .....	24
5.2 Principles of building partnerships and networks: definitions, characteristics of partnerships and networks.....	26
5.3 Examples of good practice .....	32
5.3.1. An example of good practice in the cooperation of schools and businesses	32
5.3.2 Legnica Special Economic Zone .....	33
5.3.3 The activities of non-governmental organizations for the promotion of vocational education .....	36
5.3.4 Examples of classes patronage .....	37
5.3.5 Other good practice .....	37
5.3.6 Wroclaw example of good practice .....	39
5.3.7 School Partnerships .....	41
5.3.8 The example of German partnership – Ausbildungsnetzwerk, Grone Netzwerk Hamburg .....	41
6. Guidance & Matching of Students (module 4) .....	43
6.1 School guidance .....	43
6.2. Profiling tools and competence measurement used by Grone-Schule .....	44
6.2.1. Selection of tools .....	44
6.2.2. What can be measured by the tools? .....	45
6.2.3 Profiling tools and competence measurement used by Grone-Schule most often .....	45

7. Methods to prevent interruption of vocational training in Germany (modul 5) .....	47
7.1. Introduction .....	47
7.2. Consequences of dropouts in vocational training .....	48
7.3. Measures to prevent interruption of vocational training .....	49
7.4 Bundesprogramme zur Vermeidung der Abbrüche:	50
7.4.1 AbH Training Support .....	51
7.4.2 Vocational training in a supra-company (or non-company) establishment	51
7.4.3 AsA .....	52
8. Selection and development of personnel in the system of vocational training (modul 8) .....	53
8.1. Introduction .....	53
8.2 The role of a VET teacher and vocational training nowadays .....	54
8.3 Methods of work of a vocational training instructor .....	55
8.4 Key competences of a vocational training instructor .....	56
8.5 Possibility of further education of the vocational staff .....	58
9. Recommendations for implementing the dual system – Intellectual Output number 4 based on the IOs of the project.....	59
9.1 General recommendations: .....	59
9.2 Recommendations for the countries who want to build up a dual system.....	60
9.3 Recommendations for the countries who want to strengthen an existing dual system .....	61
9.3.1 Poland .....	61
9.3.2 Germany .....	62
9.3.3 Danmark .....	63
9.3.4 Lithuania .....	66
10. Bibliography .....	67

## 1. Introduction

A supportive system of sharing information and services among individuals and groups having a common interest is probably one of the most obvious definition for the aimed partnership heading toward positive networking.

Since the year 2014 “Strategic Partnership for the development of dual system” as an “Erasmus+” project has been built up. In this project a group of partners from 4 countries (Germany, Denmark, Lithuania and Poland) has been closely cooperating working together. The main goal and interest of that partnership was to share the knowledge and transfer experience from countries with advanced and very well developed VET dual education system to countries which are just at starting point in that area. Introducing and applying dual system in VET is very important issue from European economic point of view because it is commonly known that states with widely applied VET dual system are having the lowest level of unemployment among countries in European Union.

Additionally, common interest of the project from the very beginning was also to analyse, to assess and to build up the second partnership for “Efficient strategy of bringing back to society and re-engage young NEET people” with a strong commitment toward a reduction numbers of youth unemployment. Both partnerships gathered an experience of the enrichment of transnational cooperation and European citizenship with all the languages and different cultures, bringing together people to make friends with each other, to learn together and to get ideas from each other. Project partners working together have involved young people, employers, schools, parents, local businesses, educational institutions, foundations, etc. to create a usable, practical guide offering thanks to the dual system, a range of flexible pathways for NEET young people with different needs, attributes and skills levels, the guide which provides variable vocational learning options, which clearly links to educational or labour market opportunities and workplace progression.

Having as a background both strategies: “Strategic Partnership for the development of dual system” and “Efficient strategy of bringing back to society and re-engage young NEET people” the guide applies many different methods of actions as profiling and matching, preventing interruption of vocational training, learning by doing and implementing, preventing the dropping out, training workshops like conflict management, team building, communication, mediation and tutoring. Effective and enhanced information, advice, support and practical guidance for NEET youngsters from European countries is given.

A guide, among others, presents verified information, supports and offers practical advice how to organise dual education for target group such as NEET young people. The most important part of dual education, which is efficiently organised, precisely targeted on work market is creation of the network of partner institution involved in vocational education process. Presented here Guide gives information how to choose proper institution, describes partnerships forms, partners range and duties, shows how to get the partner fully involved and convinced to reach the common goals. Full knowledge about this subject matter is proved by examples of good practice from Germany and Poland.

Other, very important points of an efficient vocational training are proper profession profiling and matching as well as creation of stable pair: a VET student – a company. The Guide is presenting that subject as an example of tools applied by the Danish partner. Similarly, taking into consideration German partner experience The Guide is showing the methods and procedures for drop outs prevention. Proposals for VET teachers, employers and governmental programmes

heading into durability and continuity vocational education and training by students from NEET target group are presented. Teacher's group selection for VET and teacher's professional development are described. The final chapter of the Guide includes recommendations for each partner country as a results of project experts and VET institutions works.

This guide contains reliable information, offers support and practical advice on how to organise dual training for the NEET target group.



## **2. The origin and aim of the project 'Strategic Partnership for the development of dual system'**

In the search for good practice of vocational education and training, initiators of the project turned toward the dual VET system functioning in Germany and Denmark. The advantage of this system is a combination of theoretical teaching of profession with an intensive system of apprenticeships in companies. Vocational education in Poland and Lithuania lacks of system apprenticeships solution in enterprises. Apprenticeships are only an additional element and, consequently, students do not have any work experience or their experience is very negligible, which makes finding employment very difficult for Polish and Lithuanian students and the contact during the job search is their first experience of this kind. Anna Kwiatkiewicz believes that "the promotion of the dual system, or even the elements could modernise the Polish vocational education system and tie it closer to the realities of the labour market." (A. Kwiatkiewicz "Vocational education in the German dual system"). Due to the economic downturn in Germany organisational efficiency of the system is being discussed at the moment.

There is a need to develop tools that would "revitalize" the system and adapt it to the current economic situation. Partners from Germany and Denmark emphasize the need to develop tools to motivate young people for the taking up and continuing education, as both Germany and Denmark face the problem of leaving schools and courses by young people with no qualifications.

Whether Polish and Lithuanian systems are modelled on the German or Danish dual system, an important issue seems to be wide ranging co-operation between schools and the labour market.

The need for strengthened cooperation between the institutions involved in dual training was emphasized, however, in a survey conducted at the beginning of the project by the respondents from Denmark and Germany (students, teachers, vocational school head teachers, employers, labour market institutions). The aim of the project was therefore to improve the situation of young people on the labour market by promoting the dual system and the creation of tools for the dual system and the development of strategic partnership working to alleviate the problems of youth in the labour market in Poland, Lithuania, Germany and Denmark, and what is more, to develop recommendations for the institutions taking participation in dual education in partner countries.



### 3. Structure of the Guide

In the first part of this guide, you will find the results of the research conducted among the participants of the vocational system in the partner countries:

- a) pupils of vocational schools from Poland and Lithuania, young people and apprentices in the dual system from Denmark and Germany
- b) teachers of vocational schools and head teachers
- c) employers
- d) labour market institutions and business-related institutions.

Another element of the guide is general information about vocational training systems in partner countries (Denmark, Germany, Lithuania, Poland)

The most important element of vocational education and training, which is organizationally efficient, effective and responsive to labour market needs, is the establishment of a network of partner institutions involved in vocational training. This guide contains information such as the choice of institutions, forms of partnerships, the role and responsibilities of the partners, acquiring and motivating partners. This knowledge is supported by examples of good practice from Germany and from Poland.

Other very important elements of effective of vocational education and training are proper professional profiling and selection of pairs “student-workplace”, which in this guide are shown on the example of tools for profiling and matching used by the Danish partner.

A valuable component of the guide is an introduction of the methods and forms of preventing interruption of vocational training on the basis of the experience of partners in Germany. The guide contains suggestions of methods for employers, vocational teachers and a description of government programs, which are aimed at maintaining the sustainability of vocational education by students from the NEET target group.

Moreover, the selection and development of personnel involved in dual training are reflected in the guide.

Recommendations for individual countries, based on the work of experts and developed on the results of the survey close the guide.



## 4. The program framework and the legal organisation of vocational training systems in partner countries

### 4.1 The Danish VET System (module 1+2)

- Legal framework, main actors and financial schemes

By

Claus Brandt Kristensen

International Officer at Centre for Vocational Education Lolland-Falster (CELFL)

#### Introduction

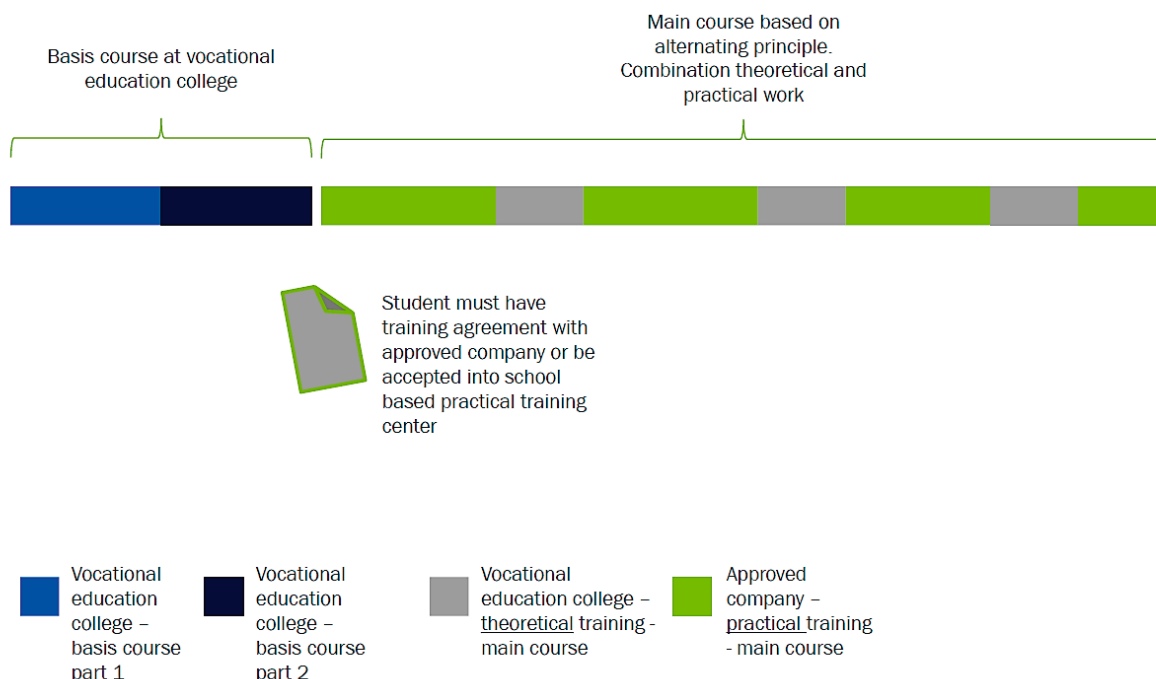
The Danish vocational education and training system is a dual system. But what is a dual system? One definition could be the following:

*The Vocational Education and Training (VET) takes place in a company where student is employed as an apprentice.*

*During the training in the company there are periods of schooling of various types and duration at the so-called vocational schools - i.e. technical schools, trade schools, combining schools, agricultural schools and the like.*

*The Vocational Education and Training finishes with an apprenticeship test /final exam - and if the apprentice passes the test, he/she will be given a certificate of completed apprenticeship.*

Figure 1 - The Danish VET system



This definition works fine on the micro level but it doesn't give us an understanding of the system and program level of the Danish dual. On the program level we can look to figure 1 where a standard Danish vocation education is shown in different elements of the course of the education and training.



Now we both have a rudimentary understanding of micro and program level in the Danish dual system, and especially the program level is contributing to define where the Danish dual system differs from other dual system. In the Danish system the first 20 or 40 weeks are pure school based and the apprentices go to school in block periods.<sup>1</sup> It's important to mention that the school education and training is work based where theoretical education in classrooms is combined with practical training in workshops. Therefore the workshops are large and well-equipped. But we still don't have a systemic understanding of the Danish dual system therefore we will focus on the next three issues: the Legal framework, the main actors and financial schemes.

### Legal framework

In the following sector the legal framework for the Danish dual system is presented though link s to the official Danish legislation.

#### VET laws:

<https://www.retsinformation.dk/Forms/R0710.aspx?id=170605>

<https://www.retsinformation.dk/Forms/R0710.aspx?id=164559>

<https://www.retsinformation.dk/Forms/R0710.aspx?id=172904>

<https://www.retsinformation.dk/forms/R0710.aspx?id=172818>

#### VET ordinances:

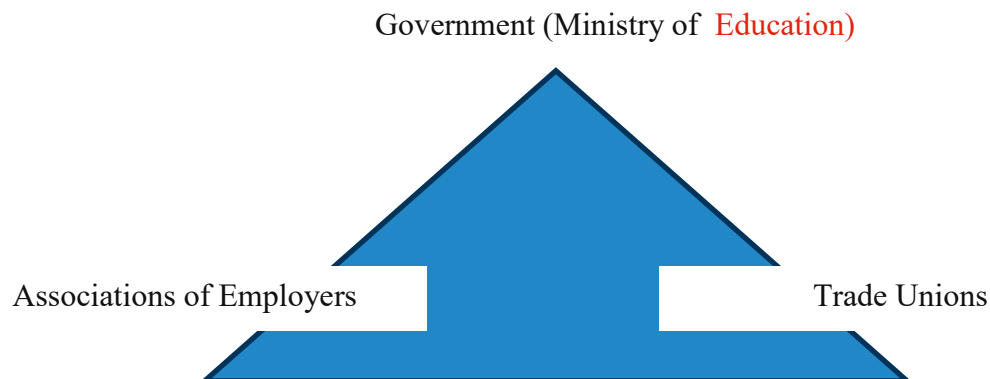
<https://www.retsinformation.dk/Forms/R0710.aspx?id=164802>

One per education<sup>2</sup>

### Main actors

To understand the Danish dual system it's necessary to take a look at history of the Danish labour market. In the later part of the 19<sup>th</sup> century the Danish labour market was characterized by massive conflict between employers and employees each represented by the Associations of Employers and the Trade Unions. The solution to solve this conflict came in 1899 with the *Main Agreement* where the roles and rights on the Danish labour market was defined and still is to this day.

The *Main agreement* constituted a labour Market which is regulated without interference from the government. This is also visible when it comes to governmental regulation of area relating to the labour market including vocational education and training, where there three-part negotiations or – as it's in the case of VET – a formalised committee structure



<sup>1</sup> UVM

<sup>2</sup> <https://www.retsinformation.dk/Forms/R0930.aspx?q=bekendtg%3%b8relse+om+erhvervsuddannelse+til&col=b&smode=simpel>

Below the different parties and their roles are defined:

### **The Danish Parliament (Folketinget)**

- Decides general framework for management, structure and objectives

### **Ministry of Education**

- Appoints the councils for vocational training
- Create the educational ordinances through the council's advice on for example structure and content of the educations.

### **The Trade Committees**

- Lay down the detailed content of the education and training programmes
- Approve companies for apprenticeships

### **The school**

- Helps students get training agreement.
- Responsible for theoretical part of education

### **The Companies**

- Offer training agreements
- Responsible for reaching the objectives in the main course

### **Local Education Committees**

- Advice the schools about planning and helps develop cooperation with local trade and industry

## **Financial Schemes**

As described above the Danish VET system is based on dual system where training takes place at college and in an enterprise in turns. The government finances training at colleges and enterprises finance on-the-job training. The Apprentices receive an apprentice salary while in the company and in the school periods on while on the main course.<sup>3</sup>

### **Financing training in colleges**

In 2011, the Danish government spent a total of DKK 7.165 million (EUR 963 million) on foundation courses and main programmes. A considerable proportion of these funds were distributed to colleges in accordance with the 'taximeter' principle, whereby funding is linked to some quantifiable measures of activity, for example number of full-time equivalent students, with a set amount awarded per unit. Besides the 'taximeter' rate, VET providers also receive an annual fixed grant for maintenance of buildings, salaries, etc.<sup>4</sup>

### **Financing training in companies**

All employers, both public and private, pay an amount into a fund called the employers' reimbursement scheme (Arbejdsgivernes Uddannelsesbidrag - AUB) regardless of whether or not they provide apprenticeship placements. This fund finances both VET and AMU. In 2016, all employers are obliged to pay an annual contribution of DKK 2 775 (EUR 373) per full-time employee. These funds are then allocated to the places of work taking in apprentices so they

<sup>3</sup> Danish Country Report, Cedefop 2014, p. 42

<sup>4</sup> Ibid.

do not bear the cost of training alone. These employers receive wage reimbursement during apprentices' periods of college-based training.<sup>5</sup>

## 4.2 The German VET System (module 1+2)

- Legal framework, main actors and financial schemes

By

Anna Block

Grone-Schulen Niedersachsen GmbH gemeinnützig,

Grone Netzwerk Hamburg GmbH gemeinnützig

### 4.2.1 Introduction

Germany is one of those European countries where learning in the work process is a traditional element of vocational training. Developing skills of action is the goal of any form of vocational training. Landmarks of the German vocational training system, known as dual system, are - apart from the needs and requirements of the labour market - the necessity of acquisition of the skills, knowledge and competencies which are important to occurrence on that market effectively.

**Dual system** is based on a parallel education in a vocational school (theoretical knowledge) and practical education in the workplace (by direct contact with the company and the activities performed in the certain profession). In this system, vocational training is tailored to the needs and expectations of employers and allows students to smooth the transition from school to working life. The system of dual vocational education and training is used not only in Germany, where as much as 69% of students attend vocational and technical education in the dual system. This system also applies in Switzerland (87% of the students), Czech Republic (58% of students), Hungary (37%) and the Netherlands (33%).

German dual vocational training system is based on a few basic societal decisions:

- all graduates of general education schools should be allowed to learn a profession,
- in order to achieve this goal, strategic approach to the implementation of cooperative vocational training system, called the dual system of vocational education and training, has been developed together with the entrepreneurs,
- in a cooperative model of vocational education and training the public sector (government, schools) considers the private sector as a partner on equal rights,,
- the legal framework for this cooperative system is the foundational Vocational Training Act, which regulates the roles of the different actors.<sup>6</sup>

Learning first profession takes place in competitions recognized by the competent state authorities according to uniform national standards. The role of the state comes here only to a narrow organisational and regulating function.

### 4.2.2 German system of vocational education and training

**The system of general education** in Germany is largely the responsibility of the individual **federal states** (including culture, so-called superiority of the culture of the Länder).

<sup>5</sup> Ibid.: p. 43

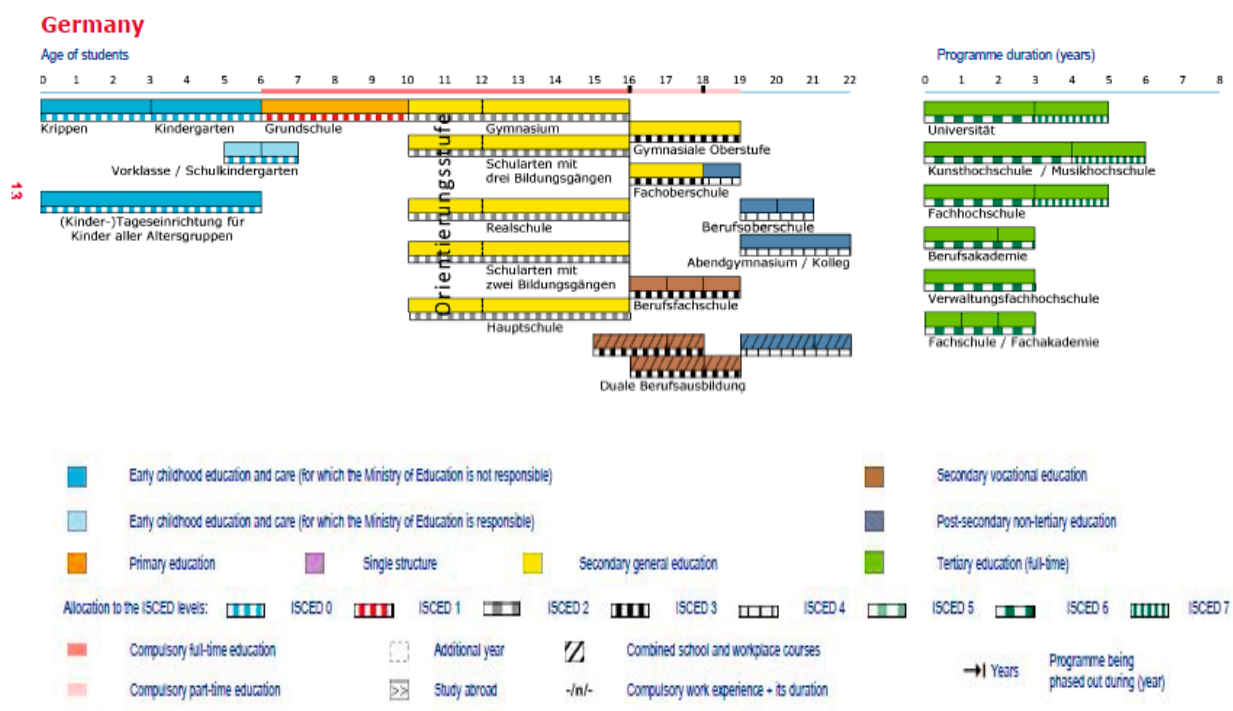
<sup>6</sup> Berufsbildungsgesetz, Vocational Training Act dated 01.09.1969 ; last amendment has been applied since 01.04.2005. It regulates in Germany, all the issues related to vocational training, and thus the base of the dual system (Duales System), vocational preparation (Berufsbildungsvorbereitung), further training (Fortbildung) and professional re-qualification (berufliche Umschulung)

As a result, the educational systems of individual federal states in some parts differ from each other a lot. In order to ensure at least a minimum of uniformity in the education systems of all federal states, the Standing Conference of Ministers of Culture was established.<sup>7</sup> The Conference sit three or four times a year and establishes a common framework and trends. In the area of vocational education and training the government has powers to coordinate apprenticeship in companies, whereas the federal states have the competence for vocational training in schools, and thus they are the governing body of vocational schools.

Education in Germany is compulsory is from the age of 6 years up to the age of 18 years in mainstream schools or in the dual system of vocational training. Continuing of education is optional after young people turn 18. The German education system can be divided into **four stages**:

- 1) Primary, ISCED 1
- 2) Secondary I and II, ISCED 2 and 3
- 3) Postsecondary, ISCED 4
- 4) Tertiary I, ISCED 5 and research programmes ISCED 6

Chart 1. German education system (source: [www.eurydice.org.pl](http://www.eurydice.org.pl))



Education systems are uniform in all federal states on ISCED level, but they differ slightly depending on the type of school and the possibility of obtaining ISCED levels of education. For example, Saxony decided not to keep separate the “major schools” (Hauptschule) and “real schools” (Realschule) at the expense of secondary schools, so-called. Mittelschule, which conducts classes for all levels of education. The education system of Lower Saxony is basically a reflection of the classic system “Hauptschule-Realschule” Gymnasium. The novelty of the system is the

<sup>7</sup> So called. Kultusministerkonferenz (abbreviation KMK) was established in 1948 and involves the creation of a common policy of all the federal states on education, education, science and culture. The provisions of the KMK not a Germany-wide law shall come into force in the individual federal states only after the decision by the government of the Land.

introduction of so-called. integrated comprehensive school, offering education at each level of from grade 5 to 13, and further conducting intensive remedial classes for students with disabilities, for example with language disability. This type of school is ideal for regions with a high percentage of the immigrant population and it gives children of migrants chances of getting at least the minimum of general education that allows to take learning in the dual system (Hauptschulabschluss after 9 or 10 years of study).

#### 4.2.3 The dual vocational education and training system in Germany

67% of all people entering for the first time the work are those who after completing school education received in the dual system profession recognized by the state. Currently, the list of professions which can be gained in the dual system contains about 360 profession. Possibility of study in this system is not conditioned by the fact of completion of a particular type of school, but it is generally open to all. Dual system is characterized by two features in particular: two apprenticeship places: in the workplace or other authorized institutions (Bildungsträger, Trainingszenter) and vocational school.

A learner is a student of the profession in a certain enterprise or office and is seconded to attend school recognized as a vocational school, so at the same time he or she is a student of the vocational school. The student signs a contract personally with the company working on the practical workshops, then is recruited to the selected schools at different levels of education, but in terms of content the school is associated with practical job training. Education in the workplace is guided by specially trained instructors.

Young people from the age of 16 can participate in practical vocational training. There is no upper limit of the apprenticeship, though limitation may be in the difficulty in finding the company which can give practical vocational training for an elderly person.

While within a framework of vocational education and training in enterprises, primarily practical professional skills and the necessary amount of professional experience are provided, learning in a vocational school focuses on the transmission of theoretical content on the industry of a given profession and on the deepening and intensifying study of general subjects. The training period lasts from 2 to 4 years depending on the profession chosen by student and on student's initial school skills.

#### 4.2.4 The legal framework for the functioning of the dual system in Germany

Key documents underlying the dual education system in Germany:

- The Vocational Training Act (Berufsbildungsgesetz)<sup>8</sup>, which gives each citizen the right to learn a profession in the dual system. It is connected with the right to learn in vocational school free of charge. (up to the age of 25, whereas for the age 25 plus only in special programmes) and the right to establish a contract for training occupations and earning the salary which is established for particular vocational group at the federal level.
- The Regulation on Craft Trades (Handwerksordnung)

<sup>8</sup> The Act amended on 01.04.2005 (Act 1969 and the Law on financing of vocational training were revised and combined into one bill). It provides educational opportunities for all young people in Germany and the high quality of vocational education and training regardless of their origin and social status. Its new provisions also regulate the recognition of stages of vocational education and training gained outside Germany, the competence of the Federal Institute for Vocational Training (BIBB) in terms of setting rules vocational training and modification system of recognition of previously acquired knowledge (including informal systems) as part of a regular practical vocational training.

- The Regulation on qualifications of instructors of profession (Ausbildereignungsverordnung)
- The Youth Worker Protection Act (Jugendarbeitsschutzgesetz)
- The Act regulating the structure of enterprises (Betriebsverfassungsgesetz)
- The Act regulating the possibility of raising qualifications (Aufstiegsfortbildungsfoerdergesetz)
- The Act regulating extramural education (Fernunterrichtsschutzgesetz).

#### 4.2.5 Partners and the scope of responsibilities in the dual education system

In the process of education in the dual system various entities are involved. They assume different functions and the resulting from the functions responsibilities. Here, we should mention about partners from three levels: federal, regional and enterprise levels. An important partner is also a student, who himself is responsible not only for finding a company where practical vocational training will be organised but also for participation in theoretical classes and in the end - for the final examination.

**Federal level** - is responsible for the principles of education in the dual system. The central government bodies involved in the dual system of vocational education and training are two ministries: the Ministry of Education and Research (Bundesministerium fuer Bildung und Forschung) and the Ministry of Employment and Economy (Bundesministerium fuer Arbeit und Wirtschaft).

State responsibility at the federal level is to establish the general principles for the organisation of the education process - according to the Act on vocational training (Berufsbildungsgesetz). According to the provisions of this Act rules of learning are determined by the representatives of the groups involved in the exchange of employer - employee and are enforced by the appropriate minister at the federal level (it is usually the minister of the economy).

Valid classification of occupations is the Annex to this Act - dual system ignores the civil service and certain professions from the Ministry of Health. The funds are financed by federal special programs of individual federal ministries responsible for the target groups involved in the education system, supporting vocational training, with particular emphasis on young people with difficult access to the education system, learning problems and risk of exclusion.

In addition, programs for the disabled, programs providing equal educational opportunities for the youth of the new federal states, international youth exchanges, support for particularly gifted students, the off-site (external) places for vocational training (eg. simulation firms<sup>9</sup>) and innovative educational programs. These funds are maintained structure of the organisational unit of the Ministry of Education - Bundesinstitut fuer Bildung Berufliche - responsible for vocational training.

#### ***The level of federal states – here is responsibility for the programs, apprenticeships and exams.***

Since the implementation of the dual system of education takes place at the level of federal states, they regulate the issues in accordance with their internal regional policy. The funds for dual training are affected by the independence of federal states. The funds come from both federal states' budget and companies funds. Theoretical training in vocational schools is paid by federal states, while the practical training - the enterprise.

The federal states pay from their budgets for staff costs in education and the costs which are directly related to education (teaching aids and learning materials). At the federal level, an

<sup>9</sup> Measures to maintain business simulation has been significantly reduced since 2012.



important role is played by chambers of commerce and crafts, whose task is to ensure the proper implementation of the process of federal regulations concerning vocational training.

In particular, the Chambers certify the qualifications, i.e. they develop - in consultation with the labour market - Guidelines for the content of education and teaching programs/ curricula for the certain profession<sup>10</sup>. It is the responsibility of the Chambers to conduct professional examinations, i.e. they appoint committee of examination and issue the relevant certificates and diplomas. Examination members of the commission are representatives of chambers, schools and the workplace, who must have the appropriate examiners permissions.

Moreover, the Chambers provide recruitment services between the workplace and the students seeking places for apprenticeship and vocational training.

### ***Company level - is responsible for the practical vocational training.***

Practical vocational training in a company usually lasts three years (after graduating from high school or higher education, this period can be shortened by law into two years), and it is hold for maximum four days a week, or in a modular system (ie. 6 weeks in school, 6 months in the workplace). Companies offering places for vocational training come mainly from the SME sector. The apprenticeship has an established program, and its progress is constantly monitored. In the apprenticeship dairy weekly detailed report from activities is recorded. At the end of practice diary is signed by the supervisor and is submitted to the appropriate chamber for four weeks before the expected date of the exam. Workplaces cover the costs of gross wages of apprentices and sometimes their own training programs.

## **4.2.6 Financing of vocational education in Germany**

### ***Assumptions of funding<sup>11</sup>***

Financing of the vocational training system in Germany is based on a mixed system of financing from various sources, both public and private. The sources of funding are as follows:

- 1) Public:
  - a) At the federal level:
    - The Ministry of Education and Research
    - Ministry of Economy and Technology
    - Labour Office
  - b) At the level of the federal states:
    - ministries of particular Länder responsible for the work, the economy, education and culture
  - c) local government units
  - d) The European Union
- 2) Private funds:
  - a) workplaces
  - b) trade unions
  - c) chambers of commerce and craft

<sup>10</sup> At the regional level the detailed rules for the organization of the vocational education are defined and the content of the payload and hourly programs of learning the profession is divided into theoretical and practical classes (according to the National Qualification Framework). Plan of apprenticeships must be consistent with the program at school and requires excellent coordination of time.

<sup>11</sup> The processes of education take place in many areas of life, in public and private institutions, but also outside these systems. At the same time the tasks and package services training institutions are very diverse. For this reason, it is not possible to prepare measurable monetary statistics, which depict the actual expenditure on education. Hence the reported cost of education at all levels ISCED focuses on the presentation of personnel costs, property and investment spending.

- d) industry associations
- e) private institutions, such as foundations, associations and sponsors.

Financing general education and theoretical vocational training in the dual system is done with taxes of the federal states and municipalities. The issues related to the functioning of the internal schools (eg. school administrators, approving curricula, education and teachers' salaries) are financed by federal states whereas external affairs of schools, such as. the equipment, maintenance, renovation of school buildings, administration, purchase of teaching materials are financed by the municipality.

Private funds coming from the workplaces and their surroundings are intended to cover gross wages for students of the dual system, the cost of after-school vocational education courses and to recruit instructors. Chambers with their resources organise and conduct the examinations and conduct quality control programs of practical training. Allocation of funds from sources of other private institutions varies depending on the purpose of financing.

### *Financing of the dual system*

Responsibility for funding the theoretical learning of profession is - as mentioned above - in the hands of the federal states and municipalities. Every citizen below the age of 25 (for migrants from renowned German citizenship it is 27) has the right to theoretical education in a vocational school free of charge.

The financing of practical vocational training is the responsibility of workplaces: each plant decides about how many seats of profession training is available and in which profession in the company is able to create workplaces within the framework of existing legislation and willingness to allocate the resources on the certain level. In some industries<sup>12</sup> there are valid joint arrangements for the reception of students to learn the profession. Well, in these industries workplaces pay for the vocational training according to the adopted algorithm (developed for example on the basis on the remuneration in the industry and the size of the employer) to a common industry fund which was set for them in order to fund places of practical vocational training.

The admission criteria for vocational training involves the workplace with the payment of his monthly appropriate salary<sup>13</sup>, coverage for its cost from social insurance, the insurance industry it in the insurance companies, securing his protective clothing, but also to remuneration of trainers who are employed mandatorily when the plant decides to accept the students. Workplaces cover about 85% of the total cost of the dual education system. On average, the cost of education per student amounts to € 15,300 for one year of training<sup>14</sup>.

---

<sup>12</sup> eg. in the construction industry, the association of roofers

<sup>13</sup> Students are treated as employees and receive a monthly salary determined according to special tariffs applicable uniformly for the industry

<sup>14</sup> Source: Bundesinstitut fuer Berufliche Bildung (BIBB). Costs depend on the region of Germany (eg. In the states of western lands cost of education is about 33% higher than in the eastern states), the size of the employer and the industry (the lowest is in the craft)



### *Financing contracts of individual student with the employer*

For the period of vocational training, workplace concludes with a student contract (Ausbildungsvertrag), which defines the rights and obligations of both parties and the amount of monthly salary, together with voluntary additional benefits if they assume collective bargaining agreements<sup>15</sup>. The agreement is reported to the appropriate chamber (industrial, commercial or craft) to check the eligibility and registration of the profession learning start by the student. Since the training starts, workplace begins to pay student wages in the amount specified by statute for the profession and the Land<sup>16</sup>. The costs of remuneration established for the profession and the education are the costs of health insurance and pensions (ie. Arbeitgeberanteil), which amount to about 25% of the basic salary (depending on the insurance fund, to which the student belongs)<sup>17</sup>.

## **4.3 The Lithuanian VET System (module 1+2)**

### **Programmatic and legal framework in the organization of the vocational Training in Lithuania**

**By**

**Daiva Ziogene**

**Anyksciu svietimo pagalbos tarnyba**

Lithuanian VET is part of a well-structured, straightforward and potentially permeable education and training system together with general education (preschool, pre-primary, primary, lower and upper secondary) and higher education (colleges and universities).<sup>18</sup>

The main responsibility for VET policy development is delegated to the Ministry of Education and Science. Until 2008 the implementation of VET policy was divided between two ministries: the Ministry of Education and Science was responsible for initial VET while the Ministry of Social Security and Labour was responsible for continuing VET. Correspondingly two networks of training institutions existed. Vocational schools under the Ministry of Education and Science were mainly involved in initial VET, and labour market training centres under the Ministry of Social Security and Labour were implementing training of adults. In 2007 a new edition of the Law on VET was passed by the Parliament (Seimas) which provided for an increase of efficiency and support for lifelong learning by merging the two networks to create unanimous network of training providers under the Ministry of Education and Science.

The Ministry of Education and Science is responsible for shaping and implementing vocational education and training (VET) policy. The main priority for VET is to become an attractive and highly valued part of education and lifelong learning. Because in Lithuania is low level of early leaving from education and training. In 2012, the share of the population aged 18 to 24 with, at most, lower secondary education and not in further education and training was 6.5%, considerably lower than the EU-27 average. It is one of the main national aims to keep the share of early leavers below 9% by 2020. VET programmes are designed for learners of different ages

<sup>15</sup> These include, for example. Subsidies to insurance for an additional pillar pensions (so-called. Vermoegenswirksame Leistung), thirteenth salaries, subsidies to insurance in the event of incapacity for work (within the meaning of the Act to persons born after 1960 is not entitled to collect rent health) or extra vacation days

<sup>16</sup> in the states of the former Federal Republic the salaries are slightly higher than in the so-called. the new federal states, ie. Länder incorporated after German reunification

<sup>17</sup> The employer pays the premium for health insurance (Krankenversicherung), retirement (Rentenversicherung), welfare (Pflegeversicherung) and the Labour Fund (Arbeitslosenversicherung)

<sup>18</sup> VET in Europe–Country report (2013). Qualifications and Vocational Education and Training Development Centre with contributions from members of ReferNet Lithuania.

and educational backgrounds. Initial VET (IVET) offers learners over 14 opportunities to acquire a first qualification.

The VET system (Article 5)<sup>19</sup> consists of:

- initial vocational education (IVET) aimed at acquiring an initial qualification;
- continuing vocational education (CVET) to update or upgrade an existing qualification, acquire a new one or some competence needed to perform a function;
- vocational guidance. The VET system aims at:
  - (a) helping individuals acquire a qualification and competence corresponding to the current level of technology, science, economy and culture, find a job in the changing labour market;
  - (b) creating opportunities for lifelong learning to upgrade qualifications and requalify;
  - (c) providing access to quality education and training and vocational guidance (Article 3).<sup>20</sup>

Most VET programmes are school-based, meaning that they are undertaken in accredited institutions. VET programmes are designed for learners of different ages and educational backgrounds. In IVET, learners have an opportunity to acquire a first vocational qualification and complete general lower or upper secondary education. CVET enables a person to improve an existing qualification, acquire a new qualification or gain a competence needed to perform a specific job (function) as regulated by legislation.

In IVET, VET programmes included in the study and training programmes and qualifications register (Studijų, mokymo programų ir kvalifikacijų registras) are provided at:

- lower secondary education level not leading to a basic education certificate;
- lower secondary education level leading to a basic education certificate;
- upper secondary education level for learners having completed basic education, not leading to upper secondary general education;
- upper secondary education level leading to upper secondary general education;
- post-secondary education level for learners having completed upper secondary general education.<sup>21</sup>

In Lithuania there are two types of teachers in vocational education and training (VET) institutions: VET subject teachers (*profesijos mokytojas*) and general education subject teachers (*bendrojo ugdymo dalykų mokytojas*). Only in rare cases VET institutions declare other groups of teachers, such as managers of practical training. According to the most recent data of the Centre of Information Technologies in Education<sup>22</sup>, in September 2015 there were 872 general education subject teachers and 1 892 VET subject teachers working in initial VET (IVET) institutions. Although a number of VET students is stable and is even slightly increasing, it is observed that a number of teachers is gradually decreasing<sup>23</sup>.

Formal vocational training programmes (both IVET and CVET) are provided by:

- 74 State veT providers, of which 26 have companies in their governing boards;
- five labour market training centres (LmTc) (specialised in CVET but some providing IVET programmes as well);
- two private VET providers;
- 234 other institutions (including companies) licensed to implement VET programmes.

<sup>19</sup> Parliament of the republic of Lithuania (1997). Law on vocational education (last amended on 22 June 2011, No XI-1498).

<sup>20</sup> Parliament of the republic of Lithuania (1997). Law on vocational education (last amended on 22 June 2011, No XI-1498).

<sup>21</sup> VET in Europe–Country report (2013). Qualifications and Vocational Education and Training Development Centre with contributions from members of ReferNet Lithuania.

<sup>22</sup> Statistics Lithuania (2015). Education 2015. Vilnius: Statistics Lithuania.

<sup>23</sup> Vaitkutė, L. (2016). Supporting teachers and trainers for successful reforms and quality of vocational education and training: mapping their professional development in the EU –Lithuania. Cedefop ReferNet thematic perspectives series.

VET standards (profesinio rengimo standartai) comprise three main interrelated components:

- activities and competences describing occupational activities ;
- training objectives defining the knowledge and skills necessary to perform occupational activities;
- vocational competences' assessment parameters.

The first comprehensive VET standards were developed in 1998. Presently, 77 standards have been approved for the VET sector. These VET standards were prepared centrally coordinated by the KPMPC. To assure social dialogue in designing them, 14 sectoral expert groups (Ūkio šakų ekspertų grupės) were formed, comprising employers, trade unions and VET institutions.

Although VET in Lithuania is school-based, practical training and training in enterprises are a major part. In IVET, practical training comprises 60 to 70% of the total time allocated to vocational subjects, of which 8 to 15 weeks is organised in a company or a school-based workshop simulating working conditions. In the last years progressing implementation of apprenticeship is considered a national priority. In 2008 the Law on VET which entered into force 1 January 2008 introduced Apprenticeship (Pameistrystės profesinio mokymo organizavimo forma) as a form for VET organisation where training is implemented at the workplace (company, organisation, farm, freelance teacher, etc.). All IVET programmes incorporate compulsory work-based learning (WBL) or work experience period (so called 'practice'–praktika) with the duration from 2 to 3.5 months<sup>24</sup>.

VET legislation (Parliament, 1997 and Lithuanian SMM, 2012) provides a legal basis for apprenticeship. However, apprenticeship has still not gained its position as a clear VET pathway and receives little attention from VET providers and companies. The reasons for this are the lack of apprenticeship traditions in the country, labour market features (SME (small and medium-sized enterprises) prevalence, limited availability of economically strong enterprises, economic decline and shrinking employment), and upturns and downturns of economic development and their impact on investments in VET. Another important obstacle for apprenticeship is the absence of support mechanisms (both financial and non-financial) for companies employing apprentices or offering other forms of work-based learning.

However, there are no systemic schemes that would be recognised as apprenticeships when scrutinized under a more exhaustive definition and usual practices. First of all, apprenticeships provide systematic, long-term and mainly company-based training by combining practical, work-related training at the workplace (more than 50%) with theoretical training at education institutions. The legal basis for apprenticeship has existed since 2008, but implementation has been slow so far. Still the employers and other stakeholders have lack understanding of long-term benefits of apprenticeship. Companies have little information about the benefits of apprenticeship. Currently there is no mechanism in place for financial support of companies taking up apprentices or learners for WBL. This is one of the core pitfalls that prevent a wider spread of apprenticeship-type schemes in the VET system<sup>25</sup>.

Funding for formal IVET is allocated from the State budget. Training costs are calculated per student as approved by the government in 2008. This methodology determines the level of direct funding needed for training per learner enrolled in a formal training programme for one VET academic hour. The unit costs (the so-called 'student basket') include allocations for staff salaries

<sup>24</sup> Lukas Geležauskas, Simas Simanauskas, Lina Vaitkutė (2014). Apprenticeship-type schemes and structured work-based learning programmes. Lithuania. Kvalifikacijų ir profesinio mokymo plėtros centras.

<sup>25</sup> Apprenticeship review LITHUANIA Signposting the apprenticeship path in Lithuania. Luxembourg: Publications office of the European Union, 2015

and social insurance, in-service training of teachers and funding for acquisition of various training resources, including practical training. The latter category is calculated using a coefficient that varies depending on the programme area. Funding is allocated to the VET provider based on the actual number of learners multiplied by the number of hours for implementing the programme and costs of a training hour. Unit costs for learners with special needs are defined separately<sup>26</sup>.

## 4.4 The Polish VET System (module 1+2)

By

**Jan Kamiński, Dolnośląskie Kuratorium Oświaty**

**Iwona Machoń-Pluszczewska**

**Fundacja Krzyżowa dla Porozumienia Europejskiego**

The Polish VET system for which the Minister of National Education is responsible is provided at upper secondary and post-secondary non-tertiary levels. VET at higher education level is in the scope of responsibility of the Minister of Science and Higher Education.

Vocational education in Poland is a component of formal education system which is introduced in the Eurydice publication entitled “The System of Education in Poland” (2014).

Since 1 September 2012 there is a new structure of secondary education introduced by an amendment of the Act on the Education System of 19 August 2011.

Graduates from lower secondary schools can choose one of the three types of schools<sup>27</sup>:

- a 3-year general secondary school (liceum ogólnokształcące), preparing for the matriculation exam (matura) necessary for admission to higher education;
- a 4-year technical secondary school (technikum), preparing for the matura exam and external examinations confirming vocational qualifications required for a specific profession,
- a 3-year basic vocational school (ZSZ), preparing for exams in vocational qualifications required for a specific profession<sup>28</sup>.

From 1 September 2012 in the structure of education are the following types of secondary schools implementing vocational training:

- a 3-year basic vocational school,
- a 4-year technical school,
- a post-secondary school for people with secondary education, with a study period not exceeding 2.5 years
- a 3-year special school job training.

VET students may take external exams confirming vocational qualifications which are conducted separately for each qualification specified in a given occupation. The exams are organised during the learning process, not only at its end as it used to be. After passing each external exam confirming vocational qualification, students obtain a certificate confirming one particular qualification. Only after they pass exams for all qualifications required in an occupation (1, 2 or 3) and achieve a required education level, they receive a diploma confirming vocational qualifications. Upper secondary technical school enables also taking so called maturity exam

<sup>26</sup> VET in Europe–Country report (2013). Qualifications and Vocational Education and Training Development Centre with contributions from members of ReferNet Lithuania.

<sup>27</sup> The System of Education in Poland, Chapter 5. Secondary Education, EURYDICE, 2014

<sup>28</sup> Legal framework: Regulation of the Minister of National Education dated. December 23, 2012 r. On the classification of vocational education training (Dz. U. of 2012. No. 2, pos. 7, as amended. D.)

which gives entrance to education at tertiary level. Graduates of basic vocational schools can upgrade their knowledge in 3 year upper secondary general schools for adults (LO dla doroslych) starting with the second grade. They may also upgrade their skills or gain new qualifications (requalify) at vocational qualification courses leading (after passing an exam) to qualifications.

At post-secondary non-tertiary level graduates of general and technical upper secondary schools can gain vocational qualifications in a post-secondary school (szkola policealna) where learning process does not last longer than 2,5 year. Polish VET at technical schools and post-secondary schools is mainly school-based with the share of practical training in total VET programme of 50%, whereas in basic vocational schools the proportion of practice to theory is 60% to 40%. Apprenticeship training is chosen by approximately 60% of students in basic vocational schools. It is organised in small and medium enterprises, mainly in handicrafts. After passing the external exams in crafts, apprentices obtain apprentice certificate (swiadectwo czeladnicze) or, if their employer does not belong to the Polish Craft Association, they pass exams at Regional Examination Boards and obtain diploma confirming vocational qualifications.

Existing basic vocational and technical schools for adults since 1st September 2012 are being replaced by more flexible system of VET courses for adults organized: mainly by IVET schools, continuing education centres and practical training centres.

VET for adults is organised mainly in out-of-school forms, such as:

- a) vocational qualification courses. Completing a vocational qualification course allows to take an external examination confirming vocational qualification, conducted under the same conditions and according to the same rules as for IVET students.
- b) occupational skills courses – courses for separate units of learning outcomes specified in a given qualification.
- c) other courses related to occupations included in the classification of occupations and specialisations meeting labour market needs, including courses conducted in cooperation with labour offices.

Apprenticeship for Adults is in the scope of responsibility of the Minister of Labour and Social Policy. The aim of this particular active labour market programme, provided by the Local Labour Offices, is to improve employability of unemployed and job seekers, by helping them to confirm their skills and qualifications formally.

According to our research vocational training system in Poland has been based mainly on theoretical education, whereas the acquisition of practical skills has been limited to the practical vocational training in school and several weeks of practice with employers, the length of which depends on the particular occupation. The consequence of such system of apprenticeship is very often with no reference to the realities of the labour market and with a structural mismatching between the educational offer to the requirements and demands of employers, who complain that graduates of vocational schools lack practical competences to an occupation. Priority actions should therefore be striving to increase the efficiency of the educational offer of vocational training in order to prepare young people to enter the labour market much better, and in particular to develop the practical training in conjunction with employers.

Increasing the relevance of vocational education and training to the labour market has been recently a very important policy focus in Poland, which has several aims to work on:

- 1) to strength cooperation between vocational schools and employers;
- 2) to engage employers in curriculum development and assessment of vocational qualifications;
- 3) to attract highly qualified specialists to work in vocational schools;
- 4) to increase the quality of vocational education by adapting it better to the economic environment;



- 5) to strengthen cooperation between vocational schools and employers; to engage employers in curriculum development and assessment of vocational qualifications;
- 6) to attract highly qualified specialists to work in vocational schools;
- 7) to increase the quality of vocational education by adapting it better to the economic environment.

The need to improve the effectiveness and relevance of vocational education and training system and adjust it to the needs of employers and the labour market is the most important reason for changes which were introduced in 2012 on the basis of the legislation adopted in 2011. Reform of the VET systems are to be fully implemented by 2016/17.

The main changes include<sup>29</sup>:

- 1) a new classification of occupations in VET and definition of a register of occupations possible to acquire within initial and continuing VET. Occupations are now described in terms of qualifications. Within particular occupations one, two or three qualifications are distinguished. Students and adult learners can acquire qualifications one by one throughout the whole education process and not only upon the completion of the school as was the case before the reform. Examinations confirming vocational qualifications are held at different stages of education, making it possible for the students to receive a certificate for a single qualification. After passing examinations for all the qualifications required for a given occupation, and having completed the required level of education, the students receive a vocational diploma. Until 2017 it will be possible for the graduates of vocational schools who followed the programme according to the previous VET core curriculum to take the “old” version of the vocational examination.
- 2) a re-orientation of the VET core curriculum towards learning outcomes
- 3) a requirement to seek advice from regional and district employment councils on introduction of new occupations by VET schools
- 4) a monitoring programme (*Monitoring and Improving the Implementation of New Core Curricula in VET*) to gather information on implementation of new VET curricula.

Minister of Education Anna Zalewska introduced the plans of changing the VET in Poland during the conference in Wałbrzych 27 June 2016. There are plans of the establishment **branch schools**:

“First degree Branch School

- obtaining a vocational qualifications diploma upon graduation and after passing exam on one qualification,
- reducing the number of qualifications to one qualification for a first degree branch school
- continuation of education in second degree branch school industry Second degree Branch School
- vocational training can take place in the professions, which are the continuation of education in the first degree
- limiting the number of qualifications to two in the second degree branch school
- receiving a diploma of technician after passing an exam on the second qualification, and after graduating from school
- completing school gives vocational secondary education
- joining the vocational leaving school examination (vocational “matura”) - after obtaining the title of technician
- “matura” will include Polish language classes, foreign language and mathematics”<sup>30</sup>

<sup>29</sup> Education Policy Outlook: Poland, OECD 2015

<sup>30</sup> The presentation of Ministry of Education from the website: <https://men.gov.pl/ministerstwo/informacje/zmiany-w-ksztalceniu-zawodowym-dla-rynku-pracy.html>

The Minister of Education has announced lately such changes as gradual introduction of a dual system of education, involving employers in the process of training and examinations, establishment of branch school at two levels, the creation of the Corps of experts and a special Fund for the Development of Vocational Education.

The Chart below presents the VET system in Poland which is from 1<sup>st</sup> September 2012 but as it was said by Minister of Education Anna Zalewska it would be changed in 2017.

VET system in Poland from 1<sup>st</sup> September 2012

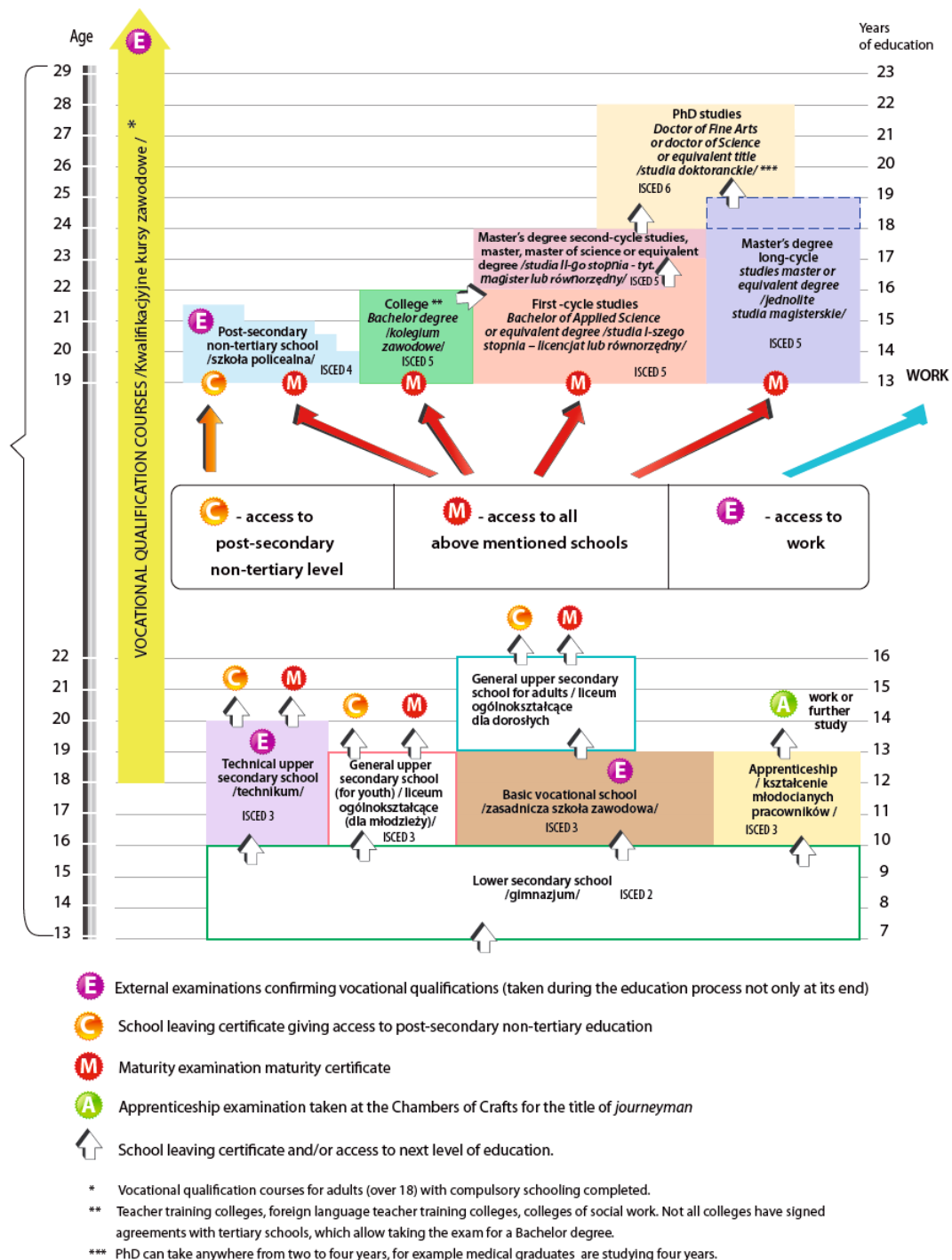


Chart. VET system in Poland, source: <http://www.eqavet.eu/gns/what-we-do/implementing-the-framework/poland.aspx>

## Vocational training in the dual system

Regulation of the Minister of National Education of 11 August 2015 amending the regulation on apprenticeship (Dz. U. of 2015., Pos. 1183) thoroughly amended the Regulation of 15 December 2010 On Apprenticeship.

The changes allow the implementation of practical vocational training in the dual system in every type of school provides vocational training. The changes are to encourage school principals to be more active in establishing contacts with employers.

The amendment to the regulation on apprenticeship determines, among others, that:

- in vocational schools the number of hours of practical classes, completed in employers on the principles of the dual education system cannot be lower than the minimum number of hours of practical training (...)
- in post-secondary schools and technical schools, the number of hours of practical classes, completed in employers on the principles of the dual education system cannot be lower than 30% and not more than 100% the number of hours of practical training (...).

In a case of practical training which is completed in employers' companies on the principles of the dual education system, the employer can report requests to the content of the curriculum, in terms of practical activities, which are executed with the employer to head teacher. This can be done in the manner specified in the agreement on practical vocational training, signed by the head teacher of the vocational school and the entity receiving the students for practical training.

In accordance with the applicable laws of the educational task of career and educational consulting - training in the area of psychological - pedagogical was included in schools. This assistance is provided during the current work with the student in the form of activities related to the choice of the direction of education and profession and career planning.



## 5. Establishment of partnerships and networks for the benefit of the dual vocational training (module 3)

- Introduction – definitions, aims, main assumptions of partnerships
- The selection of institutions/ actors to the network for dual education

By

Alicja Przepiórska, Iwona Machoń-Pluszczewska, Aleksandra Wójcik  
Fundacja Krzyżowa dla Porozumienia Europejskiego  
Jan Kamiński, Dolnośląskie Kuratorium Oświaty

### Establishment of partnerships and networks in favour for dual vocational training

#### 5.1 Introduction

The research within a framework of the Erasmus + project entitled “Strategic Partnership for dual system” was carried out among specific target groups, representing employers, business institutions, labour market institutions, vocational schools and students. Its purpose was to examine the situation in the area of vocational training, its quality, defining mutual needs and expectations of communities and identify critical areas requiring improvement, in order to improve the condition of the Polish vocational education and its quality. An important role



is assigned to building and developing cooperation in the line of employer-school-student. The research revealed that most of employers face some sort of skills-related inadequacy of the VET graduates who look for job and want to enter labour market. Companies complain that VET graduates lack vocational skills and express dissatisfaction with the quality of skills held by graduates of the vocational schools which are not involved in mutual cooperation with companies.

Despite of the high unemployment rate among young people, a lot of employers, who look for workers, are exposed to problems in finding appropriate people. Employers expect professional experience and specific competence skills, such as communication skills, high motivation and commitment, good organization of their own work, the ease in building and maintaining long-term relationships and self-reliance. Therefore the biggest problems in vocational education and training are as follows:

- Lack of consistency between the education system and the needs of employers, which is one of the most important causes of unemployment of graduates, or their work in positions unrelated to their education;
- Failure of education programs to the needs of the labour market due to the dynamic changes taking place in the area of economy and in individual enterprises, which in turn results in rapid obsolescence of educational programs and curricula;
- The insufficient link between theory and practice in VET;
- Lack of opportunities to gain work experience during learning, being caused by a small number of hours of practical vocational training and vocational placements in the curriculum.

Most of the companies surveyed in our research expressed their willingness to engage in cooperation between schools because they would like to have impact on the design of courses and curriculum in vocational schools. Thanks to mutual cooperation curricula in partner educational institutions could be up-dated, and companies could see more value in hiring graduates of such schools. The vocational training system needs to bring vocational schools and industry closer together in designing vocational training. The partnership between the education authorities, schools, the social partners, chambers and the business community is a key characteristic of the dual system, therefore creating and building strong partnerships is so essential for employers and schools, particularly in terms of the ongoing evolution of the dual training system. Therefore there is a need to look for the best solutions of cross-sectoral partnerships establishment and development, discuss the key elements in ensuring active partnership, identify partners and their needs, and choose the model of the management defining the rules of cooperation.

As a result of the project, the established cooperation between the partners of the project, who shared their experience created a strong belief, supported by the results of research and analysis of the situation in Poland and Lithuania, that building partnerships is essential to the implementation of the strategy to improve the quality of vocational education - from the point of view of parties of the student-school-employers stakeholders:

The model of dual education contributes to improving the quality of vocational training, first of all including the quality of competencies that the students acquire during the cycle of learning profession and thus to improve the satisfaction of employers with the level of preparation of students to function in the modern enterprise and increase the employability of graduates of vocational schools.

The basis for all actions aimed at achieving success is finding reliable partners to cooperate, defining a common goal of activities and the way of its implementation, so that the interests of all parties can be protected. This publication aims to support future users in their efforts to create partnerships and networks for the benefit of dual education.

This chapter, which is dedicated to the creation and development of partnerships and networks for the benefit of the dual vocational training, is divided into 4 parts:

- Part 1 contains a definition of partnership, describes the main features of the partnership and its practical aspects,
- Part 2 concerns the process of networking and the principles and standards of cooperation,
- Part 3 focuses on education cooperation with business and other institutions for the benefit of the dual system, presenting forms of cooperation between schools and employers, barriers to cooperation, its potential and opportunities,
- Part 4 presents some examples of good practice.

## **5.2 Principles of building partnerships and networks: definitions, characteristics of partnerships and networks.**

First of all, building a partnership requires a good and precise definition of the objectives we want to achieve, planning of the individual steps and actions to be taken and which bring us closer to achieving the goal and also determine the benefits or results and effects of these activities, identify stakeholder groups, without which the achievement of the goal would be impossible, and that have the potential for the establishment of such partnerships- substantive, technical, financial and human resources.

### **So what is a partnership? What potential has a partnership? Why the “partnership” is necessary?**

The concept of “partnership” has become a term widely occurring particularly through projects measures, occurring mainly in projects and thanks to European Union projects and aimed at achieving sustainable development, the achievement of the common good and social responsibility. Partnership as a mutual action in favour of common objectives, interests, stakeholders. It also aims to support many entities and organizations, becoming a great tool used for joint initiatives and work. The partnership ensures the effectiveness of activities and a variety of benefits, provides a multifaceted approach to issues and solving problems, it draws from a wide range of partners’ experience and provides the added value of mutual learning.

### **What are the benefits of establishing partnerships and tasks in the partnership?**

On the basis of data compiled by the Foundation “Education for Democracy” partnership brings the following benefits:

‘Solution to local problems, activation of communities and increase awareness, improving qualifications, access to certain networks, markets and target groups, the ability to affect the established policy and decision makers, access to new funding opportunities, sharing skills and experience and the creation of new resource development and capabilities, benchmarking, i.e. comparison of the best promotion of the region, to minimize the risk and sharing it, change / increase the value and quality of the profile of the organization, the effects cascade-one person,

group of people or organization activates another, new jobs, access to new ideas and experiences of others, and move them to their own communities.’<sup>31</sup>

Scientists recently the subject of partnerships claim that inter-institutional partnerships, involving representatives from government, NGO, employers or others, are essential in the process of stakeholder engagement and ‘can lead to creative solutions to problems that affect all stakeholders’<sup>32</sup>

## Definition of partnership

The term ‘Partnership’ in The Encyclopaedia Britannica, ed. from 1990 :

‘Partnership, a voluntary association of two or more persons for the purpose of managing a business enterprise and sharing its profits or losses’, ie: ‘Partnership, a voluntary association of two or more people whose aim is to carry out the project and sharing its profits or losses’.

“This is the definition of partnerships in this, perhaps, the most remarkable encyclopaedia that exists in the world. In fact, nothing more, nothing less. Everything is said, succinctly and clearly. (...) Being an encyclopaedic definition has the dimension of a single, short sentence. (...)” Said Jerzy Marchwiński, musician, pianist, teacher during the Conference Scientific and artistic in April 2014. He also appointed 12 elements needed to create a comprehensive picture of the partnership. “These are:

1. Common, mutual responsibility for the whole work
2. Mutuality
3. Understanding partners
4. Openness to dialogue
5. Willingness to understand the partners’ differences
6. The inner space
7. The ability to hear yourself and your partner simultaneously
8. Culture of being with another person
9. Tact in resolving tensions
10. The ability to accept a compromise
11. Trust and respect for partner
12. The understanding of the imperfections of the partner and ours “.<sup>33</sup>

The material collected by the Centre for European Projects in Warsaw, the publication ‘Partnership without borders’ quotes several other definitions of partnership, each pointing to a joint action, community, collaboration, cooperation and co-decision.

According to the Dictionary of Polish PWN ‘partnership is participation in something’. The report of the ad hoc group on the partnership Member States states that [...] “partnership is based on the experience that multi-dimensional problems can only be solved when organizations with complementary and supporting profiles and competencies actively cooperate, developing synergies, sharing ideas, objectives, risks, opportunities, obligations and tasks, as well as competence and resources. The partnership is thus creating ‘bridges’ and ‘interfaces’ [...] that combine various services and supporting structures.”<sup>34</sup>

<sup>31</sup> „Partnerstwo- konieczność czy potrzeba” Fundacja Edukacja dla Demokracji, Warszawa 2008

<sup>32</sup> . „Partnerstwo, jako narzędzie społecznej odpowiedzialności biznesu” Joanna Woźniczka 2013

<sup>33</sup> Jerzy Marchwiński, „Definicja partnerstwa” Warszawa 2014

<sup>34</sup> Za: Centrum Projektów Europejskich, Partnerstwo bez granic/Partnership without borders“, Zasada partnerstwa w nowych

Partnership as a strategic alliance of organizations that represent various sectors is built in order to start cooperation, implement mutual projects and achieve joint goals. Partnership is not formed so independently - each participant in the partnership has clearly defined rights, responsibilities and tasks. The role of each partner is determined and irreplaceable. Each partner brings their own resources and skills that allow the partnership to achieve synergies. Participating in the process of implementation of jointly established mission and mutually defined objectives, and what is more risk-taking collectively, brings all the advantages and benefits with down-scaled input of human resources, time or finances.

Defining partnership and the principles of cooperation the United Nations indicates 'a voluntary and cooperative relationship between the sectors in which the partners agree to work together to achieve a common goal or undertake a specific task and to share risks, responsibilities, resources, competencies and benefits.'<sup>35</sup>

Cooperation in the partnership is based on the fundamental principles that will make it successful. These are:

1. Effectiveness - efficiency, purposefulness of action
2. Transparency - access to information, transparency of procedures, decision-making
3. Partnership as equivalence – mutual achievement of the objectives
4. Subsidiarity – help, support
5. Sovereignty of the parties- independent performance of their tasks
6. Fair competition - equal access to information, equal treatment in access, eg. finances

The partnership is based on a trust, responsibility to the individual elements-tasks as well as for the entire project. Cooperation and identify not only with our own parties, but the partnership as a whole, have the highest value. The key principles of partnership working are mutual action, interaction and understanding. Understanding - the attitudes, needs and constraints of the partner can take advantage of individual characteristics, resources and experience of the organization, to create a wide range of cooperation of that partnership.

With more opportunities being created for partnership, there is recognition that there can be increasing benefits including wider collaboration, additional funding, mutual advantage and resources accessed through partnerships.

The partnership is not only a brand created for the 'outside world', it is also a space created for and by the partners themselves, which is to ensure their seamless development and agreeable cooperation which is free of encumbrances such as political, historical, philosophical and racial burdens and discrimination based on sex or disability. The ruling in the partnership principle of mutual communication is to ensure the mutual respect of the right to listen to each other actively and with understanding. Acceptance of diversity and freedom of expression, agreement to a compromise that is a factor which provides colourfulness for the partnership.

The most important elements of the partnership is therefore cooperation, voluntarism and active joint action, mutual objectives, common investment of resources, sharing the risk and benefits.

An important issue is also the search for innovation and focus on long-term cooperation.

The partnership requires a duality of at least two partners, but it is not numerically limited.

---

programach EFS(2007-2013), Ramy programowania, czerwiec 2006

<sup>35</sup> Definicja z raportu Zgromadzenie Ogólne w 2003 r. za K.Kwiera, R.Bukowska „Partnersstwo w Leaderze“ Małopolska sieć LDG 2009 s. 8

**On the occasion of the creation of the partnership the concept of networking also appears.**

### **What is a network of cooperation?**

‘The network is a system that allows contacts, exchange of views, access to information, collaboration and cooperation to facilitate an investigation into the expected results in a long-term, systematic, based on trust and reciprocity. This process is a process and act in a non-hierarchical structure’.<sup>36</sup>

We speak often of cross-linking, networking establishment, networking cooperation and networking. Giving the Encyclopaedia of Management ‘networking is establishment of contacts and maintaining positive relationships for the exchange of information and mutual support in the professional sphere’.<sup>37</sup>

The network meets various functions such as building a sense of power and influence, achievement and affiliation. Belonging to a network gives an institution acceptance, but also a sense of security and a social support. It departs from the principles of territoriality, cyclical meetings ‘face to face’ or the number of members of the same network.

Quoting a participant of the conference ‘Teachers as a learning community professional’, purpose of the network is ‘solving problems together, share ideas, thoughts and suggestions - both through the internet platform treated as a forum for the exchange of experiences and personal meetings’.<sup>38</sup>

One of the most developed and integrated forms of networking are clusters. Polish word „klaster” is derived from the English ‘cluster’, which means group of similar objects that are close to each other. “Dictionary of regional development” defines a cluster as ‘spatially concentrated assemblies cooperating and supporting enterprises, mainly small and medium ones, associated usually with of university or another scientific research entity’.<sup>39</sup>

Clusters are therefore examples of institutions in the network, based on the principles of creating partnerships that work on development and innovation, which, acting on the principle of cooperation and interconnections become competitive. Using the cluster structures one can exploit opportunities to create support structures and the exchange of knowledge and experience.

In Polish culture of cooperation a cluster is defined as a ‘spatial and sectoral concentration of actors for economic development or innovation and at least 10 businesses from one or several neighboring regions, competing and co-operating in the same or related industries and associated in extensive network of relationships in the formal and informal nature. At least half of entities operating within the cluster are entrepreneurs’.<sup>40</sup>

---

<sup>36</sup> . M. Hajdukiewicz, Nauczyciele jako ucząca się społeczność zawodowa, ORE Warszawa 2012 Prezentacja , dostępna na internetowej stronie ORE [http://www.ore.edu.pl/strona-ore/index.php?option=com\\_phocadownload&view=category&id=142:nauczyciele-jako-uczca-si-spoeczno-zawodowa&Itemid=1017](http://www.ore.edu.pl/strona-ore/index.php?option=com_phocadownload&view=category&id=142:nauczyciele-jako-uczca-si-spoeczno-zawodowa&Itemid=1017)

<sup>37</sup> . Encyklopedia Zarządzania <http://mfiles.pl/pl/index.php/Networking>

<sup>38</sup> . O potrzebie tworzenia sieci współpracy i samokształcenia w doskonaleniu nauczycieli kształcenia zawodowego, Włodzisław Kuzitowicz

<sup>39</sup> . [http://www.wsz-pou.edu.pl/magazyn/index.php?strona=mag\\_berniak55&p=](http://www.wsz-pou.edu.pl/magazyn/index.php?strona=mag_berniak55&p=)

<sup>40</sup> . Ministerstwo Gospodarki , Rozporządzenie z dnia 11 grudnia 2006 roku

### **School partnerships with business and other institutions for the benefit of the dual system: forms of cooperation between schools and employers, barriers to cooperation and the potential and possibilities.**

Good cooperation between upper secondary schools and employers benefits each party. Employers are given the opportunity of acquiring well-prepared graduates to work in their profession, as a result of ongoing apprenticeship the companies can recruit the most talented students and replenish their Staff. What is more, such cooperation gives employers the opportunity to promote the company, its brand and product. The school benefits from the so-called. "Sponsorship" by equipping classrooms by employers, or collaborating with curriculum development and participating in specialized training for teachers conducted by employers. But the biggest benefit of this cooperation are the students – who are the reason for the partnerships between vocational schools and employers. With the active cooperation between school and employers students have the opportunity to acquire practical skills in a real work environment, to touch of modern technology and raw materials. Also they can get a unique opportunity to learn social skills expected by employers such as a positive self-presentation, team cooperation, communication and self-presentation.<sup>41</sup>

Quoting the Ministry of National Education 'in the system of vocational education in the school year 2014/2015 there were 3994 upper secondary schools providing vocational training for young people, including 1957 a four-year technical schools, 1,684 three-year vocational schools and 353 post-secondary schools. The current legal situation in the field of economy and in the area of education allows to take actions aimed at better matching of vocational education to the needs of the economy, including the development of cooperation between employers operating in special economic zones with schools and institutions of education system leading vocational training'.<sup>42</sup>

Polish legislation provides ample opportunities for cooperation of secondary schools and enterprises. These are:

- Curriculum development
- Conducting vocational training
- Implementation of professional examinations

In order to increase the involvement of employers in vocational education and training the provisions of the Act on Special Economic Zones (SEZ) have been changed which introduced new tasks for the SEZ management. Managements of SEZs have been obliged to take action to establish educational clusters and to cooperate with schools and universities, taking into account in the process of training needs of the labour market in the SEZ.

01.23.2015 Agreement was signed between four ministries (Education, Economy, Labour and Social Policy, Treasury) to strengthen and streamline actions conducive to education to training. It regulates the principles of cooperation on the line employer – the VET school. 'Cooperation is aimed at activating vocational schools to adapt general education and vocational training conducted by them to the needs of a modern economy and to activate employers to become involved in the process of vocational training in basic vocational schools (ZSZ), technical schools and post-secondary schools. It involves:

---

<sup>41</sup> Współpraca szkół zawodowych z pracodawcami przykładowe rozwiązania SZKOŁA ZAWODOWA SZKOŁĄ POZYTYWNEGO WYBORU WYBORU, Autorzy: Paulina Zaręba, Renata Kępczyk, Jolanta Misztal, Małgorzata Hadrian, Adam Biernat KOWEŻIU Warszawa 2013

<sup>42</sup> Ministerstwo Edukacji Narodowej, Informacja MEN o współpracy Specjalnych Stref Ekonomicznych (SSE) ze szkołami zawodowymi, Warszawa 05.03.2015



- establishment of educational clusters in SEZ
- participation of employers in the creation of curricula for occupations
- development of curricula in cooperation with schools
- accepting students for apprenticeships
- participation in the exams of formal qualifications of the occupations and creating examination tasks
- helping students of vocational schools in the acquisition of additional (non-school) program useful in enterprises, (on skills and professional qualifications)
- helping teachers of vocational schools in updating and improving their professional competence.<sup>43</sup>

Regulated involvement of employers and schools legally to build relationships, establish partnerships and networking is designed to implement complementary projects to support the development of vocational education. Modern vocational education must be tailored to the needs of the local labour market, the needs of employers and the modern economy, open to cooperation of vocational schools with employers and thus encourage employers to engage in the implementation of apprenticeship.

Forms of cooperation between vocational schools and employers:

- Partnerships of knowledge- cooperation of vocational schools with their surroundings (employers, labour market institutions, universities)
- Adapting the educational offer in schools and extracurricular forms to the needs of labour market including training new occupations / qualifications, such as:
  - a) analysis of the current situation on the regional and local labour market,
  - b) forecast the demand for skills and qualifications,
  - c) an overview of education in schools and school forms
- equipping schools and institutions
- the development of vocational counselling
- the creation of classes of patronage in schools
- Curriculum development
- Organising internships and apprenticeships for students
- organising of extracurricular activities for students
- improvement of vocational education teachers through access to modern technology and techniques, and to provide teachers with training opportunities to update their knowledge through direct contact with the real working environment - the organization of internships in companies (Lasting a minimum of 40 hours)

In addition, cooperation with employers is accompanied by:

- implementation of extracurricular forms of education professionally - qualifying vocational courses, professional skills courses,
- organization of courses of professional skills for students to increase their opportunities for future employment
- additional special classes organized in cooperation with actors from the socio - economic development, enabling students to obtain and supplement the knowledge, skills and qualifications
- support for students, including the acquisition of additional rights increasing their chances on the labour market
- educational Clustering

<sup>43</sup> [https://men.gov.pl/wp-content/uploads/2015/01/porozumienie\\_o\\_wspolpracy\\_23.01.14.pdf](https://men.gov.pl/wp-content/uploads/2015/01/porozumienie_o_wspolpracy_23.01.14.pdf)

### What is a patronage class?

It is an example of beneficial cooperation between vocational school and the entrepreneur. The parties have an agreement that the company covers the care of selected branches in schools with profiles in line with its activities.

The signed agreement guarantees the employer that its expectations are taken into account when creating the curriculum for the class. Within the patronage the practical training may be done in whole or in part with the employer. It uses the machinery and equipment of the patron, organizes specialized courses and workshops for students and teachers. Often the company equips patronage class, also endows scholarships to students. It happens that it covers the insurance costs of students, pays for textbooks, buys the necessary clothing and donates prizes unions. The most talented graduates are then guaranteed a job in the company. The best pupils attend the patronage classes and they are guaranteed by the biggest companies in the region to gain knowledge and skills to find their place in the labour market after completing their education. The patronage class makes event apprenticeships and paid internships holiday possible. The development of Lower Silesia depends on new investments on its territory. Model cooperation of industry and vocational education can attract these investments.<sup>44</sup>

### What is an educational cluster?

Educational clusters are formed at Special Economic Zones (on the basis of the Agreement on cooperation in the development of vocational training dated. 01.23.2015 r. between Ministry of Economy, the Ministry of Education, Minister of Labour and Social Policy and the Minister of State Treasury). Cluster works to improve the quality of vocational education and its adaptation to the needs of the modern economy and local labour markets. Its aim is to combine the economic, educational and scientist potentials. Clusters are focused on vocational schools, businesses, counties and stakeholders interested in vocational training, Chamber of crafts, enterprise incubators and others. Cluster members jointly participate in the “process of shaping the awareness and create a vocational education on higher positive selection with the ability to pursue career paths based on the development of key competences required by employers”.<sup>45</sup>

## 5.3 Examples of good practice:

### 5.3.1. An example of good practice in the cooperation of schools and businesses

**Cluster Training “INVEST in Communities”** was established in February 2015. On the initiative of the Ministry of Economy and the Wałbrzych Special Economic Zone “INVEST-PARK”. Currently, it operates in 76 subjects. Among them there are businesses, educational institutions, local government units and institutions. Educational cluster was established to adapt education to the needs of entrepreneurs - pooling of economic, scientific and educational in favour of training and adapting it to the needs of the economy and local labour markets. The main task of the Cluster is forecasting demand for specific occupations, adapting education to the needs of enterprises and to increase access to apprenticeships and traineeships. According to research by the Wałbrzych Special Economic Zone, the company operating in the area, are planning to hire in the next few years, about 6 thousand. specialists. Particularly sought after are, among others, painters, mechanics, electromechanics, machine operators, welders, sewing technicians, fitters,

<sup>44</sup> <http://www.dolnoslaskie.doradztwo.koweziu.edu.pl/index.php/126-klasy-patronackie-przyszlosc-edukacji-dzisiaj>

<sup>45</sup> <https://investinedu.com.pl/wp-content/uploads/sites/2/2015/10/Regulamin-Klastra-Edukacyjnego-INVEST-in-EDU.pdf>



electricians and electronics engineers. Thanks to the cooperation of businesses and schools, vocational training has become more efficient and modern.

The leader of the Cluster is Wałbrzych Special Economic Zone “INVEST-PARK” and its chairman is the director of the School of No. 5 in Wałbrzych.

Institutions interested in joining the Cluster signed a declaration partnership. 27 schools, 26 businesses, companies located in the area of the WSSE and 22 other entities (municipalities, counties, institutions about business, labor offices) entered the cluster INVEST in EDU.

Cluster Training has become a driving force stimulating changes in the way vocational training specifically geared to the needs of businesses. Coordination of cooperation between the school and the entrepreneur will allow the education and skills of professionals in the use of advanced machinery, equipment and operations. Cluster WSEZ became a model and is used as a good example in the forthcoming reform of vocational education prepared by the Ministry of Education. Now, these activities have honorary patronage of the Minister of Development, Mateusz Morawiecki.

As part of the cluster they created two classes of patronage educating the fields’ operator of machine tools. “ This year, we announced the creation of subsequent classes of related professions: upholsterer, tailor, locksmith, mechanic and operator of machines for plastics processing.

As part of the CLUSTER held:

- Meetings for directors of secondary schools and vocational counselors devoted to the promotion of vocational education (Boleslawiec, 04/03/2016)
- Visits students in the workplace: GE Power Controls and KPM furniture Kłodzko - vocational trips for high school students (Kłodzko, 03/22/2016)
- And Rally Zone. The event is aimed at middle school students, participants of the rally took part in the classes, prepared by the scientific circles Wrocław University of Technology, the stands were secondary schools, and Toyota Motor Manufacturing Poland, Ronal, Faurecia and Quin, invited young people to visit their plants. (18./19.04.2016)
- Education Cluster meeting “INVEST in EDU”

### 5.3.2 Legnica Special Economic Zone

The special economic zone established by the Council of Ministers of 15 April 1997. It includes 18 sub-zones (4 at the beginning ) located in the central part of Lower Silesia. They occupy a total area of 1200 hectares. The main objectives of the establishment of SEZ are to create alternatives to the copper industry in the Legnica-Głogów Copper District (hence the location of the first three of the 3 sub-zones: Legnica, Lubin and Polkowice) and the management of facilities occupied until 1993 by the troops of the Northern Group of Forces of the Soviet Army (location of the fourth subzone in Krzywa near Chojnow). Another sub-zones were created with the aim to reduce unemployment resulting from the closure of the companies which used to be major employers in smaller towns (Złotoryja, Chojnów, in plans also Prochowice) and to enable further investments in the immediate vicinity of the existing sub-zones (Legnickie Pole, Sroda Slaska)

## Lower Silesian Educational Cluster

Educational Cluster of the Legnica Special Economic Zone was established in Legnica Special Economic Zone on 9 April 2015 r.

The cluster is created by a group of 67 partners: business enterprises, vocational and technical schools, universities, local governments, regional authorities, the Chamber of Craft and the Board of Education.

The main objectives of the Lower Silesian Educational Cluster partners of is work for young people through practical apprenticeship implemented through a dual system of education and class patronages.

### Partners of Lower Silesian Educational Cluster

1. Legnicka Specjalna Strefa Ekonomiczna SA (Legnica Special Economic Zone)– leader of the cluster Ministries,
2. Ministry of Economy, patronage
3. Ministry of National Education, patronage Public institutions, local governments and chambers:
4. Urząd Marszałkowski Województwa Dolnośląskiego (Office of The Marshal of The Lower Silesian Voivodeship)
5. Kuratorium Oświaty we Wrocławiu (the Board of Education in Wrocław)
6. Gmina Legnica (Communal Office of Legnica)
7. Gmina Iłowa
8. Powiat Legnicki (County district of Legnica)
9. Powiat Głogowski (County distric of Głogów)
10. Powiat Średzki (County district of Środa Śl.)
11. Powiat Wrocławski, ul. Kościuszki 131, 50-440 Wrocław
12. Powiat Złotoryjski
13. Starostwo Powiatowe w Jaworze
14. Dolnośląska Izba Rzemieślnicza we Wrocławiu (Lower Silesian Chamber of Craft)
15. Dolnośląska Wojewódzka Komenda Ochotniczych Hufców Pracy (Lower Silesian Regional Headquarters of Voluntary Labour Corps)
16. Dolnośląski Wojewódzki Urząd Pracy (Lower Silesian Regional Labour Office)
17. Powiatowy Urząd Pracy w Legnicy ( County Labour Office in Legnica)
18. Powiatowy Urząd Pracy w Polkowicach (County Labour Office in Polkowice)
19. Powiatowy Urząd Pracy w Głogowie (County Labour Office in Głogów)
20. Powiatowy Urząd Pracy w Środzie Śląskiej (Conuty Labour Office in Środa Śląska)
21. Powiatowy Urząd Pracy w Złotoryi (County Labour Office in Złotoryja)

### Enterprises:

22. Sanden Manufacturing Poland Sp. z o.o.
23. FEERUM S.A.
24. Sitech Sp. z o.o.
25. C+P Systemy Meblowe Sp. z o.o.
26. Gates Polska Sp. z o.o.
27. Vorwerk Dichtungssyteme Polska Sp. z o.o.
28. Brugman Fabryka Grzejników Sp. z o.o.
29. CaseTech Polska Sp. z o.o.
30. Volkswagen Motor Polska Sp. z o.o. ul
31. HMT Polska Sp. z o.o. & Co. Sp. K.

32. Viessmann Technika Grzewcza Sp. z o.o. u
33. Schurholz Polska Sp. z o.o.
34. Faurecia Legnica S.A.
35. LG Electronics Wrocław Sp. z o.o.

High schools and universities:

36. Państwowa Wyższa Szkoła Zawodowa im. Witelona w Legnicy
37. Politechnika Wrocławska
38. Uniwersytet Ekonomiczny we Wrocławiu
39. Państwowa Wyższa Szkoła Zawodowa w Głogowie
40. Uczelnia Jana Wyżykowskiego w Polkowicach

Vocational schools, training institutions and other schools and educational institutions:

41. Zespół Technicznych i Ogólnokształcących w Legnicy
42. Zespół Szkół Budowlanych im. Wojska Polskiego w Legnicy,
43. Zespół Szkół Ekonomicznych im. Stefana Żeromskiego w Legnicy
44. Zespół Szkół Samochodowych w Legnicy
45. Centrum Kształcenia Zawodowego i Ustawicznego w Legnicy
46. Zespół Szkół Elektryczno-Mechanicznych w Legnicy
47. Miedziowe Centrum Kształcenia Kadr Sp. z o.o.
48. Zespół Szkół Nr 2, im. Jana Wyżykowskiego w Lubinie
49. Zespół Szkół Ogólnokształcących i Zawodowych im. Jana Pawła II
50. Zespół Szkół w Chocianowie
51. Zespół Szkół im. Jana Wyżykowskiego w Głogowie,
52. Technikum nr 6 w Głogowie
53. Zespół Szkół Ogólnokształcących i Zawodowych w Lwówku Śląskim
54. Powiatowy Zespół Szkół w Chojnowie
55. Zespół Szkół Agrobiznesu im. W. Witosa w Bolkowiu
56. Zespół Szkół Nr 1 im. prof. Bolesława Krupińskiego w Lubinie
57. Powiatowy Zespół Szkół Ponadgimnazjalnych Nr 2 w Środzie Śląskiej
58. Powiatowy Zespół Szkół Ponadgimnazjalnych Nr 1 im. Mikołaja Kopernika w Środzie Śląskiej
59. Powiatowe Centrum Kształcenia Zawodowego i Ustawicznego im. Komisji Edukacji Narodowej w Jaworze
60. Zespół Szkół im. Narodów Zjednoczonej Europy w Polkowicach
61. Zespół Szkół Politechnicznych w Głogowie
62. Zespół Szkół Ekonomiczno-Technicznych im. Kombatantów Ziemi Lwóweckiej w Lwówku Śląskim
63. Centrum Kształcenia Praktycznego w Oleśnicy
64. Zespół Szkół Zawodowych im. mjr Henryka Sucharskiego w Złotorii
65. Ośrodek Doradztwa Metodycznego i Doskonalenia Nauczycieli w Legnicy NGO
66. Rada Federacji Stowarzyszeń Naukowo – Technicznych Naczelnej Organizacji Technicznej „Zagłębia Miedziowego” w Legnicy
67. Związek Pracodawców Ziemi Jaworskiej

Lower Silesian Educational Cluster SEZ makes it much easier to forecast labour market needs for specific skills, competitions and increases the availability of apprenticeship. Cluster coordinates the activities of schools and companies very well, allowing them to cooperate in the class of patronage and implementation of dual education to business needs.

26 vocational and technical schools and 8 universities cooperating with the zone investors are located in the immediate vicinity of the Zone. Even before the Cluster was established, with the participation of Volkswagen Motor Poland, the profession of “mechatronics technician” was created on the basis of the dual system. The zone firms together with schools, among others, in Legnica, Chocianów and Sroda Slaska has set up 10 patronage classes implementing copyright education programs based on a dual system. Thanks to such close cooperation of Volkswagen Motor Poland and vocational school in Chocianow the school has implemented a system of dual VET system for students during the school year and teacher training school at Volkswagen during the summer holidays.

Thanks to partnership between schools and business zone educated professionals from industries present in the Legnica Special Economic Zone appear on the labour market. The system “Employers from the zone - dual education system - a school” guarantees finding a job and a development path of career.

### 5.3.3 The activities of non-governmental organizations for the promotion of vocational education

**Foundation ALAEA** - wing development was established in July 2015. To support and encourage career development and dissemination of technical knowledge in Poland in the field of machining and general mechanics. It was created in order to play the role of a strong connector of Polish mechanical engineering with schools, conducting training in mechanical engineering at all levels (vocational schools, technical, higher education). While maintaining a close relationship with the curricula of schools mechanical engineering and machining cutting, trying to give a new value for the competition and to facilitate the Polish graduates of technical schools, conducted by training, learn new, increasingly stringent industry requirements.

Foundation ALAEA form the representatives of employers and vocational education: the company Segepo-REFA from **Świebodzice** and School No. 5 in Walbrzych. Walbrzych Special Economic Zone cooperates with the Foundation.

Goals that set by the Foundation are as follows: to develop the knowledge and support young people's access to education employment and the labour market, to support institutions and educational activities, to promote sustainable development and activation programs, to support the implementation of projects of industrialization and research for the mechanical industry.

The Foundation works closely with the School No. 5, which is run by Segepo REFA patronage-class.

The activities of the Foundation ALAEA:

- 4 specialized seminars in the field of machining for students: innovative solutions in machining (11/24/2015), modern tools in machining 11/05/2015), the role of lubricants, oils in machining (01/20/2016), modern examples of control treatment cutting (02/29/2016)
- I interschool competition “TOP-Operator Mechanic”, raising the skills of students vocational and technical schools. The competition was organized by the Foundation for Development ALAEA-Wings from **Świebodzice** (05.04.04.2016)
- Departure of students to France (9 students from class. I IMS training to be the operator of machining with 3 teachers-carers and 2 staff Segepo-Refa) Program was: visit of students at the Fair SIMODEC, one of the largest Engineering Fair in Europe in the field of machining

and industrial group Segepo in France. (Segepo-Ademis in Grenoble, Segepo Sindre in Chatillon / Chalaronne and the group's headquarters in Saint-Segepo Lage (06.03-11.03.2016)

- Gala diplomas in the first edition of the technical "Top Mechanic - Operator Machining" The prizes were paid internships professional company Segepo-Refa, a trip to the Fair Metal Forum in Poznan, traveled to the center Guhring in Dabrowa Mining (world leader in the production of cutting tools), as well as suitcases with tools and shopping vouchers MediaExpert. The Foundation sponsors awards: ALAE, the company Segepo-Refa from **Świebodzice** and the company Optima Tools from Swidnica. (4/13/2016)
- 2 conferences: "Occupation With Future - Your Route Development" combined with a visit to the workplace: Segepo-REFA **Świebodzice**, SONEL, Cersanit, Toyota Nowakowski, VOLKSWAGEN in Swidnica, Walbrzych Citroen (07.05.2016 in Walbrzych, 14.05 Swidnica)
- OPEN DAYS Foundation ALAEA combined with a mini-workshops in order to better understand the various professions in the field of machining and mechanics. (16-20.05.2016)

### 5.3.4 Examples of classes patronage

#### Good Practice Firms Segepo-REFA

An example of exemplary cooperation of school and enterprise is the creation of the Team No. 5 in Walbrzych (popularly known as the "Mechanic") patronage class. Class with the operator of machine tools consists of 15 people. For students are provided with the opportunity to pursue internships and practices, they've got modern technology, paid internships holiday, reimbursement for textbooks and the purchase of protective clothing, foreign visits to a partner. Graduates in May will also have increased possibility of employment with the employer - the patron. Patronage class is the company Segepo - Refa from **Świebodzice**. French Segepo Group was established in the 60s, and from its inception to the present has got 4 plants in France and 1 plant in Poland and Turkey. Main business of the company is machining and turning.

#### Patronage Class GKN Driveline

The company GKN Driveline, High Schools in Oleśnica and the District Vocational Training Centre in Oleśnica strengthen their cooperation. December 17, 2015, acting within the framework of the Education Cluster INVEST in Communities entities have signed an agreement to create a patronage class: The operator of machine tools. Established Class: automatic industrial. The students, in addition to theoretical teaching profession in the school, will work within the framework of vocational training in the company GKN.

### 5.3.5 Other good practice

**Toyota Motor Manufacturing Poland** (Wałbrzych SEZ) has been cooperating with the Team No. 5 of M. T. Huber in Walbrzych. It organizes 2-week placements for students in grades III and one year of specialization for students in grades IV. By 2012, the practices were organized for pupils from the profile mechanic, after 2012 for pupils from the profile mechatronics technician. The curriculum for the profession is annually agreed with the school. The company also supports the teaching base school, workshop equipment and stations for professional qualification exams.



**Mahle Poland** (Wałbrzych SEZ) for many years has been organizing apprenticeships and summer student internships and apprenticeships for graduates. They created a special time called teacher trainer profession, which is a tutor to be completed by the students of vocational schools. The company is working with the Team Secondary School No. 3 where in 2000 the Basic Vocational School No. 1 created the first patronage class. The aim was to educate future experienced staff in key Mahle competitions. Class education in two professions: operator of foundry machines and equipment, and operator of numerically controlled machine tools. Training lasts three years. Students during training practice at the plant, during which they can observe processes and have the opportunity of practical training.

Additionally, Mahle Poland cooperates with the Technical No. 3, by organizing monthly and annual practices for students majoring techniques: electrical, electronics, mechanical, mechatronics, logistics, economist, trader, a computer analyst.

The company also organizes trips for schools where students can tour the facility and learn the specifics of the work on the production.

**Faurecia Wałbrzych SA** (Wałbrzych SEZ). Mechanisms Department has been cooperating with the School No. 5 in Wałbrzych, in 2013 a letter of intent was signed between the company and the school. The company took over the patronage of education in the professions: mechatronics technician and fitter mechatronics. It organizes practice and training, participates in professional development of teachers, organizes trips vocational education facilities equipping schools.

**Electrolux Poland Sp. o.o.** (Wałbrzych SEZ). The company for several years in cooperation with the School No. 1 in Swidnica accepts students (10) on the practice school student from the class of the techniques - logistics. Students are held monthly practice or internship in EU warehouses in the factory in Swidnica.

**Daicel Safety Systems Europe Sp. o.o.** (Wałbrzych SEZ). The plant has cooperated for many years with several schools of the region: the School of Applied Sciences "Energetyk" in Wałbrzych, directions of electrical technician, technician mechatronics, electronics technician, electrical engineer (approx. 40 students), the School No. 5 in Wałbrzych, directions techniques electrician, technician mechatronics (approx. 30 students), the School of Electrical Construction and Swidnica, directions of electrical technician, mechatronics technician (approx. 30 students), the School of Mechanical Swidnica, directions of electrical technician, mechatronics technician (approx. 30 students). Actions taken in the framework of cooperation include doors open at DSSE for students, visit the company's representatives in schools, organizing a competition for students with the possibility of co-financing of equipment for the class "Kaizen at school" program of internships for the best students.

Robert Bosch Sp. o.o. branch in Mirków (Wałbrzych SEZ). Department cooperates with Lotnicze Scientific Plants in Wroclaw as part of a class umbrella profile mechatronics technician, in order to attract potential future employees of the profile required by the company Robert Bosch. In the class covered by the patronage taught 21 students. The company wants to continue to work with the current class umbrella in the coming years.

**Production Plant Automation Network SA** (Wałbrzych SEZ). The company several years working within classes patron of the School agronomic them. Peasant Battalions in Bożków direction mechanic (16 students) and Noworudzka Technical School in Nowa Ruda, the direction of electromechanical technician (14 students). The cooperation program includes training and internship students in the plant. Additionally, the company has been working with the High School. H. Sienkiewicz in Nowa Ruda. In the class of mathematical-physical implement pedagogical innovation "Towards new technologies" - the program is covered by 15 students.

**Dr. Schneider AUTOMOTIVE POLAND Sp. o.o.** (Kamiennogórska SSEMP) conducts professional training for students of Wrocław University of Technology Branch in Jelenia Góra. In addition, cooperation is undertaken with secondary schools from the district of Jelenia Góra and Kamienna aimed at delivery of education at the level of technical and vocational school in competitions mechanical and mechatronic.

**WEBER-HYDRAULIKA Sp. o.o.** (Kamiennogórska SSEMP) since 2009 collaborates with the School of Mechanical Bolesławiec.

Existing forms of cooperation with Weber-hydraulics Wykroty:

- Annually organizing monthly student practices techniques in the competition vehicles and mechatronics,
- Every year organized a series of meetings, “How actively and effectively seek work” - for pupils completing technical school;
- organizing trips for students in grades first to plant in Wykroty;
- students while on holiday have the opportunity to learn about the working conditions at the plant thanks to the program of internships holiday;
- financing of projects carried out by the students of fourth grade technical mechatronic;
- In the school year 2014/15 on 19 September an agreement was signed between the umbrella and Weber ZSM-hydraulics on the implementation of the activities of specialization Process control production and PLC programming in the class of fourth technical mechatronic.

As part of the further cooperation is planned to finance the “Bolesławiecka League of Robots - measures to promote technical skills among high school students.

**Sopp Poland Sp. o.o.** (Kamiennogórska SSEMP) of 2011 roku cooperates with the School of Professional and General in Stone Mountain in vocational training technique logistics. The cooperation includes practices and job placement. The company grants scholarships to the best graduate giving financial support and guarantee employment in the approved field of study. In addition soop Poland Sp. o.o. modernized and equipped classrooms adapted to the study of theoretical vocational subjects within the “class under the patronage”.

**Autocam POLAND Sp. o.o.** (Kamiennogórska SSEMP) in 2014 working with the School of Professional and General in Stone Mountain (theoretical) and DOFAMA Thies Sp. o.o. (Practical training) in the preparation of employees in the profession operator of machine tools. Entrepreneur guarantees employment to juvenile workers.

### 5.3.6 Wrocław example of good practice

**Practical Training Centre in Wrocław** - cooperation with employers and chambers for the promotion of vocational education

CKP conducts practical training in 14 professions 7 technical workers 7.

CKP collaborates with leading employers in the market. Employers support the work of CKP by equipping retrofitting workshops, the organization practices, certification courses, sharing their specialized equipment, organization of seminars for students and teachers.

Heidenhain - in terms of professional supervision and certification courses on programming and operating CNC machine tools, teacher

HASS- in the provision of CNC machine tools

HENSEL, Wago - organization of seminars, equipping specialist equipment to test

Tauron S.A.- equipping laboratory equipment and apparatus of power

To organize internships student CKP cooperates with:

- P.U.G. Geodet Sp. o.o., Geo-Ber Services Geodesy and Cartography, GEOAGRA Sp. with o.o. - for pupils in techniques surveyor
- PID Przybud Wroclaw - for pupils in road construction techniques
- REM-BUD SP. o.o., Polgress sp o.o. ERBUD SA, Intakus SA - For pupils in construction technician

CKP also organizes activities to promote vocational training “Eshibition- Town professions” and “Meetings with technology.” The aim of the exhibition is to promote vocational training in Wroclaw. Aimed at students of the third grade junior high schools and their parents, in order to attract a conscious choice of career.

17 teams of vocational schools in Wroclaw created 12 strong centres of industry: Building, Information and Electronic mechatronics-mechanical, electrical, automotive, tourism and catering, logistic and Towing, economic, grocery service, chemical and printing, apparel and floral. Within cooperation employers they carried out in addition to the standard cooperation (class umbrella organization of internships, practices, equipping schools and workshops), non-standard actions, eg. Cycling paradise “maniac 2014”. Students, teachers and representatives of MAN in Pietrzykowice, set out on a joint bicycle rally to away from Wroclaw 15 km MAN service. At a joint fire was integrated 3 environments: school, student, company.

For information and electronic industry there are initiatives such as:

- Authorized Examination Center Certiport - meet employers expectations in the use of modern programs / tools, IT companies founded authorized examination centre. The students obtained certificates of different companies, and Others MICROSOFT (Office Specialist), Autodesk Inc. (Autodesk Inventor, Autodesk 3 for Max, Hewlett Packard (certified educator).
- Cisco Networking Academy CNA - certification path in school, class 1: IT Essentaials, class 2 and 3: CCNA Discovery, cl. 4: CCNA Security

It created the robotic club - Radio Marketing company financed the renovation of Orsha equipped laboratory, where students composed and design work.

School centered in the grocery and service partner with DIR DIG, which involves the introduction of dual education in 16 professions. They are carried out internships in Germany and France within the framework of the project “Young craftsmen in Europe”, organized championships in the profession - National Tournament for the best student in the profession confectioner and Baker’s and Hairdressing Championship of Lower Silesia.

Students and teachers also participate in the cyclical performance of urban “Europe on a fork.” They also work with the greatest masters of the foodservice industry, participating in the competition, “Cook your success.”

Schools in the industry economic benefit from cooperation with the Bank of Credit Suisse. On the initiative of the bank is organized volunteering - bank employees conduct interviews with students technical.



### 5.3.7 School Partnerships

#### Polish – German VET schools partnerships

Polish – German VET schools partnerships were born thanks to common work, cooperation and support Group of VET Experts working in Educational Commission of Official Polish – German Governmental Committee for Transnational Cooperation. Group of VET Experts started real activities in 2009 and by 2013 they came out with idea heading into materializing theoretical approach of cooperation in practical applications. VET Experts from North Rhine-Westphalia, Baden - Württemberg, Lower Silesia, Brandenburg, Oppeln, Saxony, Lebus, Vorpommern, Stettin and Lower Saxony decided pick up VET schools in their area, ready for international cooperation. Between 2013 – 2014 VET Experts Group choose about 20 German and 20 Polish schools in 6 professions for future partnerships. Between 2014 – 2016 schools Representatives and VET Experts had met in common Conferences in Warszawa, Unna, Essen, Wroclaw, Schwerin, Erfurt, Dusseldorf and Szczecin. Real partnerships required financial support. Experts together with school Representatives decided to build up two school consortiums: German and Polish, consortiums gathering around 20 schools each and applying for financing from Erasmus+ Program. As a result of all those efforts VET Experts Group generated around 20 Polish – German VET Schools Partnerships.

Methodically, current Partner Schools cooperation is concentrated first of all on getting experience in VET dual system education by students cross border mobilities in real company work placements.

### 5.3.8 The example of German partnership – Ausbildungsnetzwerk, Grone Netzwerk Hamburg

Threefold vocational training system is based on the idea of off-site network of institutions around the vocational training (Ausbildungsnetzwerk). Mainly in the metal industry (in professions such as a mechatronics and an industrial machinery mechanic) the third pillar of vocational education could become an innovative way to supplement the dual system. Workplaces could prepare future staff more efficiently, cheaper and better in terms of quality by directing students to specialized training centers, where only relevant elements of the curriculum could take place, those which are not possible to implement in a plant and which are based on the latest technologies and innovations. Financing of such centres would be possible with public funds (taxes) and also by subsidies from the factories. First experience with the trial systems shows that although the solutions are expensive, but it does the job as the models individually tailored to the needs of the enterprise. The construction of such network of institutions enables the use of external services, which are as follows:

- Determining the need to use the services of a training centre
- Selection of students, who can have the advantage of such a model
- Organisation of the process with respective chambers, vocational schools and labour office
- Administrative management process to complete part of training centre (controlling, personnel, marketing).

Coordination and organisation of this kind of service is taken by an external company, which is available to the network of institutions.

With the help of threefold system apart from the highest quality of professional training plants are offered the relief from their activities related to the organisation of the stay in the training centre.

## **Example of good practice - cooperation between workplaces, vocational schools, private training institutions and public offices**

### **a) training centre for students learning professions in Grone Netzwerk Hamburg**

Target group: students with learning difficulties, personal problems, with limited knowledge of the German language, who are not able to find a place of practical vocational training on the regular labour market.

#### Project partners and their tasks:

- **Grone Netzwerk Hamburg** - nonprofit private training institution:  
organisation of the whole course of the three-year vocational training, blocks of theoretical and practical in Grone headquarters, delegation of beneficiaries to a vocational school and the workplaces in which the training takes place, pedagogical support of students, payment of salaries for students, preparing students for the journeyman exam, taking part as an instructor in the examination committee; intensive mentoring, assistance in solving personal problems
- **Federal Ministry of Education and Sport** - institution which co-finances theoretical training
- **Labour office** – institution which finances vocational training for the beneficiaries of labour office
- **State vocational school for service professions** - partner supervising the proper implementation of the curriculum in the field of theoretical vocational training and endorsing them, the organiser of theme blocks (modules) to be implemented in the system of state schools
- **Chamber of crafts** - participates in approving the curriculum of practical sets standards of the profession, organises journeyman examinations
- **Workplaces** - are the partners which hosts students in practical units (modules), co-finances the education of students at a private training institution from the funds allocated in a classic dual system for the mandatory creation of new vocational training (under a provision of the 2004 Ausbildungsplatzabgabe) e.g. during the apprenticeships at the workplace they take over the payment of salaries to the students, pay their travel expenses and provide protective clothing.-
- **Learning system** in this model is to going through pupils so called training blocks alternately in a private training institution (theoretical and practical blocks) in the state vocational school (theoretical blocks) and workplaces (practical blocks). The advantage of this system is the rotation both in the area of theory and practice, allowing students to acquire knowledge from different areas and transmitted in different paradigms. Moreover, the burden of responsibility for students is shifted from vocational school and the workplace for a private training institution. It is responsible for the proper preparation of students for journeyman exams, its effectiveness is measured by the number of exams passed and the number of students who, after passing the exam took employment for at least one year. In this model, we can talk about a kind of outsourcing services to private training institution. In Germany, there are a lot of similar projects, they are often used by all the institutions concerned.



## 6. Guidance & Matching of Students (modul 4)

- School guidance to and company matching in the Danish VET system

By

Claus Brandt Kristensen

International Officer at Centre for Vocational Education Lolland-Falster (CELF)

Anna Block

Grone-Schulen Niedersachsen GmbH gemeinnützig

Grone Netzwerk Hamburg GmbH gemeinnützig

### 6.1 School guidance

The guidance is linked with - and build on - the knowledge and skills students among others have acquired in the compulsory public school topic education and jobs.

Schools must organize teaching in education and jobs in cooperation with the Youth Guidance (UU) and may involve tutors from UU in the implementation of the teaching.

Collective guidance given to all students in 7th - 9th and 10th grade Collective guidance is class-based (or equivalent) guidance activities designed to prepare students for selection of youth at the end of the 9th or 10th grade.

In the collective guidance, students should be challenged in their ideas about choice of education and jobs, so the choice of education comes at a reflective and informed basis.

In the collective guidance included as a minimum:

- Introduction in upper secondary education, it's content, structure and opportunities and a dialogue on the students' understanding of this;
- Introduction to working with digital tools, among other Uddannelsesguiden (ug.dk) and eVejledning;
- Guidance on completion of education plans, optagelse.dk and the process towards signing up for upper secondary education;
- Information about the entire education system, including the link between education and jobs.<sup>46</sup>

### Assessment of education readiness

Assessment of students' readiness in relation to select and complete a upper secondary education (UPV) is a process that starts in 8th grade. The assessment must ensure that the non-education prepared students supported by an education and counselling efforts towards the end of 9th grade or 10th grade.

Three criteria included in the assessment

The school must evaluate the student's academic, personal and social conditions to begin and complete secondary education. All three criteria must be met for the student to be evaluated Education prepared.

<sup>46</sup> Ministry of Education

- Prerequisites  
In 8th grade students are assessed to be training available as they have an average of at least 4 of proficiency marks given in school.  
In 9th grade student is assessed in relation to the desired education.  
For students who want vocational training, the average of term marks for each of the subjects of Danish and mathematics be at least 02.  
For students who want a high school education, includes the student's coursework and examination grades in the basis of academic qualifications.  
For schools that do not give proficiency marks, determines the school principal, the student's academic level equivalent to the criteria above.
- Personal preconditions assessed in five focus areas: Autonomy, motivation, accountability, stability meeting and election readiness.
- Social conditions assessed in three areas: Collaboration, respect and tolerance.<sup>47</sup>

## Company matching

It is uniquely the student's own responsibility to find an apprenticeship.

The apprenticeship takes place in one or more companies that are approved by the trade committee. On [www.praktikpladsen.dk](http://www.praktikpladsen.dk) the student and the companies can make matches. Praktikpladsen.dk is the Ministry of Education's free electronic meeting place for students and companies within vocational training. The student can find all companies authorized<sup>48</sup> to recruit students and the companies can search students and assess these based on students' profiles. The companies can also advertise for students.

The school has a duty to perform outreach work to find suitable internships. The outreach work can be anchored in a practical training centre or school.

The school also has an incentive to the student find an apprenticeship. Then, the student's completion of the program depends on it and student completion is the school measured by the Ministers for Education, therefore does all vocational schools offer *placement preparatory activities* for the students.

## 6.2. Profiling tools and competence measurement used by Grone-Schule

### 6.2.1. Selection of tools

The selection of tools for creating competence profile of a person is in Germany depended primarily on age, level of education and the aim of training. Therefore different tools should be used for youth before choosing the profession, the other for those wishing to change profession and different ones for the unemployed. Most of the tools are standardized and licensed by accredited companies distributing the tools. The vast positive difference for performing the measurement and balancing of competences in Germany is the liberalization of regulations relating to the rights of the staff. For measuring the competences it is necessary to meet the following requirements:

<sup>47</sup> Ministry of Education

<sup>48</sup> <http://bygud.com/vocational-education-and-training/general-information/certification-of-employers.aspx>

- 1) completion of higher education in the fields of psychology or pedagogy or demonstrating a at least three years professional experience in teaching professions
- 2) completion of courses / training preparing to work with a tool for measuring the competence (usually they are organised by companies distributing licensed tools and last from one to several days).

Unfortunately, still only 10% of German factories used measure of competence in filling jobs. Definitely more tools for measuring competencies are used in vocational guidance for young people entering the dual system of education and for the disabled.

### 6.2.2. What can be measured by the tools?

With the help of tools for measuring competencies used in Grone-Schule, on the one hand predispositions are tested on, on the other hand professional interests. A very important element of the study is exploration of latent abilities and interests.

The balances of competence define the following areas:

- 1) Competences related to the implementation / execution of tasks (eg. the purpose orientation, initiative, persistence)
- 2) Social and communication competence (eg. teamwork, reasoning, orientation to customer needs)
- 3) Methodical competence (eg. planning, problem solving, delegating tasks)
- 4) Personal competencies / individual competences (eg. resilience, perseverance, ability to learn).

### 6.2.3 Profiling tools and competence measurement used by Grone-Schule most often

#### **Profiling sheet**

Profiling sheet an in-depth interview of counselor with the person tested. This tool is used in Grone-Schule by profilers during the initial interview with the beneficiary / candidate for apprenticeships or candidate for attendance to the vocational course. In addition to general data, it also includes information on the course of general education, vocational training, career of the person examined and data on competencies (self-esteem). Grone profiling sheet is attached as Appendix 6.

#### **hamet2**

The procedure is suitable for the diagnosis of occupational particularly among young people with an increased necessity of support. By expanding areas of research hamet2 is used in the diagnosis of pupils already at the stage of main school and the real school in rehabilitation (adults returning to the labour market for example after disease, and persons with physical, mental or sensomotoric disabilities).

For professions mainly connected with manual work hamet2 is a diagnostic procedure that allows identification of practical and social competencies - skills which cannot be measured by commonly used diagnosis with the usage of paper and pencil.

hamet2 is a scientifically proven tool that allows one to recognize and support competence in the context of the requirements of the job and their use in practical operation.

hamet2 has been developed in particular for the diagnosis of people in need of increased support, deficits and disabilities. The tool is however unsuitable for use also in other target groups. Results of hamet2 can help all stakeholders (candidates to the training profession, employees, employers, financial institutions apprenticeship) in the orientation and greater transparency when making decisions about career choice / selection of the candidate.

hamet 2 modules are constructed according to the following scientific criteria:

- Module 1 collects basic professional competence (manual-motor the ability, computer competence)
- Module 2 examines the ability of learning in relation to the basic professional skills, so that one can create the appropriate support program)
- Module 3 makes possible to collect social skills relevant to the profession
- Module 4 checks the aspect of comprehensive thinking: looking for errors and problem solving.

### **BAC – Counseling and selection centre**

BAC is a qualitative concept of collecting competences which takes into account the very purposefully competences acquired formally and well as those that have been gained in the informal area. The process of competence balancing in career counseling is carried out in the context of the individuals, determining their position and is clearly oriented on an entity and unit. In a multi-level, highly structured process the competences of the person “are balanced”. We have here, however, to deal with the collection of statistical competence, but with a very dynamic process of transformation of subjects. Balancing competence can take place both in the group and in individual counseling. From the point of view of the context of the advisory procedure it should be assigned to the concept of advice-oriented resources, because they reveal strengths and skills of the participants. The concept of counselling, which integrates balance of competence, is ultimately aimed on building and expanding the creative potential of the customer.

This procedure is very ambitious, requires strong commitment from participants. Moreover, it requires readiness to deal with their own experiences of all learning processes. The balance of competence raises self-esteem and confidence in their own abilities. Very often a positive self-concept is developed at the same time. New ideas and impulses for careers or further educational path are created and developed.

### **ProfilPASS**

It helps one to find the intricate diversity of options of the current professional market by the fact that it reveals personal abilities, skills and competence. It also helps to understand better the individual tendencies and predispositions. Used both for young people and adults. It is appropriate for the long-term unemployed and 50+ target groups. ProfilPASS is a tool that examines the skills acquired formally and informally. In its structure it contains references to the biography of the responder/ an examined person. It was developed in the form directed by the coach / auto exploration profiler. The result is not based on standard rigidly defined competence, but emphasis strongly on the interests of an examined person.

### **EXPLORIX®**

EXPLORIX® is a developed by scientists procedure of self-discovery, which offers valuable information and aid in deciding on the choice of profession and career planning. For people



who are not determined what profession they want to learn, EXPLORIX gives possibility to find a small group of professions, which should make people concentrate, people facing a decision regarding choice of profession.

According to EXPLORIX people can be characterized generally by means of the following six types / categories:

- manual-technical (realistic)
- Research-seeker (investigative)
- artistic-creative (artistic)
- educational-nurture (social)
- managerial- with sales skills (enterprising)
- clean up and administrative (conventional)



## **7. Methods to prevent interruption of vocational training (modul 5)**

- **Introduction - statistical data, the consequences of dropping out vocational training for students, employers, professional schools**
- **Suggested methods to prevent the dropping out of apprenticeship for employers**
- **Suggested methods for vocational schools**
- **Government programs for vocational training for students with learning difficulties and social problems**

By

**Anna Block, Grone-Schulen Niedersachsen GmbH gemeinnützig**  
**Martina Borgwardt, Grone Netzwerk Hamburg**

### **7.1. Introduction**

Currently in Germany, we are dealing with an increasing number of prematurely broken apprenticeship contracts<sup>49</sup>. This carries serious consequences for both young people and employers. Many people who have dropped out of school, hardly find a new workplace, and entrepreneurs – taught by negative experience - simply withdraw from taking the new students.

At 522,094 contracts included practical vocational training in 2014, education was interrupted by up to 143,082 pupils (24.6%)<sup>50</sup>. Most people drop out training in occupations related to the gastronomy and hotel (more than 50%) and service occupations. The lowest percentage of people who dropped out of vocational training is noted in the jobs related to office (about 6%). Expertise „Ausbildungsabbrüche vermeiden - neue Ansatz und Lösungsstrategien“ developed by the Unique, an institution dedicated to the personal and organisational development of enterprises<sup>51</sup> points to the fact that the subject of dropout is not fully tested scientifically: missing data defining motives of leaving education does not allow to pilot careers people who left vocational education.

<sup>49</sup> Bilateral contracts for apprenticeship in Germany are concluded between the student and the employer.

<sup>50</sup> Berusbildungsbericht 2015, BIBB

<sup>51</sup> <http://www.unique-personal.de/>

Nevertheless, we can distinguish some of the reasons for dropout.

a) From the point of view of the students:

- Problems with professional instructors and superiors, colleagues
- The bad atmosphere at work, lack of communication
- Wrong choice of profession
- Poor quality of practical learning in the workplace
- Making work unrelated to learned profession, unpaid overtime
- Low pay for vocational training<sup>52</sup>
- Lack of instruction of persons in the workplace for the student
- Lack of professional training of trainers
- No plan for practical learning or lack of its implementation
- Improper and insufficient preparation for the practical examination test
- Private problems
- Health problems
- Financial problems

b) The reasons of dropouts due to problems in school, defined by students:

- Fear of the final exam
- Conflicts with teachers
- Difficulties in learning, too difficult and extensive theory
- Mobbing by colleagues.

c) From the point of view of workplaces the following reasons for breaking contracts for vocational training can be listed:

- Students difficulties in learning in school and the workplace
- Unexcused absences of students
- Bad behaviour
- A general lack of interest
- Unpunctuality, unreliability
- Poor choice of profession, the lack of general predispositions to exercise
- Lack of preparedness to accept the hierarchy and rules and regulations in the plant, lack of competence to work in a team
- Lack of motivation among students
- Personal problems (debts, addiction, problems in the family home).

## 7.2. Consequences of dropouts in vocational training

Interrupting the process of learning a profession has consequences both for the student and for the workplace. The legal consequences may be particularly severe, in a situation where the parties cannot agree on the issue of reason of breaking the contract on the apprentice. The student may be associated with the loss of the right to benefit from the state, if the contract was terminated due to his or her fault. What is more, economic consequences have a great importance, especially for the employer, who loses both a student and also manpower planned as a permanent element of the human resources of the company. Particularly it causes problems in service companies and in sectors of catering and construction. Very important are the personal consequences of the student leavers. Almost always interrupting of learning involves an enormous disappointment.

<sup>52</sup> The amount of remuneration for apprentices in Germany is governed by collective agreements and varies depending on the year of study, learning profession and region of the workplace (in the eastern Länder, it is generally lower than in the countries of the former Federal Republic of Germany). Especially low wages for apprentices are paid by crafts.

When applying for a job the gap appears, which it is difficult to justify for a student. So often students who broke contracts, decide too late on a retry of study in another workplace, or do not take any attempt.

### 7.3 Measures to prevent interruption of vocational training

The theme of the prevention of vocational school dropout is an early prevention, both before training the profession, as well as during it. In 2009 German Ministry of Education and Research published new expertise and innovative approach to prevention in the field of vocational education<sup>53</sup>. The authors of the publication indicate the strategic areas of prevention, which include:

**a) Actions before profession training:**

- Early and close to the labour market vocational orientation through vocational placements in workplaces
- Optimization of key competences
- Individual career counselling
- Improvement of professional maturity
- Allergy Testing
- Exact matching the employer to the expectations of the student

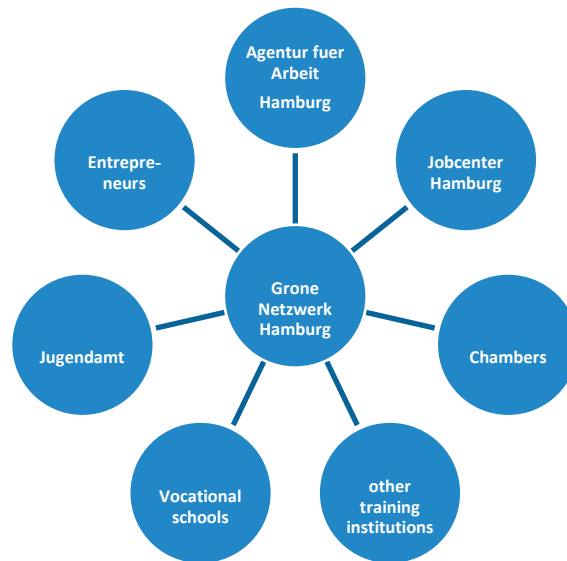
**b) Actions during profession training:**

- Support and development of key competencies of students
- Further training of instructors and vocational teachers
- Consultancy in crisis situations, mediation
- Assuring high-quality of vocational education and training (requirements for vocational school and workplace)

In addition, German partners of the project - Grone-Schulen Niedersachsen and Grone Netzwerk Hamburg –apply as methods of dropout prevention not only individually selected profession profiling before taking vocational training and intensive counselling during the apprenticeship (Ausbildungscoaching) but also building a network of institutions supporting the student in the process of vocational education (Ausbildungsnetzwerk). Widely developed network of institutions that support to troubleshoot problems in almost every area of life of the beneficiary, allows the exchange of information between the institutions directly involved in vocational training (school, workplace, Chamber of industry or craft, financial institutions which finance apprenticeships). They give a sense of safety and high effectiveness of activities aiming to complete the students' vocational education. For example, in a network of institutions supporting vocational training for students in Grone Netzwerk there are employers, trade vocational schools, the Hamburg employment office (Agentur für Arbeit), the welfare office (Jobcenter), Office for Youth (Jugendamt), chambers of crafts and industries, associations, other training institutions, and a boarding school for troubled and homeless youth has recently joined the network.

<sup>53</sup> „Ausbildungsabbrüche vermeiden – neue Ansätze und Lösungsstrategien“, Expertise, Bundesministerium fuer Bildung und Forschung, Bonn, Berlin 2009

## Partners of the network for the development of vocational training



Due to the fact that the vast majority of dropout cases have their base in the problems of communication and the attitudes of the parties involved, one of the favourite tools of prevention used in Grone is **mediation**. This method is used to prevent conflict early and has a long-lasting effect. Using the simple techniques of mediation supports in the willingness of students to resolve conflicts and avoiding them. The mediation process consists of 5 steps:

- Phase 1: creating the basis for mediation
- Phase 2: a description of the conflict and its background
- Phase 3: exposure of the conflict
- Phase 4: finding a common way of treating the conflict and / or its solution
- Phase 5: mutual fixing activities to resolve the conflict.

In each of phases it is possible to use the following techniques:

- Role-playing - getting into the emotions on the other hand,
- Demonstrating a conflict situation against the other party to the conflict
- Active listening, verbal and non-verbal
- Exercises to pay attention to the body language of the other side
- Exercises to recognize the warning signals
- Learning to express messages of “I”
- Changing points of view and perspectives.

### 7.4 Bundesprogramme zur Vermeidung der Abbrüche:

Separate place among measures to prevent school dropout are the government programs aimed at students from groups that are particularly at risk (NEET). The examples of programs implemented by Grone are listed as follows:

### 7.4.1 AbH Training Support

They support all young people during the whole vocational training for its successful completion, also at an introductory training.

This includes:

- Degradation of education and language gaps (German)
- Theory lessons, practicing of knowledge and fostering of skills
- Preparation for exams
- Mediating talks with trainers, teachers at the vocational school and parents
- Generally a socio-educational support with everyday problems

The individual support takes place individually or in small groups about 3 to 8 hours a week. It includes German and mathematics as well as job-relevant technical issues for professionals from the trade, warehouse / logistics, hotels and restaurants, care etc. Qualified educational institutions carry this out beside the normal working hours of trainees on behalf of the Employment Agency.

This includes also the preparation of interim, partial and final exams as well as training against exam stress or test anxiety.

The aim is to encourage trainees during the vocational training or during an introductory training if they can not begin or continue, or if they are expected to have difficulties to graduate successfully.

The participants have a contract with a training company and get their training allowance from there. The support training is paid by the employment agency. Participation is voluntary.

### 7.4.2 Vocational training in a supra-company (or non-company) establishment

The aim of vocational training in a non-company establishment (BAE) is to offer the possibility of a training qualification to slow learning and socially disadvantaged young people who would not be able to complete a regular vocational training. An early transition to in-company training - as possible after the first year of training - is to be achieved. Failing this, the training will be continued outside the company until its completion

Employment agency and free educational institutions work closely and cooperatively together with companies in the private sector. The practical instruction takes place in cooperation companies which are located by the educational institutions. During the training, the participants are closely monitored by social workers and tutoring teachers so that they can cope with the requirements of the vocational school as well as with the requirements of the professional practice.

The training allowance is paid by the employment agency - as well as the monitoring by the professionals. Instructor is the educational institution.

#### Contents of BAE

- Tuition in theory and practice
- Preparation for exams
- Tuition in German
- Assistance with everyday problems
- Mediating talks with trainers, teachers and parents

### 7.4.3 AsA

#### **Assisted vocational training for young people and companies – why?**

Although there is a shortage of skilled workers in Germany, many young people do not get the opportunity to complete a vocational training. This seems contradictory since many companies have problems filling their training places.

In many cases the reason is that companies and candidates supposedly do not match. To close the gap that exists between the needs of the companies and the applicants, the assisted vocational training is a good concept. It means that educational institutions such as Grone take over a new role in form of the assisted vocational training and act both as a contact person for the companies, as well as for the trainees.

Within an “Alliance for Education” there should be created up to 10,000 vocational training courses for disadvantaged young people in the training year 2015/2016. The measures will be financed by the Federal Employment Agency.

#### **The advantages of assisted vocational training (ASA):**

- ASA bridges the gap between the needs of the companies and the conditions of the young people by accompanying regular vocational training by extensive preparation and support services.
- ASA provides access to regular vocational training for young people with different conditions and supports the successful completion of training.
- ASA is no special path, but a normal vocational training. Training responsibility remains - unlike external vocational training - in the companies. The trainees work in a regular company, receive a regular apprenticeship contract and receive regular training allowances.

The assisted vocational training consists of several services that are already running before the start of the training:

- Potential trainees are already prepared to possible occupations during their time at school and receive assistance in job application training.
- During the training, the service of assisted vocational training continues because the educational institution shows presence through individual counseling and support for the trainee.
- The companies receive support in the educational area, communication and work with young people will be easier this way. In addition, companies are supported in the selection of candidates and can take on additional advice from the educational institution if necessary.

#### **Services for young people and companies from one source**

The preparation for the training will be reduced to a useful individual level. During the assisted vocational training as much support is offered as in each individual case is necessary. The educational institution takes over the role of a service provider who is responsible both for the needs of the young people as well as for the companies.

With a perfectly fitting offer of support we ensure that apprenticeships arise and that trainees can be successful.

The **offerings for young people** include application training and internships during the preparatory phase as well as tutoring, counseling and help for coping with life during the assisted vocational training.



The **offerings for companies** include amongst other things application and training management, advice and information regarding specific target groups and support in cooperation with the vocational school.

Both sides can be supported in crises and conflicts. The services are available from the beginning and act preventively against discontinuation of the training. There is also the possibility to adjust the training structures to individual requirements, e.g. support for the implementation of part-time training.

#### **Services for companies**

- Administrative and organizational support prior to the professional training
- Creating of training plans
- Preparation of applications for inter-company training sections, chamber tests or exams of qualification courses
- Instructor-coaching to avoid cancelation of training
- Cooperation between learning venues
- Collegial case consultation
- Reflecting discussions to secure the learning outcomes

#### **Services for young people**

Preparation phase:

- Application training and internships
- Assistance in finding an apprenticeship

Training period:

- Training companion as a link between all those involved in the training
- Assistance with problems in professional, academic and private sectors
- Preparation and evaluation of the vocational school education
- Preparation of individual learning deficits in homogeneous groups
- Intensive exam preparation
- Socio-educational accompaniment

## **8. Selection and development of personnel in the system of vocational training (modul 6)**

- **Introduction - the role of a teacher and a vocational training and nowadays**
- **Methods of work of a vocational training instructor**
- **Key competences of a vocational training instructor**
- **Possibilities of further staff education**

By

**Daiva Ziogene**

**Anyksciu svietimo pagalbos tarnyba**

### **8.1 Introduction**

Implementing dual vocational training is very important participation and support of commerce, industry and crafts, other associated employers' organizations, social partners, potential employers. One of the challenges is the preparation of mentors (practice guide), which led vocational school

students in companies. Practice guide not only their profession connoisseur, but the person able to reflect their specific expertise and is ready for professional activities. Therefore, the tutor must be a professional in every sense and have a special practice supervisor necessary competencies. Tutor competency benefits of vocational school students undeniable: for tutor sheltered student easier to adapt the company; student with a practical guide and the opportunity to work alongside a professional, much more efficiently acquire practical professional competences; student quickly establish professional relationships with colleagues and learn from their experiences, develops its professional activities, during internship, guaranteed a higher-quality education and training also the situation of young people in the labor market improvement.

## 8.2 The role of a VET teacher and vocational training nowadays

The role of teachers and trainers in the VET system has become more complex in recent years. Guidance, counselling, teamworking, cooperation with enterprises and communication with stakeholders have become increasingly important. This development is evident in all countries but is especially clear in countries undergoing heavy reforms trying to encompass the new realities of the VET system especially in the context of the developing knowledge society (Lithuania, Poland).

Being a teacher or trainer in the VET system is very challenging. A good teacher needs to possess a wide and deep knowledge and understanding of the professional field, of human growth and development and how to steer this growth by means of education and training. Further, the teachers need to have adopted the ethical responsibility of the profession. Finally, a teacher operates in a multi-dimensional context and must understand the dialogue and interlinkage between education, labour market and society to be able to promote the learners progress in life<sup>54</sup>.

In Lithuania VET teachers must have a vocational and a pedagogical qualification or have participated in a course on pedagogy and psychology principles. VET teacher training follows a consecutive model whereby a vocational qualification is studied first, followed by studies on pedagogy. Teachers without a pedagogical qualification, irrespective of their educational attainment level, are offered a 120- hour course on pedagogy and psychology principles<sup>55</sup>. The programme duration is 120 hours and currently it includes three themes: basics of pedagogy, pedagogical psychology and didactics<sup>56</sup>. These courses are organised by accredited institutions and companies. Additionally, universities provide programmes for vocational teachers' pedagogical education<sup>57</sup>.

Apprentice tutors or practical training instructors in companies (work-based settings) act as a link between their workplace, the student or candidate and the education provider. With respect to the quality of learning at the workplace, the tutors or practical instructor's activities and instruction skills play a significant role. Jointly with the supervising teacher, tutors or practical training instructors ensure that learning at the workplace is goal-oriented and that the student receives guidance. Especially in the case of young students, the tutor or practical training instructor is often their first contact with a professional in the field. The tutor or practical

---

<sup>54</sup> Kristiina Volmari, Seppo Helakorpi & Rasmus Frimodt. Competence framework for VET professions. Vammalan Kirjapaino Oy Sastamala 2009

<sup>55</sup> VET in Europe–Country report (2013). Qualifications and Vocational Education and Training Development Centre with contributions from members of ReferNet Lithuania

<sup>56</sup> Lithuanian MoES (2005). Lietuvos Respublikos švietimo ir mokslo ministro 2005 m. kovo 17 d. įsakymas Nr. ISAK-456 'Dėl pedagoginių-psichologinių žinių kurso'[Legal act regarding pedagogical-psychological knowledge course]. *Valstybės žinios [Official Gazette]*, 22 March 2005, No 37-1204.

<sup>57</sup> Vaitkutė, L. (2016). Supporting teachers and trainers for successful reforms and quality of vocational education and training: mapping their professional development in the EU –Lithuania. Cedefop ReferNet thematic perspectives series.

training instructor therefore serve as an example and role model for young people. Alongside the tutor or practical training instructor, the entire workplace community is involved in guiding students to carry out work in the field. This means that it is important that the tutors or practical training instructors inform other employees about training arranged at the workplace. They can then participate in the induction of the student and take him or her into account as a member of the workplace community. A positive attitude towards work and the instruction of students, as well as the patience to keep encouraging the student to try things out, are essential to a tutor or practical training instructor. They also create an atmosphere favourable to learning and training at the workplace. The duties of a tutor or practical training instructor vary between workplaces, depending e.g. on the size of the company, the company's or organisation's sector of activity, the number of personnel etc.<sup>58</sup>

The tutor or practical training instructor is playing important role in VET system, but at this moment in Lithuania is lack of legal regulation for apprentice tutors or practical training instructors in companies. VET legislation lacks clarity about the requirements for apprentice tutors, what could be related to the fact that apprenticeship is rarely applied in IVET. In the recently revised procedure for VET, it is defined that when training is implemented in apprenticeship scheme VET institution should allocate a VET teacher for supervising practical training of apprentice at the work place. Employer should allocate an employee or several employees responsible for organising of apprentice's work and practical training and one employee responsible for coordinating of apprentice's work and practical training. The latter employee is referred to as 'a master' (profesijos meistras). From legal acts it is not clear whether employees supervising apprentices should have finalised a pedagogical-psychological knowledge course and match other requirements set for VET teachers. On one hand they should work according to VET programme, but on the other hand, they don't have a teacher status. In any way, companies assess the requirements for VET teachers as too high. As regards practical training instructors it is required that a company should appoint a practical training instructor from experienced personnel of the company. No other requirements for qualification, knowledge, skills and competences are defined<sup>59</sup>.

### 8.3 Methods of work of a vocational training instructor

The role of the VET teacher is no longer to work autonomously but rather to cooperate with other teachers to plan, coordinate and carry out teaching together. This raises the question of how to change teachers' perceptions of their role and how best to prepare them for the different roles they will occupy in the future. Meeting teacher needs and guaranteeing their professional welfare: VET teachers obviously have a strong interest in raising professional standards and thereby improving their position on the labour market.

In many training activities, focus is on qualifying teachers for more 'student-oriented' approaches, i.e. coaching; guiding; supervising and tutoring.

<sup>58</sup> Heljä Hätönen. Competence Map for Workplace Instructors. Suomen Yliopistopaino Oy, Tampere, 2014

<sup>59</sup> Vaitkutė, L. (2016). Supporting teachers and trainers for successful reforms and quality of vocational education and training: mapping their professional development in the EU –Lithuania. Cedefop ReferNet thematic perspectives series.

The main methods of work of a vocational training instructor are<sup>60</sup>:

- sponsoring
- coaching
- protection
- challenging assignments
- exposure
- social support
- role modeling

These methods are not new, but it is obvious lifelong learning, focus on different learning contexts, interaction between these learning contexts, and teamwork have had a huge influence on the way training and skills development are perceived.

#### 8.4 Key competences of a vocational training instructor

Rapidly changing technologies drive the need to update VET teacher and practical training instructor competences. VET teachers and practical training instructor need strong relational competences. The main categories of competencies are:

- personal and methodological competences which includes: empathy, the ability to work with young people, the ability to work in and contribute to a team, networking skills and communications and problem solving skills.
- professional skills and knowledge requirements include: insight into learning processes, knowledge about the economy and selected occupations, insight into the conditions of companies and into work processes (teachers), project skills, innovation skills, didactics, particularly as concerns the learning process in a work environment, pedagogy, and psychology. Specifically, teachers' skills regarding evaluation and self-evaluation need to be enhanced<sup>61</sup>.
- pedagogical competences includes skills related to the practical implementation of training: time planning, distribution of content, creating a positive and inclusive learning environment, observing and understanding group dynamics, group management, and selecting methods appropriate to specific learner abilities and needs, including special education needs. Assessment of learner progress and learning outcomes is another important part of trainers' work. Trainers should be aware of summative and formative assessment methods, able to choose the most appropriate assessment methods for the training delivered and learning objectives, as well as provide feedback to learners on their progress and develop further steps to improvement. Trainers can also be expected to evaluate the effectiveness of training programmes<sup>62</sup>.

Institute of Technology and Education (2008)<sup>63</sup> concluded that establishing minimum requirements for trainer basic skills and competences was frequently used by countries to enhance trainer status and employment.

---

<sup>60</sup> The Blackwell Handbook of Mentoring, 2007

<sup>61</sup> VET Partnership between Schools and Companies – the Role of Teachers and Trainers Lessons from a Peer Learning Activity . March/2007. Danish Technological institute

<sup>62</sup> Trainers in continuing VET: emerging competence profile. Luxembourg: Publications Office of the European Union, 2013

<sup>63</sup> Cedefop (2008). Terminology of European education and training policy. Luxembourg: Publications Office.

The study identified three levels of competences relevant to in-company trainers:

- vocational (work-related);
- pedagogical and social (supporting didactic processes and ensuring effective transfer of knowledge);
- management (quality assurance and cooperation with other stakeholders).

K. Volmari et al. (2009)<sup>64</sup> put trainer competences into strategic and operational dimensions of administration, training support, development and quality assurance, and networking. The expected competence areas for trainers included:

- organisation and planning,
- project management, planning and preparation of training,
- support to learning,
- assessment and evaluation,
- developing oneself,
- developing workplace (company),
- quality management.

European Commission et al. (2010)<sup>65</sup> looked at competences for adult learning professionals that included trainers in CVET. Based on the 13 tasks applicable to trainers, they listed the following core competences:

- being an expert in a field of study/practice;
- being responsible for the further development of adult learning;
- being a fully autonomous lifelong learner;
- being a communicator, team player and networker;
- didactical competence;
- empowering adult learners;
- coping with heterogeneity and diversity in groups.

In Lithuania, according to the Description of competence of the teachers profession (2007)<sup>66</sup>, teachers' the main competences are:

- key competences include communication, information management, cooperation, research, reflection, learning to learn, management of changes, etc.;
- professional competences are defined as knowledge, skills, values, approaches, that are necessary for training (e.g. application of information technology; planning and development of training content; management of training and learning process; assessment of learners achievements and progress, etc.);
- special competences are defined as knowledge, skills, values, approaches that contribute to his successful activity in a concrete training/subject area. VET teachers' technological competences can be regarded as special competences;
- cross-cultural competences are defined as a respect for social, cultural, ethnical and linguistic identity of learners as well as securing and developing of Lithuanian culture enriched with national minorities experiences.

<sup>64</sup> Volmari, K.; Helakorpi, S.; Frimodt, R. (eds) (2009). Competence framework for VET professions: handbook for practitioners. Helsinki: Finnish National Board of Education.

<sup>65</sup> Cedefop (2010b). Professional development opportunities for in-company trainers: a compilation of good practices. Luxembourg:

<sup>66</sup> Lithuanian MoES (2007a). Lietuvos Respublikos švietimo ir mokslo ministro 2007 m. sausio 15 d. įsakymas Nr. ISAK-54 'Dėl mokytojo profesijos kompetencijos aprašo patvirtinimo' [Legal act regarding the description of competence of teachers profession]. *Valstybės žinios [Official Gazette]*, 30 January 2007, No 12-511.

As regards VET teachers' CPD, the priority is given to the development of VET teachers' technical competences. As the best practice can be presented EU-funded project to support VET teachers' and trainers' professional development was targeted at developing a system for improving the technical competences of VET teachers and offering them actual training courses in enterprises. The project title 'Development and implementation of the system for improving the technical competences of vocational teachers and lecturers' – Profesijos mokytojų ir dėstytojų technologinių kompetencijų tobulinimo sistemos sukūrimas ir įdiegimas). The project that run between August 2010 and October 2015 was coordinated. The main projects outputs are:

- the development of a model for the improvement of technical competences;
- a comprehensive survey of VET institutions' managers and VET teachers on competences needed for practical training and CPD needs;
- preparation of 100 teacher training programmes in 12 sectors of the economy (energy, engineering, wood, construction, transport, vehicles repair, apparel and textile, food and drinks production, hotels and restaurants, agriculture, forestry and fishery, social, personal services, retail and wholesale). Each teacher training programme consisted of general modules (e.g. technological processes and technological innovations/new developments) and specialised modules for teaching a concrete technology;
- organisation of teachers training in companies for 670 vocational teachers. This roughly represents one third of all vocational teachers.

### 8.5 Possibility of further education of the vocational staff

Certification (atestacija) of VET teachers can be motivation for continuous professional development (CPD). In Lithuania, based on the assessment of practical activity and professional development, VET teachers are awarded one of the four qualification categories:

1. Vocational teacher qualification category (Mokytojo kvalifikacinė kategorija),
2. Senior vocational teachers qualification category (Vyresniojo mokytojo kvalifikacinė kategorija),
3. Vocational teacher-methodologist qualification category (Mokytojo metodininko kvalifikacinė kategorija)
4. Vocational teacher-expert qualification category (Mokytojo eksperto kvalifikacinė kategorija vocational teacher, senior vocational teacher, vocational teacher-methodologist and vocational teacher-expert. Participation in CPD courses is one of the principle requirements for those seeking a higher qualification category what, in turn, influences salary. Those who wish to achieve a higher qualification category undergo evaluation in three areas: effectiveness of training, communication, cooperation and contribution to the school's community and personal professional development.

In recent years, a substantial attention was paid to improving the teacher training system in Lithuania. From 2009 to 2012, a national ESF project 'Development of the System for In- 5 service Training and Retraining of Teachers' (Pedagogų kvalifikacijos tobulinimo ir perkvalifikavimo sistemos plėtra) was implemented. Through the project a teachers' continuous professional development (CPD) model was designed to suggest a scheme of CPD organisation and necessary changes in teachers' CPD legal framework, a variety of professional development forms (mini-



training, supervision, peer coaching, traineeships in Lithuania and abroad) were piloted and teacher training courses and traineeships were offered. The project focused on teachers from general education schools, nevertheless teachers from VET institution also benefitted from participating in training courses. In 2012, the Ministry of Education and Science (MoES) approved a teachers' CPD concept including areas of teacher competences, forms for acquisition of competences, types of CPD, legal and administration mechanisms<sup>67</sup>.

In most countries, trainers' attendance at continuous professional development (CPD) is voluntary. In Lithuania, each teacher in IVET must upgrade their qualifications and is entitled to five days of continuing training per year. According to the Law on Education (Parliament of the Republic of Lithuania, 1991)<sup>68</sup> teachers must improve their qualifications and have a right to spend five days each year for their professional development.

Vocational teachers' continuing training is implemented according to non-formal education programmes. There are many training projects for VET teachers in various fields (technological competences, key competences etc).

With regard to in-company trainers' competence development, most in-company trainers in the sample have participated in training courses extensively in their working life, and therefore have substantial experience of taking part in training themselves<sup>69</sup>. However, no special training or guidance for practical training instructors is provided, such training would be beneficial for practical training instructor.



## 9. Recommendations for implementing the dual system - Intellectual Output number 4 based on the IOs of the project

### 9.1 General recommendations:

Vocational training must move with the times. This means that it must secure a number of opportunities for youth, who decided to enter vocational training, e.g. during the apprenticeship (additional qualification for students with aptitude for theory); opportunities after continues training and education in the profession and give the opportunity to join to higher education. Vocational training must be open, permeable and flexible system in which the transition between the paths of education is possible, but also between systems of education (access to tertiary education) through the recognition of acquired competences. The three bullet-points below from our research IO1 underline the recommendations above:

- Attractiveness of vocational education needs to be raised;
- Improving the ability to access to placements for vocational training
- Free upgrade possibilities transition from vocational education system to the system of higher education. Raising the possibility of transition from apprenticeship to higher education and vice versa is extremely important for social justice and security specialists or would be in order to compete

<sup>67</sup> Vaitkutė, L. (2016). Supporting teachers and trainers for successful reforms and quality of vocational education and training: mapping their professional development in the EU –Lithuania. Cedefop ReferNet thematic perspectives series.

<sup>68</sup> Parliament of the Republic of Lithuania (2011). Law on education (Last amended on 17 March 2011, No XI-1281). *Valstybės žinios [Official Gazette]*, 2011, No 38-1804.

<sup>69</sup> Who trains in small and medium-sized enterprises Characteristics, needs and ways of support Luxembourg: Publications Office of the European Union, 2015

Based on our research we can also recommend that there is a focus on differentiation of vocational education for e.g. weaker students; normal students and students with stronger theoretical or practical abilities. This has for example been one of the focal point in the recent reform of the Danish vocational education.

But if a build-up or revitalisation of a vocational should happen it is not enough just to look at the vocational education themselves but the primary and lower secondary education system because this where foundation for later education is laid, but it is also necessary to look at the guidance systems and have focus the primary socialisation level namely the parents because these factors in the educational choices of the young persons as it is pointed out below:

- General education should do more to relate to the realities of the labour market and substantive parts, e.g. arithmetic, spelling or science
- The role of parents is problematic as well, since parents in most countries has big influence on the choice of occupation of their child and are forcing their children to educational paths, which don't match them.

Finally, has our work with the training modules and the guidebook in IO2 and IO3 shown another important point, namely the importance of the institutional aspect of the implication and success of a vocational education system. Based on the cases of Denmark and Germany – even though the institutional setup in the two countries vocational education systems are quite different – there is a strong social contract between the major social partners which legitimises the legal framework and financial scheme of both systems.

## 9.2 Recommendations for the countries who want to build up a dual system

Below we have listed some concrete recommendations based on the research do in the project, but it is necessary to keep in mind that beside the four actors (students, teachers, employers and institutions with interest in labour market) we set out to research in this project. We also need to look at the systemic level e.g. the social contract and the institutional setup as describe in the general recommendations above. If a dual vocational education system should be created and implemented it is necessary to build up trust between the major social partners, create a legal framework with checks and balance<sup>70</sup> and a financial scheme that is beneficiary of all parties. But of course you need to start the development from where you are now:

- Curricula for vocational education should be largely adapted to the changing needs in society in general and on the labour market specific;
- Part of practical and theoretical education should be balanced. The practical part should take place in the workplace, so that students from the beginning form their 'labour service' mentality and learn current techniques;
- Support from the government and employers are needed;
- Better network of partners of vocational education (workplaces, schools, offices);
- Good organization inside school, workplace and between all institutions.
- Every student should after graduation be given enough time so that he or she could deploy in the new requirements. In many workplaces students don't have such possibility.

---

<sup>70</sup> [https://en.wikipedia.org/wiki/Separation\\_of\\_powers#Checks\\_and\\_balances](https://en.wikipedia.org/wiki/Separation_of_powers#Checks_and_balances)

### 9.3 Recommendations for the countries who want to strengthen an existing dual system

Both Denmark and Germany have very old and well established vocational education systems based on the dual system, even though the systems in the two countries are quite different - based on different social contracts and with different institutional setups regarding e.g. social partners - they both still high degree of satisfaction within the four groups we have researched in this project. Of course always there is room for improvement and development and below we have listed some of the recommendations found in the research:

- Attractiveness of vocational education must be raise;
- Further education of teachers;
- Increased focus on dropout rate;
- Increased focus on the completion rate;
- Increase the number of companies how are taking apprentices;
- Increased focus on the opportunities for tertiary education for vocational graduates.
- Recommendations per country

#### 9.3.1 Poland

##### Summary

There are many differences in the opinions. Students and their teachers tend to be more optimistic, employers and people interested in above subject are not very happy. Most of the respondents underline the need of longer vocational training with more work based learning because the present vocational education is to general and theoretical also the skills are mismatched to the needs of the labour market. But luckily all respondents groups' members identify the necessity of cooperation in terms of creating the modern system of vocational training schools in Poland. Is need that means that the iron is hot and it is time to strike to create a dual system of vocational training and education.

##### Strengths

- Need of cooperation and improvement is seen by all groups.

##### Weak points

- No realistic view on the students' preparation to the job from the teacher's side;
- Lack of cooperation between schools and companies;
- Too short vocational training;
- Cases of mismatch vocational training;

##### Recommendations

The country research done in IO1 gave an insight in some of the things that need to been addressed to create a better vocational educations. Below we have line up some of the recommendation for the research:

##### For schools

Adjusting the curriculum to the particular employers' expectations on the specific area:

- Longer vocational training;
- Better cooperation with employers in matter of determination the common needs and evaluation of vocational training;
- Up-to-date knowledge of trainers.

### For students

- Better preparation for the skills and competence required on the labour market;
- Changes of attitude for more positive and open to learning – make it more attractive to take an vocational education.

### For employers

- Care for the atmosphere at work – make it attractive to learn in a company;
- Realization of the yield of vocational training in companies – make sure that student has a learning outcome when in a company;
- Giving the chance for real work – make sure that the students task in a company reflex real working situations and tasks;
- Cooperation with schools and people interested in creating a dual system – Start at micro level find partners - schools and other people or institutions – who also want to make dual education and start there building up trust and create a social contract you can build on.

### For people/institutions interested in vocational education and the labour market

- Cooperation between institutions e.g. schools, companies, chamber of commerce and industry, local, regional and national authorities.

## 9.3.2 Germany

### Summary

The labour market in Germany is characterized by a now somewhat paradoxical development: Despite the positive development of the number of newly concluded agreement on vocational training of certain profession, in 2015 Germany had the lowest rate since the time of German reunification. At the same time there are more and more vacant places for apprenticeships, which are offered by workplaces and there are more and more people who are interested in starting an apprenticeship but cannot find an appropriate place. Reasons that are attributed to problems of matching the profession

Vocational training lost its attractiveness a lot, and is perceived by many young people as the situation without exit. There is a need for full permeability of different systems of education and include in the skills acquired during the change of the way of education. The role of parents is problematic as well, since parents in about 80% decide about the choice of occupation by their child and are forcing their children to educational paths, which don't match them.

### Strengths

- The vocational training in the workplace is guaranteed to be the best possibility of taking into account technical novelty in vocational education and meets the requirements of the market.
- Companies working with Chambers to develop frame plans for education and participate in the formulation of practical teaching plans and react to changes in the requirements of the labour market.

### Weaknesses

- Practical experience of the teaching staff is partly outdated, composition of the school timetable is not always focused on the issues of the workplace;
- The training is sometimes mismatched the requirements of the labour market;

- The demand for professionals is growing. A weaker group of pupils are getting employed, but this led to a greater need for financial support, and smaller companies cannot provide it.
- Weaker students are not able to cope with the requirements of workplaces. Here one should rethink the content and rules of education.

### Recommendations:

- Since the vocational training takes place largely in the workplace, it is indeed a particularly good system of vocational education for the labour market, especially in comparison with other European countries.
- New teaching plan for weaker students – other professions should be taught step by step like shop assistant/merchant in retail trade;
- Improving the ability to access to the place of vocational training. You should use every potential; free upgrade possibilities transition from vocational education system to the system of higher education. Raising the possibility of transition from apprenticeship to higher education and vice versa is extremely important for social justice and security specialists.
- Differentiation of vocational education: a) pupils weaker b) Normal vocational training c) a person stronger in science with full permeability each way, and our duty recognition of education.
- The creation of criteria for access to vocational training, diverse for each profession. Everyone should learn what suits his inclinations and competencies, and occur to different ways, but achieve everything. Intensive creation a real job, which may be acquired upon the completion of the profession and the opening of the first vertical career path. Very strong implementation of dual Bachelor Studies
- Equal opportunities! Vocational training for all young people: Support and help for weaker and stronger in science. Permeability in and between vocational training systems. Recognition and adding skills acquired to further their career
- Better network of partners of vocational education (workplaces, schools, offices). More accompanying measures for vocational training.
- Transferring content of vocational education in certain professions (particularly in occupations combined) leads to an overload especially weaker students.
- Sectors with less well-known and disliked professions have more and more difficulty to find suitable students.

### 9.3.3 Denmark

#### Summary

The overall result of this study is that there is a high degree for satisfaction across all four target groups.

Furthermore the study shows that the current balance between school periods and time in companies is ok for all the target groups.

Overall the study shows that the anchorages of vocational system are strong both among student, educators, companies and educational stakeholders.

Based on this study we can conclude that it is the general opinion across all target groups that the vocational education system in our area is preparing the students to the needs of labour market with the right skills.

But it must be noted that this study doesn't give a full picture of the Danish vocational education system therefore the Danish partner has also done the bibliographical study to be able to give recommendations on how improve the vocational education system in Denmark.

### The bibliographical study

The overall result of this study is that there are three major challenges for vocational education:

- Early school leaving;
- Reputation;
- Providing internships.<sup>71</sup>

### Early school leaving

Since 2008, all institutions of vocational education and training required to prepare action plans to help more people completing upper secondary education. The Action Plan sets out the schools precise objectives and strategies for how much it expects to reduce the dropout next year to achieve its objective the school initiates different initiatives, as described in the Action Plan. It is up to each school to decide which interventions are locally implemented to achieve the best effect. The action plans helps the schools to have a greater focus on dropout rates and causes. At the same time the action plans help the schools to systematize the efforts that are underway<sup>72</sup>

### Reputation

The intention of this policy initiative is to initiate concrete activities and initiatives to enhance vocational education reputation, supporting school work with the quality of teaching and shed more light on the schools' diverse educational practice. As a part of efforts to strengthen the reputation a Quality Squad was established which over a two year period (2010-2012) visited all vocational schools in the country. The Quality Squad continues engaging with the schools in their efforts to strengthen the one hand the quality, flexibility and educational organization of education and teaching, partly VET reputation in the local area and retention of students in education. The Quality Squad disseminates good practices from schools and helps schools to improve quality by creating the opportunity to share knowledge, ideas and experiences across VET<sup>73</sup>

---

<sup>71</sup> Erhvervsuddannelserne - fakta og muligheder, Ministry of Education 2011

<sup>72</sup> Ibid

<sup>73</sup> Ibid



## Reform of the vocational education system

Of August 2015 reform of vocational education system has been implemented to address the two challenges described above. The main objective of the reform is:

- More students must choose to start a VET immediately following form level 9 or 10;
- More people must complete a VET;
- The VETs must challenge all students so they may reach their fullest potential;
- The trust and well-being in the VETs must be strengthened.<sup>74</sup>

There are no evaluation results of the reform yet, but with the reform there has been given a clear political mandate to find solution for the systems challenges.

## Providing apprenticeships

One of the great challenges of a Dual education and training system is to provide a sufficient number of apprenticeships for the students. This challenge is particularly evident in periods of recession, where it often will be harder for companies to hire students. The provision of a sufficient number of apprenticeships is essential for the dual system can be.

Companies have a great responsibility to educate the future workforce and therefore play an essential role in providing apprenticeships. Since 1977, there has been a scheme where companies hiring a student can receive reimbursement for part of the salary costs. This scheme is called the Employers' Reimbursement System (AER). All public and private employers pay to AER.

As part of the Globalization Agreements in 2009 and 2010, the Danish government concluded four apprenticeships agreements with the aim of creating more apprenticeships and increase school training capacity. The most recent agreement was concluded in November 2010, which was allocated 2.4 billion kroner for an apprenticeship package with the intention of creating 8,900 more training places compared to 2009. In connection with the agreements, it became possible for companies to achieve bonus, when they enter into a training agreement with a student.

Both schools and trade committees are active in the apprenticeship outreach to lead students and businesses to sign a learning agreement. From 2011, development statements contain an action plan for providing apprenticeships. This will have trade committees to describe what they each do that there are training enough.<sup>75</sup>

## Strengths

- A high degree of satisfaction with the system;
- A well-established legal framework;
- The dual VET system has a long tradition with a strong social contract between the government, schools and the involved social partners.

## Weaknesses

- Early school leaving
- Reputation of VET in the general population
- Providing enough apprenticeships – challenges are both structural and conjectural.

<sup>74</sup> Improving Vocational Education and Training – overview of reform of the Danish vocational education system, Ministry of Education 2015

<sup>75</sup> Erhvervsuddannelserne - fakta og muligheder, Ministry of Education 2011

## Recommendations

- Improved guidance in primary and lower secondary school focusing on getting more students to take a vocational education;
- Systematic evaluations of the reform of the vocational educations to see if they have the wanted effect on early school leaving and the reputation of vocational education.
- Create new incentives for companies to take apprentices e.g. improved financial schemes or social causes.

### 9.3.4 Lithuania

#### Summary

Most VET programmes are school-based, meaning that they are undertaken in accredited institutions. New possibilities are providing in VET changing situation from school-based to work-based settings. By projects financed by the EU funds started apprenticeship in education and training in Lithuania. The main task for Lithuania is attract more students to VET through better relevance of qualifications to labour market needs and better cooperation between businesses and VET by increasing the proportion of practical training in companies up to 60% in all VET programmes (currently it should be at least 30%).

#### Strengths

- Getting better the image of vocational schools
- All targets group understanding cooperation importance.

#### Weaknesses

- Theoretical content is often too general.
- Curriculum content is partly outdated. Jobs are changing, and schools need to keep up with the program.
- Lack of personnel or well prepared trainers in institutions often leads to inadequate instruction.
- Too little individual support for students and support oriented to a weak student.

## Recommendations

### Schools

- Consultation of the school curriculum with employers is recommended;
- Good preparation to self-presentation and interviews is important;
- All trainers need constant up-to-date training;
- Vocational instructors should be delegated to workplace for the time of profession instruction;
- More support to students should be given;
- School level and attitude of apprentices must be assessed;
- Taking feedback from students and employers seriously.

### Workplaces

- Important factors of good training at workplace;
- Good atmosphere at work (nice, kind and willing to help workmates) Good relation helps in the assimilation of content and fast learning;
- Actual contact with some difficult situations takes place only after the start of work;
- Real tasks, real work should be given to students. Students pass through all departments in the company - to acquire technical competence - good chances for employment and

faster career;

- 100 % scheduled training should be completed. Employers should prepare students for a profession in a permanent way and not just treat them as “ gap fillers” in the absence of qualified staff;
- Learning by doing and implementing;
- Cooperation with all institutions. Intensive contact between the school and the workplace, rapid transition from theory to practice at the school in the plant;
- Companies should take part in developing frame plans for education and participate in the formulation of practical teaching plans and react to changes / progress;
- Development of frame plans for education and participate in the formulation of practical teaching plans and react to changes / progress;
- Help and support. The pedagogical attitude towards entering the vocational training could be improved.

## 10. Bibliography

1. Albrecht, Reithel, „Ausbildungcoaching und externes Ausbildungsmanagement“, Verlag Dr. Kovac, Hamburg 2014, ISBN 978-3-8300-7641-4
2. Ausbildungsabbrüche vermeiden – neue Ansätze und Lösungsstrategien. Band 6 der Reihe Berufsbildungsforschung, BMBF 2009
3. Berufsbildungsbericht 2015, BiBB 2015
4. Berufsbildungsbericht 2016, BIBB 2016
5. Bobińska B., Korpysa J. Model Współpracy Szkoły z Przedsiębiorstwem, Zachodnia Szkoła Biznesu w Szczecinie 2013
6. Cedefop (2008). Terminology of European education and training policy. Luxembourg: Publications Office.
7. Cedefop (2010). Professional development opportunities for in-company trainers: a compilation of good practices. Luxembourg
8. Cedefop (2014). European inventory on validation of non-formal and informal learning 2014: country report Denmark,
9. Cedefop (2014) Apprenticeship-type schemes and structured work-based learning programmes in Denmark,
10. Definicja z raportu na Zgromadzenie Ogólne w 2003 r. za K. Kwatera, R. Bukowska „Partnerstwo w Leadarze“ Małopolska sieć LDG 2009 s. 8
11. Deutsches Bildungssystem als Vorbild für Süd-Europäer. Welt 2.1.2014
12. Encyklopedia Zarządzania <http://mfiles.pl/pl/index.php/Networking>
13. Faßmann, Funk, Früherkennung und Reduzierung von Abbrüchen der Berufsausbildung in Berufsbildungswerken, pdf,

14. Geddes M. Making Public Private Partnership Work. Buldig Relationships and Understanding, Ashgate 2005
15. Hajdukiewicz M., Nauczyciele jako ucząca się społeczność zawodowa, ORE Warszawa 2012 Prezentacja , dostępna na internetowej stronie ORE [http://www.ore.edu.pl/strona-ore/index.php?option=com\\_phocadownload&view=category&id=142:nauczyciele-jako-uczca-si-spoeczno-zawodowa&Itemid=1017](http://www.ore.edu.pl/strona-ore/index.php?option=com_phocadownload&view=category&id=142:nauczyciele-jako-uczca-si-spoeczno-zawodowa&Itemid=1017)
16. Handbuch der deutschen Bildungsgeschichte, Bd. VI: 1945 bis zur Gegenwart, Hg. C. Furck u. C. Führ, München 1998, Tb. BRD, ISBN 3-406-32467-3; Tb. DDR u. neue Bundesländer, ISBN 3-406-42931-9.
17. Hätönen H. Competence Map for Workplace Instructors. Suomen Yliopistopaino Oy, Tampere, 2014
18. Hessisches Ministerium für Wirtschaft, Energie, Verkehr und Landesentwicklung, "Ausbildungsabbrüche vermeiden", Wiesbaden Januar 2016
19. <http://www.dolnoslaskie.doradztwo.koweziu.edu.pl/index.php/126-klasy-patronackie-przyszlosc-edukacji-dzisiaj>
20. <http://www.fundacja-alae.com/>
21. <https://investinedu.com.pl/wp-content/uploads/sites/2/2015/10/Regulamin-Klastra-Edukacyjnego-INVEST-in-EDU.pdf>
22. <http://gospodarka.um.walbrzych.pl/pl/news/wsp%C3%B3%C5%82praca-sse-ze-szko%C5%82ami-i-uczelniami>
23. [http://www.wsz-pou.edu.pl/magazyn/index.php?strona=mag\\_berniak55&p=](http://www.wsz-pou.edu.pl/magazyn/index.php?strona=mag_berniak55&p=)
24. <https://invest-park.com.pl/o-strefie/invest-in-edu/>
25. [https://men.gov.pl/wp-content/uploads/2015/01/porozumienie\\_o\\_wspolpracy\\_23.01.14.pdf](https://men.gov.pl/wp-content/uploads/2015/01/porozumienie_o_wspolpracy_23.01.14.pdf)
26. Jamrozik M. Zmysłowski M. Partnerstwo bez granic/ Partnership without borders, KIW, [www.kiw-pokl.org.pl](http://www.kiw-pokl.org.pl),
27. Kai S. Cortina, Jürgen Baumert, Achim Leschinsky, Karl Ulrich Mayer: Das Bildungswesen in der Bundesrepublik Deutschland. Strukturen und Entwicklungen im Überblick. Rowohlt Taschenbücher, November 2003, ISBN 978-3-499-61122-3.
28. Książek E., Pruvot J-M. Budowa sieci współpracy i partnerstwa dla komercjalizacji wiedzy i technologii
29. Kuzitowicz W. O potrzebie tworzenia sieci współpracy i samokształcenia w doskonaleniu nauczycieli kształcenia zawodowego,
30. Lithuanian MoES (2005). Lietuvos Respublikos švietimo ir mokslo ministro 2005 m. kovo 17 d. įsakymas Nr. ISAK-456 'Dėl pedagoginių-psichologinių žinių kurso'[Legal act regarding pedagogical-psychological knowledge course]. Valstybės žinios [Official Gazette], 22 March 2005, No 37-1204.
31. Lithuanian MoES (2007). Lietuvos Respublikos švietimo ir mokslo ministro 2007 m. sausio

- 15 d. įsakymas Nr. ISAK-54 'Dėl mokytojo profesijos kompetencijos aprašo patvirtinimo' [Legal act regarding the description of competence of teachers profession]. Valstybės žinios [Official Gazette], 30 January 2007, No 12-511.
32. Maußner M., „Gesetzesammlung Ausbildereignungsprüfung gem. AEVO“, Verlagshaus Zitzmann, ISBN 9783943370300
33. Marchwiński J. „Definicja partnerstwa“, Warszawa 2014
34. Ministerstwo Edukacji Narodowej, Informacja MEN o współpracy Specjalnych Stref Ekonomicznych (SSE) ze szkołami zawodowymi, Warszawa 05.03.2015
35. Ministerstwo Gospodarki, Rozporządzenie z dnia 11 grudnia 2006 roku
36. Pancer I., Bojko P. Analiza realizowanych obecnie form współpracy ponadgimnazjalnych szkół zawodowych z pracodawcami, Gdańsk 2014
37. Partnerstwo- konieczność czy potrzeba. Fundacja Edukacja dla Demokracji, Warszawa 2008
38. Parliament of the Republic of Lithuania (2011). Law on education (Last amended on 17 March 2011, No XI-1281). Valstybės žinios [Official Gazette], 2011, No 38-1804.
39. Rainer Geißler: Die Sozialstruktur Deutschlands. Die gesellschaftliche Entwicklung vor und nach der Vereinigung, 3. Aufl. Wiesbaden 2002, ISBN 3-531-32923-5, S. 333–364.
40. Ruschel “Die Ausbildereignungsprüfung, Taschenbuch”, Friedrich Kiehl Verlag, ISBN 978-3-470-51756-8
41. Successful Partnership A Guide, OECD Forum on Partnerships and Local Governance, Vienna 2008
42. Summary of Good Tips and Hints for a Successful Partnership, [www.progrmkontoret.se](http://www.progrmkontoret.se)
43. Trenchek, Berning, Lenz, „Mediation und Konfliktmanagement“, Nomos Verlag Baden-Baden, ISBN 978-3-8329-6886-1
44. The Blackwell Handbook of Mentoring, 2007
45. The Danish Ministry of Education (2014) Improving Vocational Education and Training – overview of reform of the Danish vocational education system,
46. Tillmann, Frank; Schaub, Günther. Attraktivität des dualen Ausbildungssystems aus Sicht von Jugendlichen. ; Lex, Tilly; Kuhn... 2014
47. Vaitkutė, L. (2016). Supporting teachers and trainers for successful reforms and quality of vocational education and training: mapping their professional development in the EU –Lithuania. Cedefop ReferNet thematic perspectives series.
48. VET in Europe–Country report (2013). Qualifications and Vocational Education and Training Development Centre with contributions from members of ReferNet Lithuania
49. VET Partnership between Schools and Companies – the Role of Teachers and Trainers Lessons from a Peer Learning Activity . March/2007. Danish Technological institute Trainers in continuing VET: emerging competence profile. Luxembourg: Publications Office of the

European Union, 2013

50. VET Partnership between Schools and Companies- the Role of Teachers and Trainers. Lessons from a Peer Learning Activity, March 2017
51. Volmari K., Seppo Helakorpi & Rasmus Frimodt. Competence framework for VET professions. Vammalan Kirjapaino Oy Sastamala 2009
52. Volmari, K.; Helakorpi, S.; Frimodt, R. (eds) (2009). Competence framework for VET professions: handbook for practitioners. Helsinki: Finnish National Board of Education.
53. Weckert, Oboth, Mediation für Dummies“, Wiley VCH, ISBN 978-3527705894
54. Wejcman Z. Jordan P. Jak budować efektywne partnerstwa, [www.odl.celodin.hu](http://www.odl.celodin.hu)
55. Who trains in small and medium-sized enterprises Characteristics, needs and ways of support Luxembourg: Publications Office of the European Union, 2015
56. Woźnicka J. Partnerstwo jako narzędzie społecznej odpowiedzialności biznesu, 2013
57. Współpraca Szkół Zawodowych z Pracodawcami. Terazniejszość i przyszłość, KOWEZIU [http://www.koweziu.edu.pl/download.php?plik=Wspolpraca\\_pracodawcow\\_ze\\_szkolami\\_zawodowymi.pdf](http://www.koweziu.edu.pl/download.php?plik=Wspolpraca_pracodawcow_ze_szkolami_zawodowymi.pdf).
58. Zaręba P., Kępczyk R., Misztal J., Hadrian M, Biernat A. Współpraca szkół zawodowych z pracodawcami przykładowe rozwiązania Szkoła Zawodowa Szkołą Pozytywnego Wyboru, koweziu, Warszawa 2013





