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**GUIDEBOOK FOR THE CURRICULUM DESIGN,  
ORGANISATION OF WORK-BASED LEARNING AND  
WORK-BASED VOCATIONAL DIDACTICS  
FOR DUAL APPRENTICESHIP CARRIED OUT IN  
THE PRACTICAL TRAINING INSTITUTIONS**

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## CONTENTS

Preface .....	4
I. Comparative analysis of the applied apprenticeship schemes in the project partner countries: Lithuania, Germany, Spain, Italy and The Netherlands .....	7
II. Recommendations on organizational aspects of WBL implementation in school-based systems .....	10
III. Recommendations for work-based vocational didactic requirements to be followed in school-based systems .....	16
IV. Qualification profile for a VET teacher or trainer .....	24
Annexes .....	27
Resources and references .....	34

## **Preface**

The Erasmus+ project Development of Dual Apprenticeship in Practical Training Units (APPRINVET) is aiming at the promotion of work based learning (WBL) for several good reasons. Well-functioning apprenticeship schemes help meeting enterprises' skills needs and appropriately take into account cost drivers with a view to encouraging enterprises to invest in apprenticeships. Moreover, it is a means of training, primarily of the young, to enhance employability and future employment prospects.

Although work based learning systems have clear benefits for learners and for the demands of the labour market, the systems in European countries have many faces.

Some apprenticeship systems are employment-based, whereas others are rooted in education and training and/or more school-based. Apprenticeship systems can also be demand-led, to varying degrees, depending on the extent to which employers' skills needs are taken into account. This often relates to the role that employers and their organisations play as part of the apprenticeship system.

It is true that vocational education and training followed in the distant past the same pattern of apprenticeship everywhere in Europe through trade guilds, but it is equally true that the Industrial Revolution and the rise of liberalism caused the abandonment of the apprenticeship system, whilst national systems of vocational education and training came to differ widely in accordance with the societal characteristics of each nation.

It might therefore be said, without risk of contradiction that each country has developed its own vocational education and training system.

### **Vocational education and training in the guild system**

A strict hierarchy held sway throughout Europe under the guild system: apprentice, journeyman, master. The title of master was the only written evidence of competence, while 'certificates of apprenticeship' confirmed completion of the first stage of training. Only after a trial period lasting several weeks were apprentices accepted into a guild. The family generally paid the master a fee to cover the apprentice's food and lodging. The apprenticeship generally lasted from two to four years, and longer in much specialised occupations. The period of apprenticeship ended with a specialised examination when the apprentice was 'discharged'. Each trade or craft had its own customs for this 'discharge' and for the former apprentice's acceptance into the community of journeymen.

Very interesting, taking the current laborious developments into account, was that journeymen's vocational qualifications were recognised in other countries. Generally without family ties, they travelled from place to place, to augment and broaden their skills by learning from masters in other countries: an early form of occupational mobility in Europe. After journeymen had acquired sufficient experience, they would apply to a guild for admission as masters.

### **Developments after the industrial revolution**

Liberal economic doctrine, which encouraged the 'free play of forces', regarded the traditional guild system as an obstacle to competition and a hindrance to free trade and so it was abolished in most countries and new systems emerged after a certain period, but with very different features.

### **The dual corporate model**

In Germany, it was Georg Kerchensteiner, a teacher from Munich, who laid towards the end of the 19<sup>th</sup> century the foundation of the current dual system in Germany. The system offered the opportunity to learn a profession in practice on one hand and to obtain some general, supporting knowledge on the other. Up to today, the system is not narrowly focussing on required skills of a company, but it takes wider professional skills into account, including some general knowledge, which was inspired by the ideas (Bildung) of the great German philosopher von Humboldt. The system was also an interesting learning pathway for the upper group of the vastly rising labour movement that was condemned to unskilled labour in the factories. By offering this opportunity Germany created a kind of skilled middle class that was reluctant towards the ideas of a revolution.

### **The liberal market model**

In the Anglo-Saxon world (UK and US) there was an equally strong industrialisation (even earlier), but with less state regulation and more free market mechanisms. For VET development, this resulted in a strong employer-led system with less holistic features than in Germany.

### **The state-regulated model**

Also France was rapidly industrializing around the end of the 19<sup>th</sup> century, but due to the French tradition of a strong centralistic government and the ideas of enlightenment, school-based learning and general knowledge obtained a higher status than learning a profession in practice.

### **Hybrid models and scattered systems**

The subdivision into the three groups here above is of course a simplification and only one of the possibilities to come to a kind of grouping. In the Netherlands e.g. the current system knows a work-based learning pathway and a school-based learning pathway, both leading to the same qualifications. Besides, the school based model –as in most countries- is not purely school based, as it is even possible to spend up to 40 or 50% of the time in a company.

In Italy there is partly the typical tradition of Latin countries with a high esteem for study, arts and literature, but there is not a centralistic tradition as there is in France. Moreover there are large differences between the North and the South and some other disintegrating forces, which makes that the Italian VET system looks rather scattered.

In Spain, another Latin country, there is not a tradition of integrating VET into (compulsory) mainstream education. In the past, the Spanish Ministry of Education and Science never showed great motivation to bring education closer to the labour market needs. Such a kind of training was offered by the Ministry of Labour and nowadays by the autonomous regions or provinces. All together VET was generally considered as a second choice and it is mainly since the recent crisis that Spain has started working on serious reforms and the (limited) adaptation of the dual system. Finally, it needs to be stressed that, like in Italy, there are huge differences between industrialized areas like the Basque country and Catalonia and other more rural areas.

### **New models in the former socialist countries**

The fundamental transformation of political, economic and social structures has radically changed the functioning of the VET systems. A whole new logic has been established. With the closure of so many workshops and companies and the reduction of facilities within enterprises, schools were forced to take care for the entire Vocational Education and Training cycle. As a result VET has become more theoretical and costs are increasing. In the new market systems, new mechanisms between the labour market needs and the supply of VET needed to be established and mediated in most cases among social partners. These partners however, are not as well established as most of their counterparts from those countries, where the market rules have a much longer tradition.

### **Emancipation in the sixties and seventies**

The ideas of emancipation of the labour classes through academic or more theoretical studies became very strong in these years with the result that many employers saw their kind of solid education to learn a profession rapidly disappearing. This tendency was even strengthened through the aftermath of the oil crisis and the massive unemployment rates in the eighties. Staying at school, college or University became more and more popular, as there was no work anyway.

### **Current situation**

By the time that the perspectives on the labour market became better and companies were again in need of well trained staff it became more and more visible that there was a gap between the requirements of the labour market and the competences at offer.

Meanwhile there is consensus about the relationship between relative low rates of youth unemployment and work based learning systems. Although this is also a kind of chicken-egg story.

### **Back to the project APPRINVET**

The project has partners from two countries, Germany and The Netherlands with a rather strong VET tradition, from two countries with a Latin tradition and rather scattered VET systems and one country with a recent history as a socialist country. It is not feasible for several reasons to realize a full transition from rather theory based systems to predominantly work based systems.

It is however possible to move towards that direction by involving (local) entrepreneurs at the design of VET programs, whilst remaining within a national (or even European) framework.

Work Based Learning has many faces, but also many features in common.

In this guidebook about required competences for VET teachers or trainers in a Work Based Learning environment, attention will be paid to the following topics:

1. Comparative analysis of the VET systems in Lithuania, Germany, Spain, Italy and The Netherlands.
2. Recommendations on organisational aspects of WBL implementation in school-based systems.
3. Recommendations for work-based vocational didactic requirements to be followed in school-based systems.
4. Qualification profile of VET teachers/trainers, working in a WBL environment.

## **I. Comparative analysis of the applied apprenticeship schemes in the project partner countries: Lithuania, Germany, Spain, Italy and The Netherlands**

Across Europe, some apprenticeship systems are employment-based, whereas others are rooted in education and training provisions and are more school-based. Apprenticeship systems can also be demand-led, to varying degrees, depending on the extent to which employers' skills needs are taken into account. The situation often relates to the role that employers and their organisations play as part of the apprenticeship system. The diversity in VET ranges from the authentic employer led dual systems in the German speaking countries to the more government based school based systems in many South-European countries

In spite of these differences, there appears to be a consensus about the need to bridge the gap between the needs of the labour markets and the VET programs at offer. Apprenticeship is a powerful tool to realize this. It is the most relevant education and training pathway to balance technical, soft, and social skills in an integrated approach and to make VET pathways more attractive and labor market relevant.

The shape of such apprenticeship is however not one size that fits all due to several factors, among which the availability and capacity of employers, being able to create training vacancies and job opportunities. After all these are crucial conditions to take on learners.

For that reason, but also as result of political choices, some countries have developed more hybrid systems, where practical learning is done in practical training centers instead of primarily in companies.

This comparative analysis is about the organisation of VET systems in Lithuania, Germany, Spain, Italy and the Netherlands and focuses on 5 main areas:

1. Description of the systems
2. Challenges, the five systems are facing
3. Practical Training Centres
4. Curriculum or learning outcomes
5. Quality control

As, the description is rather extensive, but very useful for more detailed information about the specific situation in the five countries, the full report based on research among the partners is attached as an appendix. However, as a kind of glance on the most striking features of the five countries, below there are a number of key messages related to the five focus areas.

Key messages about the systems:

- In all countries there is a shared responsibility, but up to different degrees. Whereas employers are in the lead in Germany, there is a more 50-50 balance of ownership between social partners and providers in The Netherlands. In Lithuania the role of social partners in the more government led system is growing since 2012. In Spain and Italy the landscape of VET appears rather shattered due to multilevel governance and strong regional autonomy.
- In Germany the leading system is dual, which also applies to The Netherlands but with a stronger role for the providers and a majority of students having the status of a student instead of an apprentice on the payroll. In Lithuania and Italy the systems are mainly school based, although this is not always the case in Italy due to the diversity. In Spain there is a shift going on from a school based system to a more work based system.
- Concerning status and contractual arrangements for students/apprentices the situation is the most transparent in Germany (apprentices have a contract and a salary) and in The Netherlands, where students in the work based system (BBL) have a contract and often a salary, whilst those in the school based system (BOL) have a contract, but only a compensation of their costs. In Italy and Spain apprentices in the (limited) dual learning places have also contracts and salaries, whilst all this is clearly less common in Lithuania.
- In Italy and Spain contractual arrangements with employers and clearly defined responsibilities among all actors are existing, but due to the scattered landscape it is difficult to say something about the percentage of such provisions for the entire VET sector. This applies even stronger to the situation in Lithuania.
- Funding of the VET system is done by the national governments in Lithuania and The Netherlands, whilst this is done by regional governments (and optional by companies) in Spain. In Germany it is mainly done by the employers. Exceptional appears the system in Italy where organizations (and even

bigger companies) that provide and support the apprenticeships receive funding from the National Apprenticeship Service.

Key messages about the challenges, the systems are facing:

- In all countries there might be a certain mismatch between the demands of the labour market and courses at offer, although again not in the same degree. In spite of considerable investments in VET, students in Lithuania acquire few realistic work skills, which makes that foreign investors in particular are dissatisfied by the quality of education. In the Netherlands the qualification files of all training programs are assembled together by the providers (50%) and the social partners (50%), whilst in Germany the role of social partners in defining the learning outcomes is even bigger. In spite of that in Germany there is a considerable number of unplaced applicants for Dual VET on one hand and a high number of vacant training places on the other. In Spain some big companies (automotive) are offering VET teachers courses for free in order to keep their knowledge and skills up to date.
- In Germany, due to the federal structure many competences belong to the states (Bundesländer), although the training within companies is regulated by the Federal Government through training regulations. Germany is also facing strong regional disparity with regard to demand and supply of Dual VET training places.
- In Spain the vocational schools still play a key role in defining educational profiles, whilst there is a growing tendency towards the German system of apprenticeships. There is however a limited interest from some Spanish employers - especially the SMEs - to invest in this type of training.
- Permeability from VET to higher levels of education is in most countries officially possible, but is in many cases hindered by different study profiles or principles of learning achievements, as it happens e.g. in Lithuania
- The same applies to recognition and validation of prior learning, which is also officially possible in all countries, but often facing serious problems if it comes to implementation.
- In all countries, there are serious problems regarding the matching of students, who are looking for an apprentice place and companies, who are still looking for apprentices, but are not able to find the right people. This applies strongly to the technical sectors.
- The Dutch system of two learning pathways (work based or school based) leading to the same qualification offers a solution for this problem, as there is always the school based learning opportunity in case that the industry is not (yet) willing to take the young person on board.
- In Lithuania one of the most important reasons for non-compliance of VET-graduates with the needs of the labour market is the rapid technological change. Schools do not have the means to buy expensive modern technology and thus to keep up with the rapid technological progress on the market. The German system of centres, that are established by the industry (SME's) and equipped with up to date technology, offers a strong solution for this problem. Upscaling of the size of VET centres through mergers as it was done in The Netherlands provides also more financial power.
- A striking feature of the systems in Spain and Italy is the regional diversity, leading to a shattered landscape of legislation, quality and follow up opportunities.
- Early school leaving is a general problem in all countries, although this appears to be extremely high in Spain and Italy, as these countries were hit extremely hard by the crisis. In the Netherlands, due to several measures, the numbers of early school leavers have decreased considerably in the last years.

Key messages about Practical Training Centres within the schools:

- As a response to the mismatch between demands of the labour market and the traditional VET programs there are several practical training centres established in Lithuania with the support of the EU Structural Funds. Training is now getting closer to practice, employers are involved in the training process and new, shorter forms of education are emerging.
- In Germany many efforts are made to stick to the system of Dual VET, even in cases where the market is not functioning as it should do. In those cases authorities are supporting the creation of centres, where certain professions can be learnt in the same way as it should have been done in a real company. These are the so-called Außerbetriebliche Ausbildungsstätten. Students combine this with school as it has always been done in the Dual system. Industry sometimes provides external intercompany vocational training centres (überbetriebliche Berufsbildungsstätten) in cases where the full range of professional skills cannot be learnt in the company (SME). Finally, there are also full-time vocational schools with integrated practical training facilities and short work placements in companies.
- The involvement of the triangle of school, practical training centre and real companies differs from country to country. Whereas this appears to be well organized in Germany, the involvement of the industry is a weak point in the Lithuanian situation.

- Interesting partnerships are sometimes created in Italy, where school-work alternating pathways are sometimes created in “simulated companies” with the support (tutor ship) of real companies located in the area.
- It is for all countries a main challenge to employ teachers, trainers or tutors with a trade & Industry background in order to obtain the experience and knowledge from the labour market. At the same time it is necessary to combine this practical knowledge with some pedagogical and didactical knowledge, which people from the trade & Industry are sometimes missing.
- Key messages about the curriculum or learning outcomes:
- In general countries have subdivided their curricula in three main areas:
  - a profession-related learning area;
  - a cross-profession learning area, which complements the vocational qualification and contributes to the social, cultural, ethical and sometimes religious competences. General subjects like a second foreign language (English), arithmetic and native language also belong to this category
  - a differentiation area, which enables learners to supplement, broaden and deepen their individual knowledge, skills and competences and to meet the particular labour market demands in a certain region.

The proportions of this subdivision differs from country to country and also depends on the authorities that are responsible for the VET programs.

- Generally, in cases where the Labour Ministries (e.g. Spain) are in charge, more emphasis is put on the job related competences, whilst in cases where the Education Department is in charge, more emphasis will be shifted to general or broader competences, without neglecting the professional ones.
- It goes almost without saying, that the volume of general subjects in IVET is more extensive than it is in CVET.

Key messages about Quality control measures:

- The European Quality assurance system (EQAVET) appears to be more leading in those countries with less tradition in solid VET programs (Lithuania, Italy), than it is in countries with a stronger tradition like Germany and The Netherlands.
- There is a tendency among countries to shift from fixed governmental control to more internal quality assurance mechanisms with the authorities keeping a close eye on the procedures that should be respected by all providers. Although this does not happen everywhere in the same amount. Quality control by governmental authorities can be done in a proportional way; light where possible, but more frequent and thoroughly if necessary.
- Teachers and the quality of teachers are crucial for the quality and the attractiveness of VET.
- The role of companies increases if systems shift from school based learning to more work based learning.

## II. Recommendations on organizational aspects of WBL implementation in school-based systems

### 1. Definition of work-based-learning in dual apprenticeship

Basically, Work-Based Learning, or WBL, defines a wide range of activities and activity types which aim at acquiring knowledge, skills and competences by performing and reflecting on tasks in a professional environment, either at work (in dual vocational training) or in a VET institution. WBL also occurs in other areas of education, such as in school-based education and training, higher education and adult education. Thus, WBL can be both part of the initial education in all educational sectors, as well as part of further education.

According to CEDEFOP, Work-based Learning may be used interchangeably with 'alternance training', or dual education in order to identify 'education or training combining periods in an educational institution or training centre and in the workplace'. In the context of the present analysis, hence, Work-Based Learning will refer to **dual education** types of activities (ex. dual apprenticeship), characterized by 'duality' in two regards:

- the duality of learning venues (schools/VET providers and training companies), sharing the responsibility of providing theoretical and practical training; and
- the duality of actors (public and private actors), sharing the responsibility for VET policy and practice.

The duality of the learning venues is the basis for the definitions used in European and international literature.

In line with the Rethinking Education Communication three main models of WBL can be identified:

- A. Alternance schemes or **apprenticeships** are typically known in Austria and Germany as the "dual system". These are fundamentally based on the integration of companies as training providers together with VET schools or other education/training institutes. In these programmes, learners spend a significant time on training in companies. In parallel, or in "alternating" periods, they acquire general and occupation-related knowledge and often complementary practical skills and key competences in VET schools or other education/training institutes.
- B. A second model of WBL is school-based VET which includes **on-the-job training periods in companies**. On-the-job training periods typically cover internships, work placements or traineeships that are incorporated as a compulsory or optional element of VET programmes leading to formal qualifications. They can be of varying duration but typically represent less than 50% of the training programme duration (often around 25-30% or less).
- C. Finally, WBL that is **integrated in a school-based programme**, through on-site labs, workshops, kitchens, restaurants, junior or practice firms, simulations or real business/industry project assignments. The aim is to create "real life" work environments, establish contacts and /or cooperation with real companies or clients, and develop entrepreneurship competences.

Experience suggests that these forms of education can meet the twin goals of improving individuals' employability and increasing economic competitiveness. Nevertheless, a lack of workplace experience and the related skills and competences is one of the factors contributing to the "skills gap" in the EU today. While 5.6 million young people in the EU suffer the consequences of unemployment, 36% of employers' report that they struggle to find new recruits with the skills they need. Something is clearly wrong. The need to identify, adapt and adopt practices which can tackle this skills gap is urgent. Part of the solution can be found in high quality vocational education and training (VET) systems, in which the active participation of employers and a strong element of work-based learning facilitate young people's transition to work by providing the knowledge, skills and competences which they need for a successful first step into the labour market. Countries with strong and attractive VET systems, and notably those with well-established apprenticeship systems, tend overall to perform better in terms of youth employment. (Work Based learning in Europe - Practices and Policy Pointers).

### 2. Roles, responsibilities and interaction of parties involved

VET is delivered by a large number of persons at different learning venues:

#### Companies

Companies provide In-company training which is based on in-company training standards (minimum standards) defined in "training regulations". Based on these training regulations they draw up an individual

training plan. Step by step, trainees take over duties and tasks in the workplace, and in the process contribute to production. Officially recognized training personnel imparts wide-ranging occupational skills and knowledge and personal competence (types of behaviour, ability to work as part of a team, autonomy etc.) and organizes the training process.

Not to forget, of course, the large number of skilled workers providing training work at the company and give training alongside their normal duties.

The company-based-training, “the learning at the workplace” has to be predominant in relation to the training time as student at the vocational school.

### **Vocational school**

VET Schools and other providers are still at the core of the dual education systems in many European countries mostly characterized by WBL delivered in school-based learning environment (ex. internship and traineeships in Italy and Spain).

### **Chamber organisations**

In particular in the German dual system, Chambers play a key role, since they are supposed to:

- Advise companies on VET
- Assess and certify companies and trainers for in-company training provision
- Monitor in-company training (facilities, instructors, etc.)
- Support companies in finding trainees
- Register training contracts
- Organize interim and final exams
- Mediate disputes between trainees and companies

### **Social partners**

- Labour unions and employer associations negotiate training allowances for trainees
- Workers councils monitor in-company training
- Are involved in the development of in-company training standards
- Are part of the examination boards
- Are involved in the boards which create and adapt the training curricula

Work-based learning is an example of a win-win situation which presents different benefits for all parties involved, beginning with the learner and the company which hosts the learner and /or cooperates with the VET school/institution, through VET providers themselves and up to the broader level of society. Good work-based learning governance is the basis for a successful system: It requires effective collaboration and strong commitment by a wide diversity of stakeholders, each one bringing its own added value, together with a clear definition of their roles and responsibilities:

- Effective partnerships between VET schools / institutions and companies are fundamental to successful WBL. Work based learning provides opportunities for teachers to follow developments in workplace practices, processes, equipment and technology. Furthermore, good links and networking between VET providers and employers facilitates direct access for learners and teachers to the latest technology and equipment. School and business collaboration on the provision of WBL can also enhance cooperation in areas such as curriculum design, career guidance and mentoring and results in better value for money, as costs/resources/technology are shared with employers.
- The key roles of chambers, social partners and government is actively supporting and shaping the Dual VET system. The stakeholders (and especially the chambers) are the „guardians of quality“ of VET provided in Dual VET System (quality assurance). Involving national social partners is necessary to ensure that WBL remains responsive. Their involvement is essential for identifying future skills requirements so that the development of skills across the economy keeps pace with needs. Training/occupational standards need to be reviewed and updated regularly, and social partners are well positioned to make input to the process. They have direct experience of the extent to which WBL provision is user-friendly and successfully geared towards employability and competitiveness.

Nevertheless, the present analysis showed how in all Countries there is a shared responsibility, but up to different degrees. Whereas employers are in the lead in Germany, there is a more 50-50 balance of ownership between social partners and providers in The Netherlands. In Lithuania the role of social partners in the more government led system is growing since 2012. In Spain and Italy the landscape of VET appears rather shattered due to multilevel governance and strong regional autonomy.

### 3. Structure of VET Programmes/curricula (credit-unit system) and time duration

VET curricula should include definition of learning objectives, contents, assessment procedures and methods, as well as arrangements for teachers/trainers (perspectively division of responsibilities between VET-institutions and companies). VET providers/business cooperation on WBL provision can also enhance cooperation in areas such as curriculum design, career guidance and mentoring, thus resulting in a better value for money. In WBL learners spend most of their training pathway at the workplace. It's therefore crucial that the workplace offers rich and diverse learning opportunities: "a too narrow and company specific training can limit opportunities for transferability and career development" (NET WBL - Intermediate Report on WBL needs and gaps).

All on-the-job learning periods, even short ones, should have a clear pedagogical and job-orientation purpose, defined learning outcomes and specified objectives that both the learner and the employer are aware of. In some cases learners participating in on-the-job training periods are only exposed to short-term periods of work experience, e.g. several weeks. These are not always designed as a learning process with clear objectives and planned tasks and thus learners risk ending up in on-the-job training periods that are unplanned and unstructured with limited opportunities for real learning or skills development.

In general, European countries have subdivided their curricula in three main areas:

- a profession-related learning area;
- a cross-profession learning area, which complements the vocational qualification and contributes to the social, cultural, political, ethical and sometimes religious competences.
- a differentiation area, which enables learners to supplement, broaden and deepen their individual knowledge, skills and competences and to meet the particular labour market demands in a certain region.

The proportions of this subdivision differs from country to country and also depends on the authorities that are responsible for the VET programs.

It goes almost without saying, that the volume of general subjects in IVET is more extensive than it is in CVET.

Good practices analysed revealed how a good structure of an effective VET curriculum could be structured as follows:

- Duration of the training: 2 to 3 years
- 70 % - 50 % of VET in company, 30% - 50% of VET in vocational school
- Company provides systematic training under real-life working conditions (in-company trainer, up-to-date equipment, etc.)

### 4. Balance of on- and off-the-job training

Integration of WBL, and notably apprenticeships, in the broader education and training system is a first condition of success. In order for alternance pathways to be attractive to a range of learners and employers, they must be permeable, in other words structured in a way that enables people to access additional, continuing and advanced VET or further and higher education. The qualification must be clearly linked to and anchored within the overall qualification system.

Within a specific training programme it is important that the WBL aspects articulate clearly with the school-based parts, complementing each other. In well-established dual systems, recognition in the school environment of what learners learn in the workplace is a crucial success factor, ensuring the coherence of the pathway. Vice versa, the work-based learning parts of a programme need to take into account the progress made in school-based instruction. Clear articulation between periods of work-based learning and school-based learning is key to the success of on-the-job training periods, particularly from the perspective of the learner. Critically, an outcomes-based curriculum makes it easier for learners and employers alike to identify the relevant knowledge, skills and competencies the learner is expected to acquire. This requires a clear understanding of the assessment approach and how the period of on-the-job training will be assessed.

Evidence showed that, as for vocational training in the *duales* System (dual system), where initial vocational training is carried out jointly in a company and in the Vocational Schools, at least 40 weekly periods p.a. of teaching are required. This may be organized in a variety of ways with students either attending classes on a part-time basis with about 2 days a week school and 3 days in-company training, as a rule, 40 weekly periods two days a week throughout their course or alternating between two days one week and one day the next. Teaching may also be received in coherent blocks.

## 5. Specification of teaching-learning environment and resources

Learners need preparation and support in their search for a host company where they will carry out their training. Given economic pressures, employers are typically looking to take on learners who have developed certain skills and attitudes that support their employability. In many countries, there remain issues of unequal participation and success rates across different groups of learners. Apprenticeships should be open and accessible to all, regardless of gender, ethnicity, disability or learning difficulty. Different forms of support can be provided to help achieve this: career guidance (how to approach companies, how to find a suitable company, etc.); preparatory training on aspects such as how to behave in an interview and how to behave in a workplace; coaching and mentoring. These support services can be provided by bodies ranging from schools to public employment services, youth clubs/ centres or others.

## 6. Particularities of learning contracts

Learners enrolled in alternance or apprenticeship training are between studying and employment. They are learning but at the same time take part in the production process of a company and, over time, the company benefits from their work. There is therefore a need for a specific regulatory framework that clarifies the responsibilities, rights and obligations of each party. It should specify the status of the learner, the remuneration arrangements and other benefits (if applicable), together with the obligations of the employer, the learner and the training centre. The contractual arrangements between the learner, the employer and the VET provider (if necessary) also need to be clearly defined. Written agreements protect all those involved from abuse or damage.

The present analysis showed that the status and contractual arrangements for students/apprentices the situation is the most transparent in Germany (apprentices have a contract and a salary) and in The Netherlands, where students in the work based system (BBL) have a contract and often a salary, whilst those in the school based system (BOL) have a contract, but only a compensation of their costs. In Italy and Spain contractual arrangements with employers and clearly defined responsibilities among all actors are existing, but due to the scattered landscape it is difficult to say something about the percentage of such provisions for the entire VET sector. This applies even stronger to the situation in Lithuania.

The regulatory framework for dual apprenticeships needs in particular to ensure that: Employers do not use the apprentice status to replace regular workers. Incentives for employers to take on apprentices risk creating a replacement effect. In other words, an apprentice may be recruited for a position that was previously carried out by an employee. The administrative burden imposed on companies through the regulatory framework is not too heavy. Otherwise it may be seen as a disincentive. In some countries, apprenticeships suffer from a bad reputation among employers due to the perception of high levels of paperwork involved. This negatively affects the supply of apprenticeship placements. The regulatory framework concerns not only the "micro-level" relationships between the learner, the workplace and the VET provider, but also needs to set a top-level frame including responsibilities for:

- Developing qualification standards or learning outcomes-based requirements
- Developing curricula and learning plans
- Quality assurance, evaluation and review
- Public funding and its use

## 7. Organization of examinations

As already mentioned, examinations and, more in general, curriculum development could be more effective in WBL when organized by a multiactor partnership according to a shared-governance management system. The final examinations, as an example, could be organized by VET schools in partnerships with the chambers (German model) and/or market actors. One cornerstone of quality provided in Dual VET system: examination is independent from provision of VET (teacher and trainer of trainee does normally not assess him/her). According to the good practices analysed, quality based examinations could endorse the following criteria:

In the examination board, as a consequence, could be recommended that all relevant implementing stakeholders of both vocational practice and vocational theory are represented. Final examinations should be realized in all recognized training occupations. Legal regulations may exist in respect of the following:

- Intermediate examination and final examination or extended final examination
- Admission to the final examination – written record of training, participation in the intermediate examination, exceptional regulations etc.

- Object of examination – candidates are required to demonstrate employability skills.
- Examination is conducted by the examination board of the competent body.
- Final certificates – chamber certificate, certificate from company, vocational school certificate

## Conclusions

Work based learning is widely recognized in Europe as a win-win situation for learners and company, and as a fundamental aspect of vocational training, directly linked to the mission of VET to help learners acquire knowledge, skills and competences which are essential in working life.

Creating opportunities for high-quality work-based learning lies at the heart of current European education and training policies. High quality vocational education and training (VET) systems are characterized by the active participation of employers and strong elements of work-based learning which facilitate young people's transition to work by providing the knowledge, skills and competences for a successful first step into the labour market. Countries with strong and attractive VET systems, and notably those with well-established apprenticeship systems, tend overall to perform better in terms of youth employment.

Member States, companies, VET Providers, social partners committed themselves to the objective of including work-based learning in all initial VET courses.

Despite these commitments, the supply of apprenticeship and traineeship places in the EU continues to be under-developed. The picture varies greatly by country. Those enrolled in apprenticeships in the strict sense, represent 33% of secondary VET students. 24 EU countries have schemes in place where learners spend more than 50% learning in the workplace, but the scope of the schemes varies widely.

According to the present analysis, the following gaps seem at the moment to hinder the full potential of Work Based Learning and its contribution as a means to promote transition from school to quality based employment:

- In all Countries analysed there are serious problems regarding the matching of students, who are looking for an apprentice place and companies, who are still looking for apprentices, but are not able to find the right people. This applies strongly to the technical sectors.
- Quality and relevance of WBL provisions still need to be improved: though quality systems are in place in most of European countries analysed, and curriculum are build up on learning outcomes describing competences, skills and knowledge to be gained by learners, performances range from country to country, and, moreover, from region to region (according to the analysis carried the strong regionalism is one the main barrier of the VET systems of Italy and Spain).
- In all Countries analysed there might be a certain mismatch between the demands of the labour market and courses at offer, although again not in the same degree. In spite of considerable investments in VET, as an example, students in Lithuania acquire few realistic work skills, which makes that foreign investors in particular are dissatisfied by the quality of education. Good practices and pilots realized in the countries targeted by the present analysis showed how, as a response to the mismatch between demands of the labour market and the traditional VET programs, shorter forms of WBL are emerging which have been proved effective in getting training closer to practice, involving employers in the training process: the practical training centres established in Lithuania with the support of the EU Structural Funds, the so-called Außerbetriebliche Ausbildungsstätten in Germany and interesting partnerships created in Italy, where school-work alternating pathways are sometimes created in “simulated companies” with the support of real companies located in the area are contributing to bring the training closer to labour market.

**To sum up**, Recommendations on organizational aspects of Work Based Learning implementation in school based systems could be grounded on:

### 1. **Promoting a real shared governance and multi-actor partnerships:**

- Effective partnerships between VET schools / institutions and companies, and between them and social actors are fundamental to successful WBL and should be fostered to enhance effectiveness in areas such as curriculum design, career guidance and mentoring.
- VET schools need to operate in networks with local businesses and social partners to identify suitable placements, support learners to secure an employer placement, as well as to facilitate vulnerable and most at risk groups of learners full access to quality based employment oriented opportunities.

- Clear roles, responsibilities and cooperation modalities should be clarified and defined through written MoUs in all the WBL patterns, with specific regards to both on-the-job training periods in companies, and to WBL paths that are integrated in a school-based programme.
- 2. **Increasing diversification and relevance of the WBL offer:**
  - WBL actors and stakeholders should invest in the diversification of their offer through the further development of practical training centres and of other forms of work-based learning, notably on-the-job-traineeships, onsite labs and workshops in schools, and real life project assignments: they all bring VET closer to the market and increase the relevance and quality of vocational education and training and support a smooth transition from learning to work.
  - WBL actors and stakeholders should work closely to constantly update training/occupational standards and increase relevance of WBL provisions to the market
- 3. **Enhancing quality of training/curriculum development:**
  - WBL actors and stakeholders should increase co-operation to ensure that the workplace would offer rich and diverse learning opportunities: all on-the-job learning periods, even short ones, should have a clear pedagogical purpose, defined learning outcomes and specified objectives that both the learner and the employer are aware of;
  - Curriculum/training provisions should endorse a balanced mix of learning outcomes related to both professional-related, complementary cross-professional and differentiated learning areas tailored on needs and profiles of learners and companies. At the same time they should consider the regional labour market needs.
  - WBL actors and stakeholders should invest in promoting a balance between on- and off-the-job learning, clearly articulating WBL with the school-based parts, complementing each other: recognition in the school environment of what learners learn in the workplace is a crucial success factor, ensuring the coherence of the pathway. Vice versa, the work-based learning parts of a programme need to take into account the progress made in school-based instruction.
  - WBL actors and stakeholders should increase support services to learners, such as career guidance (how to approach companies, how to find a suitable company, etc.), preparatory training, coaching and mentoring. These can be provided by bodies ranging from schools to public employment services, youth clubs/ centres or others.
  - Each WBL path should be developed according to a clear and specific regulatory framework that clarifies the responsibilities, rights and obligations of each party, the status of the learner, the remuneration arrangements and other benefits, together with the obligations of the employer, the learner and the training centre.

### **III. Recommendations for work-based vocational didactic requirements to be followed in school-based systems**

The benefits of work-based learning in VET are obvious: it increases employability and guarantees smoother transition from school to work, it contributes to reducing skill shortages and gaps as well as youth unemployment, strengthens entrepreneurship and innovation (European Commission, 2017). For the effective implementation of work-based learning in VET, certain didactic implications are needed to make a role of the learner as an active participant in learning with clear responsibility to acquire the necessary abilities. Learners' motivation and engagement in learning, improvement of their learning achievements could be fostered by the below discussed didactic guidelines focused on learner-centred VET and didactic approaches employed in VET, learning and assessment methods as well as assessment types and criteria applied to support these approaches.

#### **1. Learner-centred VET and learning outcomes**

A learner-centred VET is the main element of innovative education and training paradigm which underlines the role of learner in education and training process. The role of a learner is multiple nevertheless learner's engagement in and demand for learning process as well as learning outcomes relevant to work and life is crucial. Ongoing debates on the match of education and work pays a special attention to the coherency of the learning outcomes.

The term *learning outcomes* is used in a large variety of contexts and therefore it possesses a range of connotations and denotations. Nevertheless CEDEFOP (2016) underlines that the term has mainly two definitions. Learning outcomes are considered as:

- a) statements of what a learner knows, understands and is able to do on completion of a learning process, which are defined in terms of knowledge, skills and competence;
- b) sets of knowledge, skills and/or competences, which learner has acquired and/or is able to demonstrate after completion of a learning process, either formal, non-formal or informal.

CEDEFOP (2016) explains that the relationship between the two definitions can be understood as a cohesion between abilities intended before the learning and the ones actually achieved through a learning process. To be more precise with the first definition, learning outcomes are formulated as a part of the curriculum provided for a teaching-learning programme. Learning outcomes are the starting point for the curriculum as they have a direct impact on the teaching-learning methods and content, contribute to what and how young people learn, regulate learning assessment. As for a second definition, learning outcomes are considered as the expectation of the acquired actual knowledge, skills and/or competences which strengthens the link between vocational education and training and the labour market. In further turn the learning outcomes provide the redefinition of qualifications and the curriculum. Effective application of learning outcomes in the curriculum requires a continuous dialogue between intended and actual outcomes, seeking to improve the stated expectations (intended learning outcomes) based on the actually achieved outcomes (CEDEFOP 2016, p. 30-31).

Further arguments for the learning outcomes based curriculum come from acknowledging the benefits of linking learning and teaching/training processes to typical daily and work situations. The most important aspect of the learning outcomes based curriculum focuses on the results of learning processes. Learning is considered as an open-ended process through which outcomes are constructed in the learner's mind according to her/his individuality. This paradigm calls especially for a learner-centred didactic approaches in VET based on formulating outcomes to guide the learning process, employ active learning methods and learning-based assessment (CEDEFOP 2010, p. 10).

#### **2. Learner-centred approaches**

##### **2.1. Problem-based learning**

When learning outcomes are set in the curriculum, the process of learner-centred learning occurs as knowledge is negotiated among learners, facilitated by a more knowledgeable group member (or teacher) and students are active learners. A teacher/trainer performs a role of a facilitator who guides the learning process rather than provides information. Teachers/trainers make key aspects visible through questions that scaffold learning through modelling, coaching, and eventually fading back some of their support. Learning occurs while learners are solving a problem.

Problem-based learning (henceforth, PBL) is an active learning method based on the use of ill-structured problems as a stimulus for learning. Ill-structured problems are complex, do not necessarily have a single correct answer and require learners to consider alternatives, to provide a reasoned argument to support the solution that they generate. PBL gives learners the chance to experience professional style ill structured and

pragmatic problems. The PBL in the curriculum design allows learners to experience the professional problem solver position through the design of instruction surrounding the investigation of an ill-structured problem. In PBL, learners have the opportunity to develop skills in reasoning and self-directed learning. This method is usually carried out in small groups and takes advantage of the social aspect of learning through discussion, problem solving, and learning with peers. Learning occurs as learners collaboratively engage in constructive processing as innovative education paradigm requires.

## 2.2. Learning contracts and personal development plans

A **learning contract** approach assists in the planning of learning and attainment of achievements based on the plan. It is a written agreement between a learner and a teacher/trainer saying that a specific activity will be completed to attain particular goals. A learning contract enables a learner to take more responsibility for her/his learning through engaging a learner to make commitments for learning at the planning stage. "It is a means of designing a learning activity with the focus on the learner rather than the subject or the teacher. For this reason learning contracts are particularly suitable for structuring assignments and projects which are largely self-directed, for use in courses in which participants come from a diversity of backgrounds and in tailoring learning to individual needs and interests" (Anderson et al, 2013, p. 3).

Before signing the contract, a learner and a teacher/trainer discuss their roles, responsibilities as well as expectations, and they share decisions regarding the learning. When a learner has a possibility to negotiate the contract, this allows her/him to raise objectives and concentrate on competences that are most relevant to own learning needs and interests. The main commitment of a learner is to complete the agreed activities, and the primary responsibility of a teacher/trainer is to assure the necessary support as well as follow that the module/subject requirements are met.

The structure of a learning contract may vary depending on the learning requirements, however, a typical contract includes the following elements:

- The learning objectives or goals and competences the contract is addressing.
- The strategies and resources available to achieve these objectives.
- The outputs indicating the objectives have been achieved.
- The criteria to assess these outputs.
- Start and end date of the learning process.
- The module/subject where the contract is applied.
- The names of a learner and a teacher/trainer.
- The signatures of a learner and a teacher/trainer.

This approach can be used in any teaching or training area covering the whole of the module/subject or a part of it. The latter case is more usual, and learning contracts are seldom applied as the only approach to learning in the module/subject. They are rather used to cover several topics and abilities while the rest part of the module/subject goes under another approach of learning.

Learning contracts provide possibilities for learners to focus on their learning needs that is why the learning itself appears to be more meaningful, and it engages learners more strongly than performing traditional learning activities. A learner becomes less dependent on a teacher/trainer through taking responsibility in choosing what to learn, how to learn and how the results could be assessed. These advantages can be reached after a learner acquires skills to plan and write contracts that is why she/he should be acquainted with the main principles and practice of contract application. Moreover, a teacher/trainer should also be ready to apply learning contracts by getting familiar with this approach. For beginners, it is a suggestion to omit the freedom in choosing *what* to learn, and to take autonomy only for *how* to learn. In this case a learning agreement would follow learning objectives and outcomes which are applicable for all the learners, but strategies and resources would be chosen according to individual learning needs and interests.

One more structured didactic approach to learning is based on **personal development plans**. This approach is grounded on the reflection of former achievements through the analysis of strengths and weaknesses, successes and failures as well as planning for the future by identifying personal learning goals with consideration on prospective opportunities and possible obstacles (Mittendorff et al, 2008). Even though this is a personal plan, there is a suggestion to assess individual needs regarding the context a person is operating in and to relate personal development interests to environmental demands in the plan.

A typical personal development plan should give answers to the following questions:

- What do I want to learn?
- What do I have to do?
- What support and resources will I need?
- How will I measure success?

- What is the time scale?

A personal development plan should aim at the specific learning area which needs improvement. Like all other plans, this one should include achievable goals, reasonable activities to be carried out, available support and resources, appropriate methods to measure progress and realistic deadlines to accomplish the goals. A personal development plan is related to a continuous learning process that is why it should be regularly updated and amended.

### 2.3. Portfolios

A portfolio approach is applied to illustrate a learner's efforts, progress towards a goal and reveal evidence of learning achievements (Mittendorff et al, 2008). It is a systematic collection of artifacts (documents, material, media files and likewise) which demonstrate learner's activities, accomplishments, attainments and gained experience in a particular subject/module. The completed assignments, exercises, production pieces and projects representing the learner's progress and acquired skills are included in a portfolio.

A portfolio is based on the learning objectives and competencies to be acquired that is why it is not a random selection of learning evidence. At the outset, a learner identifies her/his current knowledge, skills and values in a specific area in order to develop reasonable learning goals. The successful meeting of these goals is documented and reflected on by learners in their own portfolio by the collected evidence. The goal is to assist learners to acquire evidence that illustrate their capabilities in the best way and demonstrate the possessed talents.

Having decided to use a portfolio approach, a learner together with a teacher/trainer discuss the portfolio contents and possible examples of performance evidence. Then they develop assessment procedures and criteria for monitoring the progress of the learning achievements with regard to the portfolio contents and for grading the portfolio. They also decide on the time scale to review the progress of learning in their meetings. Learners become active participants in the learning process and its assessment through giving suggestions what is of important consideration for them.

Learner's reflection and self-evaluation is an important factor for an effective portfolio. Critical reflection covers explanations what skills have been developed and experience gained, for which reasons they are important for a learner, how they are related to previous skills and experience, and other similar issues.

### 2.4. Individual and group work

Both individual and group learning can be effective and reasonable depending on the situation and context: learning goals and competencies to be developed, learning assignments, personal learning needs and demands, learner's skills to work independently or in cooperation with others (Faraday et al, 2011). The list of advantages and disadvantages of individual and group learning could be used to decide which approach of learning is the best option.

	Advantages	Disadvantages
Individual work	Learning in own speed, no waste of time for agreement on decisions, full responsibility for achieved results and marks attained for them.	Lack of assistance in sharing of ideas and in motivation to complete the task, more threats to get stuck with the task and much time consumed finding way out.
Group work	Increased cooperation and collaboration skills, developed more creative ideas, variety of suggestions for problem solution, reduced stress for learning results by shared responsibility.	Possible conflicts because of passive members, unproductive meetings with no progress in reaching the goal, time consuming with regard to decision making.

Group work can be organised applying a range of following methods: discussions (to exchange thoughts in a short duration), brainstorming (to produce a lot of creative ideas), case studies (to analyse of a matter that highlights real problems), role playing (by performing specific roles and acting accordingly), business games (by a simulation of the activities of a real organisation), and other methods.

### 2.5. Coaching

"Coaching in vocational education and training (VET) aims to help people to learn for themselves under the close guidance of an expert... Coaching can be described as a 'learner-focused constructivist experiential approach'. 'Constructivist' here means an approach that recognises students' prior knowledge and aims to build on it, complementing instructional and workplace demonstration" (Jameson, 2012, p. 51). Coaching

enhances learners' active involvement in learning, they gain experience how to direct and regulate their own learning with the focus on individual learning goals through the support by a teacher/trainer.

Several particularities could be attributed to coaching (Collett, 2012):

- Responsiveness. Coaching is relational since it involves individualised feedback and responsiveness to individual progress. An effective mutual relationship between the coach and the coachee should be developed since both of them are expected to adjusting their strategies in response to the learning progress and interim assessment results.
- Dynamics. The coach and the coachee should be open for changes in the learning process when necessary. Even though coaching is based on the plan, changes can appear due to the coachee's progress (she/he develops new skills) or due to new workplace demands.
- Co-production. The learning experience is created by the input of two actors since both the coach and the coachee are actively engaged in the learning process through learning conversations, discussions and reflections. They possess different understanding, skills and experience and work together with these backgrounds.
- Focus on outcomes. Identification of learning outcomes facilitates the learning process because it enables learners to reflect and assess their progress and modify their performance.

## 2.6. Reflection

Reflection is conscious thinking about and analysing what one is doing or has done during her/his learning, it is an inter-subjective process that promotes deeper learning. Reflection in learning enhances its meaning, supports deeper insights, fosters development of skills and facilitates in finding solutions. Learners become producers of knowledge since their current experience is linked to previous learning when information is processed, synthesised and evaluated during reflection. Learners reflect on their learning in written or verbal forms by discussions, interviews, questioning, logs and journals (Costa, Kallick, 2008). Reflection can be expressed on paper or screen, in speech, in film, in graphic portrayal, music etc. (Moon, 2004).

Reflection is performed in stages, and different phases could be identified while the most followed model is Gibbs' (1988) reflective cycle is composed of 6 stages:

- Description. The question to be answered: what happened? Decide on something that happened during your learning, something that taught you about yourself.
- Feelings. The question to be answered: what were you thinking and feeling? You may have felt anxious, especially if what happened was new to you. The important thing is to show how you managed to do what was expected of you despite your anxiety.
- Evaluation. The question to be answered: what was good and bad about the experience? You think what went well and wrong in the situation, whether anything useful or meaningless has been learnt as a result of performing tasks.
- Analysis. The question to be answered: what sense can you make of the situation? You can reveal how well you are keeping up with your learning, demonstrate the knowledge and skills you have, show that you understand what causes the problem/need.
- Conclusion. The question to be answered: what else could you have done? It is time to identify what exactly you have learned, was there anything you should have noticed, was there anything you could have discussed.
- Action plan. The question to be answered: if it arose again what would you do? You consider how the experience helped you to improve your practice, what your strengths and weaknesses it has revealed, how you would respond in a similar situation, whether you feel more confident.

Appropriate skills to organise learning through reflection are very important for teachers/trainers who, first of all, should "develop good listening skills. They need to listen and also to respond appropriately. This response might include prompts and encouragement rather than instructions. There is no point forcing ideas, plans and priorities on a work-based student, who knows their own workplace better than you do. A relationship built on respect and reciprocal learning needs to be fostered, rather than a more traditional learner/teacher relationship where the teacher claims to hold the knowledge that they may (or may not) filter out to the "empty" student" (Helyer, 2015, p.20).

## 3. Learning and assessment methods

Learning methods are the ways by which knowledge, skills and competence are being acquired while assessment methods are the ways by which learning progress or achievements (the acquired knowledge, skills and competence) are analysed. The same methods can be applied for the learning process as well as for the assessment of learning progress and achievements. For example, a report as a learning method means that a learner acquires the particular skills by preparing a report on the chosen topic. A report as an

assessment method tells that the prepared report is analysed in order to find out whether a learner has gained the necessary skills.

Most common learning and assessment methods for practical skills in vocational training could be an observation of practical work, business/service plans and presentations.

### **3.1. Observation of practical work**

Observation of practical work serves as a learning method when learning occurs through watching the job performance of others, remembering the observed information and later replicating the observed behaviour. A learner separates significant information from insignificant one during the observation and retains the details that are of the most importance for her/his experience. Good observation helps one to become well informed and to be more effective at work.

Observation for learning is an active process when ones pays attention intently and actively so that to gather specific information and assess it. In order the observed situations could become more meaning for a learner, she/he should take notes and document what has been watched. The recorded information is useful and helps keep in mind the key data, allows one to learn and remember more details about the situation. Moreover, when looking through the taken notes, a learner has better possibilities critically assess and understand situations of work environment. Finally, the ability to observe and make observation effective for learning depends on how well one concentrates, and taking records enhances to focus on the situation.

Observation as an assessment method possesses many advantages. "Observation of performance, especially in the workplace, is popular ... because it has high face validity. This means it has a high degree of realism and is a good indicator of the ability to perform particular tasks" (Guide to the assessment of practical skills in International Vocational Qualifications, 2003, p. 11.). Observation of performance may take in a variety of situations: in the real work place as a part of work (learners do real job in real environments by themselves), in work placements (in real work place alongside more experienced people), in a realistic work environment (can be organised within a training centre) or through simulated work experience (can be organised within a teaching institution).

Observation checklist is a useful tool to be followed when learners are assessed by observation. It is a competence checklist defining what exactly and to which extent the learners are able to do performing particular operations/activities. In other words, the checklist reveals what practical competences have been acquired and which of them still need to be improved. Having developed this tool, assessors could record their observations of the learner's performance directly onto this checklist during or after the observation.

Next to an observation of practical work performance, assessment of products is carried out when the following outputs are produced: a business/service plan or some other plan, a presentation, a design, an item of processed information or some other output.

### **3.2. Business/service plan**

A business/service plan as a learning method is useful for the development of a set of skills, namely personal, social and special professional skills. Planning and entrepreneurship skills next to the vocational field skills could be gained when applying this method. By creating a business/service plan the learners will improve how to make their ideas more explicit, deliver them in a concise way, by well-reasoned arguments. Since a business/service plan is prepared for a particular professional setting, the vocational field skills are also developed when working on the plan.

The advantages of a business/service plan for learning could be illustrated by the learner's thoughts after having completed the business plan: "I felt significantly more comfortable with a great deal of business, planning for the future, dealing with unexpected problems, writing financial statements, understanding how the law works in relations to building businesses, publicly speaking and expressing our plan in a passionate manner, and really getting to the essence of a value proposition. These are skills that I will surely use for the rest of my life" (Bhageria, 2016, p. 2).

Business/service plan should be simple, specific, realistic and complete, and its assessment guidelines could cover the following issues (Written Business Plan Rubric, 2013):

- Business description (legal form, mission statement, goals and objectives, keys to success).
- Product/service description (competitive advantage, uniqueness of product/service).
- Market analysis (behaviour, target market, promotion, strategy, commercial aspects).
- Resources (product merchandise, distributors).
- Location analysis (advantages/disadvantages of location, rents/costs).
- Financial plan (start-up costs, general pricing)
- Structure of the plan (layout, spelling, grammar, sentence structure).

### 3.3. Presentations

A presentation is a means of information delivery by speaking and demonstrating something. A presentation as a learning method enables learners to be active participants, develop their communication and flow of thoughts skills when expressing ones ideas and opinions as well as improve professional abilities. By doing presentations, learners get used to prepare information in a concise way with the most important issues of the target, improve speaking in front a group, which is a broadly applicable professional skill (Weimer, 2013). Presentations are helpful to develop a deeper understanding of a topic, project, product or other target through accessing it in more detail. Moreover, they can be applied as an opportunity to rehearse how some equipment works before using it in real life situations when operating in the professional settings.

Learner presentations benefit the presenter in significant ways, likewise they can be very useful for other learners if they get actively engaged in what their mates are saying and demonstrating. An appropriately chosen assessment types and forms could involve all the learners in presentations. A good solution of the participation enhancement is peer-assessment when the presenter's learning mates are requested to provide feedback on the presentation with reasonable assessment arguments.

Well-guided and evidence-based assessment of presentations is based on a set of criteria that are expressed by statements or questions. These items can be provided in a single list or they can be divided into a couple or several sections. For example, assessment form could grouped into two broad sections when one of them includes the main presentation skills (eye contact, voice, and gestures, handling of questions, visual aids, time management, manner: fluency, confidence in knowledge, enthusiasm) while the other section is meant for the content of the presentation (overview of topics/presentation, identified critical concepts, explanation of technical issues, organization and flow, summary/conclusions). Alternatively, the assessment form is divided into smaller sections revealing both the presentation skills and the presentation content in a more detailed structure. The latter case could be illustrated by the following composition of an assessment form (Student Presentation Evaluation Form, Cornell University):

1. Organization and content. Did the presentation follow a logical sequence that the audience could follow? Were any important points left out? Were the important points fully supported with convincing arguments, ideas and data? Was the rationale and 'take home message' explained clearly for each experiment?
2. Subject knowledge. Did the learner have a good understanding of the subject? Was he/she able to answer questions and explain technical details?
3. Graphics. Did the learner use clear and instructive figures in presenting the background information, data, and conclusions? Were the slides easy to follow (font size, image size, amount of information per slide)?
4. Presentation skills. Did the learner speak clearly and at a sufficient volume, maintain eye contact with the audience, and avoid using distracting hand movements and such? Was the learner receptive to questions and handle the questions well?
5. Positive comment(s). What was the best about the presentation?
6. Advice for improvement. What could be developed regarding the presentation content and presentation skills?

The assessment of the presentation could also answer whether the presentation was concise and informative, contained practical examples and useful techniques that applied to the current work, included effective visual aids. In general, the assessment could reveal how well the presenter was organized and prepared.

## 4. Assessment types and criteria

### 4.1. Assessment types

Different assessment types are encouraged to be applied in order to obtain more comprehensive information about the learning and foster its progress as well as learning achievements. Assessment is suggested to be classified into types according to several categories: formal and informal assessment (according to data recording), formative and summative assessment (according to purpose), criterion and norm referenced assessment (according to validation), assessment by teachers/trainers and learners (according to participants), assessment of individual and group work (according to the number of learners) (Savickiene, 2014).

*Formal and informal assessment.* The difference between the two ones is revealed by the fact whether the marks are being officially recorded. Informal assessment usually does not include any marking at all, however, if grading is carried out, marks are not listed in a register. Such assessment is performed in each teaching or training activity when teachers/trainers analyse and provide explanations whether a learner is performing well. Meanwhile, formal assessment involves registration of marking, and a most common example is grading when an examination is over.

*Formative and summative assessment.* Formative assessment is performed in the course of learning aiming at feedback and improvement of learning achievements. It is an often case when such assessment is informal, and the grading is not involved here. Summative assessment is carried out at the end of some learning activity when learning outcomes or a particular part of an outcome has been completed, and it is time to identify whether the achievements are the same as they have been expected to be. Summative assessment is also called assessment *of* learning while formative one is treated as assessment *for* learning.

*Criterion and norm referenced assessment.* Criteria describe features to determine how students learning achievements correspond to the defined learning outcomes. The list of criteria is set in advance before the assessment procedure takes place in a criterion-based assessment. A norm referenced assessment does not provide clear parameters beforehand, and achievements by one learner are compared to the ones of another person. For example, several learners are being observed in a professional setting, and their skills are assessed in proportion to each other's skills.

*Assessment by learners.* Teachers/trainers are usually perceived as the main performers of an assessment, however, learners can become effective assessors as well when they analyse their own or peers' progress and achievements. There are many advantages of learner involvement in assessment. First of all, they are encouraged a greater sense of involvement and responsibility as well as get skills to make independent judgements of their own and others' work. Peer assessment provides learners a possibility to critically analyse work done by others, rather than simply seeing a mark. Moreover, learners receive a wider range of feedback when their peers' opinions are involved. The disadvantages of self and peer assessment are mainly related to the lack of the ability to assess each other, however, this shortage can be eliminated when learners are shown how to perform assessment. Learners should practice to become assessors who provide appropriate and constructive comments on the activity or product under assessment, who give reasonable feedback with evidence-based arguments and suggestions for improvement.

*Assessment of group work.* Assessing of groups can become a challenge when it is necessary to choose the strategy to allocate a mark for group work. Three strategies could be distinguished: 1) individual assessment (each group member is assessed on an individual piece of work), 2) same mark allocation (group is required to submit one product for assessment and the same mark is allocated to each group member), 3) weighted mark allocation (members receive a mark comprised of both a shared and individual component). The last strategy encompasses the advantages of the other two therefore it is practical to support assessment of the group work by the guidelines applicable for the third strategy: divide the group task into smaller pieces that could be assessed separately, distribute proportions between a shared and individual input, include peer assessment and allow group members to decide on a part of the mark, employ self-assessment and request to specify ones effectiveness, identify whose contribution is the largest one and give a higher mark for this member.

## **4.2. Assessment criteria**

Assessment criteria are meaningful to define the learning content and expected learning achievements in a more specific and detailed way through revealing the scale and depth of assessment. Criteria are applied to enhance transparency and openness both for learning and assessment by identifying attributes to determine the acquired abilities.

Criteria are helpful in making reasonable decisions on learning achievements, and the more clear criteria have been set the easier assessment decisions are made. Moreover, they facilitate giving feedback for learners since they become guidelines to acquaint the learners with merits and drawbacks of their performed tasks. While informal assessment is enough to include just verbally announced criteria of which only learners and teachers/trainers are aware, formal assessment shall always contain publicly accessible criteria in the curriculum, and these statements are known for all the stakeholders.

The following guidelines could be practiced in identification of assessment criteria:

- specify learning outcomes by assessment criteria,
- align criteria with the complexity and scope of learning outcomes,
- compile particular criteria for different levels of learning achievement,
- match criteria with learning and assessment methods,
- discuss criteria with learners and teaching/training colleagues.

## **Conclusions**

In summary, recommendations for work-based vocational didactic requirements could be grounded on:

- providing an active role of learners and their commitment in a learning process specified by clear learning outcomes;
- enhancement of learner-centred approaches by problem-based learning, learning contracts, personal development plans, portfolios, individual or group work, coaching and reflection;
- employment of active learning and assessment methods through observation of practical work, business/service plans, presentations, and other methods;
- application of various assessment types (formal and informal, formative and summative, criterion referenced assessment, self-learner and peer assessment, group work assessment) and evidently defined assessment criteria.

## IV. Qualification profile for a VET teacher or trainer

This document provides a description of the required competences of a teacher or trainer in upper secondary vocational education. It is a qualification file that can be regarded by teacher training institutions as guidelines for the training of a modern VET teacher or trainer, who is able to act in a theoretical, as well as in a practical learning environment. The file is mainly focusing on competences, but in the three annexes there is also extensive information on knowledge, sub tasks and results.

To make the qualification file more survey-able, it is subdivided in three separate, but coherent fields:

1. Development and maintenance of personal professional competences.
2. Didactical-methodical competences.
3. Guidance and coaching competences.

Teachers and trainers in VET are preparing (young) people for a profession, not for individual graduation subjects. All teachers in VET work from the context of the profession and the sector for which they train their students. They need to have knowledge of their professional sector and they need to be aware of the latest innovations. They need to know how innovations arise and how they can be followed and encouraged. Teachers and trainers should know the history of developments in their sector, nationally and internationally, and be able to teach this, so that they can provide their students with a wide view on their future profession.

Teachers and trainers do not act as single professionals, but as members of an education team, in which they collaborate, coordinate and share knowledge and experiences. A crucial feature of the VET teacher and trainer is that he is a member of an education team. It is in educational teams, where the professionalism and quality of teachers and other supporting team members with educational supporting tasks (such as instructors, education assistants and practitioners) should be assured.

Each team makes internal agreements about the division of tasks. This means that not every VET teacher or trainer needs to perform all the (sub) tasks described in this document. Team members can also carry out (sub) tasks under the responsibility of the teacher with educational support tasks. It is very important that the tasks are well distributed within the team and that the required expertise is represented. Last, but not least is it important that students experience the education provided by the team as a coherent whole.

This document is the result of interviews, that were held with individual teachers, 'key persons', team managers, department managers and HR managers in VET. Also representatives of employers' and employee organisations, as well as those from Teacher Training Colleges are consulted and contributed to this qualification profile.

### Field 1: Development and maintenance of personal professional competences:

The teacher is able to:

- provide and receive feedback about his own professional development and that of others;
- work with digital portfolio development including assessment criteria;
- use methodologies to learn from his own experiences from an investigative attitude;
- use the various forms of (co-) coaching, super- and inter vision;
- conduct conversations regarding objectives, contracts, performances and assessment interviews in order to determine the content of one's own performance and professional development;
- initiate innovations in his education and training programs and to show entrepreneurship;
- identifies international opportunities for the teachers, students and the school;
- build up and maintain a relevant network in the professional field in order to keep his
- professional knowledge up to date;
- build up and maintain a relevant network within his school and team aiming at cooperation, attuning and learning from each other;
- contribute to team development and effective consultation;
- contribute to quality awareness and quality improvement in his team (pdca);
- contact and liaise with national- and EU bodies;
- plan training initiatives at international level;
- deliver teaching and training in a diverse cultural environment;
- take part in student recruitment and selection processes;
- take part in school marketing initiatives to promote training and career development.

## **Field 2: Didactical-methodical competences:**

The teacher is able to:

- create a varied education program tailored to the target group, consisting of individual education and group activities, lessons in and outside the school, theory and workplace learning;
- transfer the legal frameworks (the qualification file) into a curriculum with colleagues, taking into account the institutional policy and team agreements;
- transfer issues and innovations from the region into feasible projects for individuals or groups of students;
- collaborate with colleagues in a team in order to create a coherent curriculum for students;
- coordinate the didactics for profession-related language and calculation aspects with his colleagues;
- deliver tailor-made work on the student level for content and supervision structure;
- make use of specialists in specific situations (eg language and arithmetic, other specific education or learning disorders) or advise on it;
- engage a network of colleagues from the professional field and in the professional sector regarding the (further) development of the educational programs;
- update the curriculum on the basis of innovations in the professional field;
- use digital learning tools to improve the quality of the educational program, in line with the learning styles of the students;
- concretely structure learning related to an authentic professional practice, taking into account questions about innovations in country and region;
- support students in integrating knowledge, skills and attitudes in professional activities;
- establish different types of learning, both in a school-based setting and a work-based setting;
- stimulate entrepreneurial activity among students, both in the meaning of intrapreneurship as entrepreneurship;
- working from a holistic approach, assessed from the professional practice;
- build up a network, aimed at the adequate and current educational practice in the professional context;
- recognize and promote functional use of language and arithmetic in authentic (professional) situations and contribute to the acquisition of this;
- contribute to designing a competence-oriented learning environment;
- deal with heterogeneous groups, taking into account differences in level, self-image, culture, interest, learning style and foreknowledge;
- implement process and task-oriented guidance in different learning contexts;
- collaborate with colleagues and cooperation partners (intern and extern);
- work systematically (product and process-oriented);
- contribute to quality assurance and innovation;
- set goals in a quality cycle in consultation with the team;
- fulfil different roles in a team;
- perform administrative tasks (study progress, absenteeism) in accordance with institutional agreements;
- allow students to reflect on the development of self-regulation skills for further learning in training or profession;
- work with portfolio development;
- develop, implement and evaluate development-oriented tests;
- develop, implement and evaluate exams;
- come to an integral assessment in consultation with colleagues and the professional field.

## **Field 3: Guidance and coaching competences:**

The teacher is able to:

- challenge students to ask the right questions critically about experiences gained, and to stimulate and guide the discovery of talents and ambitions;
- implement process and task-oriented guidance in different learning contexts;
- give his opinion, judge, impose;
- learn students to understand the relevance of the curriculum for professional practice and the coherence of the curriculum with the professional practice.
- match questions from the region and innovations with the students' learning demands;
- learn students to reflect on skills acquisition for further development in training or professional situations;

- conduct different coaching and conversation techniques and to listen actively (summarizing / paraphrasing, asking open and closed questions, provide and receive feedback, confront through simple conversation interventions, explain, advise, inform);
- contribute to a workable balance between the interests of the student, the school and the company;
- is able to guide new colleagues and colleagues, who are still in training.

## Annexes

### Annex 1: Qualification profile of a VET teacher or trainer

#### Field 1: Development and maintenance of personal professional competences

##### Professional knowledge of the teacher or trainer:

- knows the laws and regulations relevant to the VET sector, in particular about the execution of his work as a VET teacher (qualification files, VET legislation, supplementary regulations and the Professional Charter);
- follows the current social developments around VET;
- knows the professional identity of the VET teacher, knows how he can develop further professionalization, how to formulate his own learning questions and to demonstrate his learning outcomes;
- keeps track of developments and innovations in the field of work of the students and translates them into his own professional development;
- is familiar with the various forms of formal and informal learning, theoretical learning and learning by doing or learning in practice;
- is able and willing to learn with and from colleagues inside and outside the school;
- is aware of national- and EU bodies related to his/her area;
- is aware of EU instruments and tools in the educational area ( EQF, Europass, ECVET etc.).

##### Sub tasks of the teacher or trainer:

- The teacher contributes to educational development, innovation and quality assurance from an investigative attitude.
- The teacher is aware of his own limitations, works systematically on his own (professional) development in relation to the professional field and in coordination with the team.
- The teacher keeps track of developments in language and arithmetic in the context of the profession.
- The teacher supervises new teachers and teachers in training.
- The teacher works together with educational support staff (instructors, teaching assistants) on the basis of the educational program and takes responsibility for the learning process

##### Results:

- The teacher thinks as a team member how institutional policy, legal frameworks and current professional and professional developments can be transferred into the education (= professional room of the teacher).
- The teacher makes concrete annual agreements with his supervisor about his personal development, in coordination with the team development plan, he executes these appointments, checks them and acts again (pdca).
- The teacher makes choices based on reflection and (systematic) research into his own acting and in coordination with the team.
- The teacher is open to other ideas and working methods and tries them out from time to time.
- The teacher keeps track of his development, learning efficiency and keeps a competence file.
- The teacher ensures that his registration in the teacher register (if relevant) remains up to date.
- The teacher maintains his own language and numeracy skills and can adapt it to new (technological) developments.
- The teacher supervises teachers in training, taking into account the team activity plan and the curriculum of the teacher training.
- On the team level, the teacher contributes to the agreed system of training and introduction on the institutional level.
- The teacher is (partly) responsible for a clear assignment to an instructor or assistant and is ultimately responsible for the education.

- The teacher works together with the educational support staff on the basis of quality criteria and legal frameworks.

## **Annex 2: Qualification file of a VET teacher or trainer**

### **Field 2: Didactical-methodical competences**

#### **Professional knowledge of the teacher or trainer:**

- knows the legal frameworks of his work environment, the institutional policy and the team agreements;
- masters the required learning material (knowledge and skills) and knows its theoretical and practical background, particularly with regard to the specific situation;
- has up-to-date knowledge of the professions, where he is providing the training for and is able to establish links between the learning material and subject and the relevant qualification files;
- oversees the structure of the curriculum, the coherence with other program components and the relation with what is learned by fellow teachers in the professional field;
- identifies specific language and calculation aspects within the own discipline;
- knows that students can interpret the subject matter differently and is able to take that into account
- knows the main content of the other units within the program;
- makes it clear to students what the relevance is of the subject matter for professional practice;
- knows how the educational program fits in with the other education types, which is important with a view on permeability;
- is familiar with the various teaching and learning theories and can translate this into practice;
- is aware of the most important theories concerning supervising (modelling, guiding, scaffolding, coaching, monitoring)<sup>1</sup>;
- knows the possibilities and limitations of digital learning resources;
- knows how to make a coherent whole of the various parts of the curriculum (theory lessons, training, workshops and integrated assignments), taking into account the differences between students and language and arithmetic aspects in the context of the profession;
- aligns the learning objectives with the program of his colleagues to provide a coherent whole for the students;
- is familiar with the study materials (knowledge and skills) and knows the theoretical and practical backgrounds, particularly focused on the (current) target situation;
- has up-to-date knowledge of the professions the students are being trained for by watching the developments in the field closely;
- can point out to the students the relevance of the material for professional practice;
- Is aware of the relevant literature regarding the didactics of vocational education and systematically applies these methodologies in line with the institution's approach;
- is aware of (learning) disorders (dyslexia, ADHD) and physical disabilities in learning, and knows the school policy in this matter;
- knows QA principles and systems of teachers profiles;
- has up-to-date basic knowledge of the legislation and regulations regarding examinations;
- has basic knowledge of examinations;
- has knowledge of qualifying assessment;
- has basic knowledge of development-oriented test forms;
- knows the relevant literature on examinations and assessments and knows which methodologies are used in his school;
- knows the difference between development-oriented testing and examination.

#### **Subtasks of the teacher or trainer:**

- The teacher develops (part of) the educational program, on the basis of the legal frameworks, in consultation with the education team and within the policy frameworks of the school
- Based on his individual assignment, the teacher/trainer designs, in consultation with the team, learning arrangements deriving from the professional profile of the future professional in a suitable (powerful,

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<sup>1</sup> Modelling: the teacher demonstrates whilst the student is close to 'look at the play of the art'. Guiding: sticking pickets where you can work towards, making an overview, provide structure. Scaffolding: first carry out a task with a lot of help and guidance and then a similar task with less guidance. Coaching: follow the participant and come up with solutions by means of questions. Monitoring: supervising from a distance, mainly focusing on the process of learning. Take gradually more distance to the learning process during the course of the training program.

professional context) learning environment, using current knowledge and experience from the whole range of the professional area and describes the required general knowledge for this purpose.

- The teacher adjusts the developed program from time to time, based on the set goals, feedback instruments, experiences and results.
- The teacher uses the professional practice experiences as learning experiences and connects these to knowledge, skills and attitudes that are taught school situations. The teacher encourages the student to apply this knowledge, these skills and attitudes in practice.
- The teacher offers the curriculum in different ways (including, for example, distance learning).
- The teacher chooses - in accordance with team agreements - teaching methods that fit the target, target group, learning styles of students and context of the learning activity.
- The teacher takes into account differences between students and provides a focused approach to learning disabilities or knows how to ask for support.
- The teacher recognizes the language and arithmetic aspects in his teaching methods, can identify deficiencies among his students and can call in experts if necessary.
- The teacher supervises the students during the execution of the learning activities, based on team and institution agreements.
- The teacher evaluates the implementation of the program and the effectiveness of the activities and ways of guidance with those directly involved (in collaboration with the team) and draws lessons for improvement.
- The teacher prepares the student for his development-oriented assessment and examination, based on agreements in the team and institution.
- The teacher ensures an appropriate organization of the development-oriented assessment and the examinations, based on agreements in the team and institution.

#### **Results:**

- An educational program with learning content, based on legal frameworks, related to the final qualifications.
- An educational program in which the educational vision of the school has been elaborated.
- A teaching program supported by the team with a clear partition of the tasks and guidelines about the mutual coordination.
- An educational program with room for updates, based on developments in the professional field.
- A program with structural focus on language and numeracy-oriented vocational education, subject-oriented language and mathematics education and remedial language and arithmetic education, in line with the needs of the students and linked to the development of a triple set of qualifications, containing professional, career and citizenship competences.
- A program where the profession related education or training, the subject-oriented language and arithmetic education and modern foreign languages in such a way incorporated that a natural unity is created in vocational-oriented training.
- Learning arrangements from the perspective of the professional profile of the future professional.
- Learning arrangements where theory and practice are linked together (theoretical learning and workplace learning).
- Learning activities (lessons, training courses, workshops) where the students:
  - apply theoretical concepts in concrete tasks;
  - link specific (professional) experiences to theoretical concepts;
  - connect knowledge, skills and attitudes to professional tasks;
  - learn to see a relationship between the detail and the larger whole.
- An educational program that is structurally embedded in a pdca cycle to map out the effectiveness of education and training to reconsider (didactic) choices if desired to improve the learning outcomes of the students.
- An integral educational practice in which the subjects are subordinate to the profession for which training is provided. Students are constantly invited to connect their professional experiences to learning experiences at school and the other way around.
- An educational practice, in which an integral way of guidance is practiced: guidance to one professional identity that runs parallel with personal guidance and guidance in (study) career steps.
- A performance practice with possibilities for flexibilisation and customization according to purpose, target group, learning styles, form and context.
- A performance practice in which - depending on purpose and target group - a balance has been found between theoretical, methodical and practical learning, in which the necessary knowledge has been made explicit.

- A balanced range of different learning activities (theory lessons, trainings and workshops), with theoretical, practical and integral assignments.
- A performance practice in which the teacher can observe which student needs a customized approach and ask for support or refer someone to specialists.
- The teacher knows what his colleague teaching language or maths can contribute and makes efficient use of it.
- A set of result-oriented guidance activities, inextricably bound to the educational implementation, consisting of:
  - observing students during their learning activities;
  - aligning actions and interventions with the learning process (learn to learn, learn to attribute, learn to regulate) and learning outcomes of the students;
  - registering the progress with the student: discuss the progress and desired interventions and communication with colleagues.
- Evaluation of the learning process to determine if it leads to the desired results.
- A quality cycle in which learning activities are evaluated (also by students) and adjusted. Guiding in the evaluation:
  - learnability;
  - improvement of learning outcomes;
  - relevance to professional practice;
  - performance of teachers.
- An annual evaluation in relation to the instruments for quality assurance and performance information.
- The student knows how he is assessed and how he should prepare for it. Education and examination are clearly connected.
- The student knows which assessments are development-oriented and which are qualifying
- The student carries out the development-oriented test or the exam under the appropriate conditions.
- The student knows what he can expect.
- The assessment is correct and leads to further development or to a valid and reliable exam result.

### **Annex 3: Qualification file of a VET teacher or trainer**

#### **Field 3: Guidance and coaching competences**

##### **Professional knowledge of the teacher or trainer:**

- knows the current literature on career counselling and systematically applies methodologies, in line with the institutional vision;
- knows the structure of the curriculum and can show students the coherence in the program;
- has up-to-date knowledge of the professions for which training is being provided;
- knows that students learn in different ways and can adjust their education accordingly;
- knows current theories about the development of self-steering learning;
- has up-to-date knowledge of the (developments in) occupations for which training is being provided;
- knows the relevant literature about workplace learning and systematically applies these methodologies, in line with the vision of his school;
- knows the most important literature on career guidance and systematically applies this knowledge, in line with the institutional vision.

##### **Subtasks:**

- The teacher provides guidance to the student in the development of his professional identity and career competences: what do I want, what am I able to do, what can I do and what can I make come true? The student learns to give direction to his reflection on qualities and motives, work exploration, career management and networking (also in a follow-up course).
- The teacher supports and encourages the student to reflect on his study progress, professional and career skills and his professional identity.
- The teacher provides guidance to the student regarding choices of where to learn which parts of the program (school, workshops or practice). This in a decreasing sequence.
- During the learning process, the teacher presents the student with the progress and supports the student in building up a portfolio.
- The teacher maintains contact with all officers (inside and outside the school) who play a role in the learning process of the student (including networks).
- The teacher identifies absenteeism and other factors that impede student progress and takes action if necessary.
- The teacher prepares the practical training with students.
- The teacher supervises students in the professional practice in and outside the school.
- The teacher maintains his knowledge of the professional field through visits to the workshops or other places of the practice.

##### **Results:**

- A continuous and coherent guidance process with the team, in which the student develops into a self-managing person, in which he functions as a citizen and as a (prospective) employee. Here he works on his professional profile, possible follow up study in higher education and the acquisition of career competencies.
- A coaching process that is coordinated with the team, with fixed moments of evaluation/conversation, in which the student learns to look critically at himself and gets to know his possibilities in direct relation to his (near) future in education and / or work.
- A coaching process that is coordinated with the team in which the student learns step-by-step to see the connection between what he can learn and where to do this.
- A system that is in line with the team policy for recording the progress of the student. The student, the career counsellor and examiners / assessors can use this system.
- A system in which contacts with others are recorded: who communicates with whom about the learning process of students and how is feedback ensured and communicated?
- A system in which information about factors that impede the progress of work is recorded. The system can also be used for absenteeism registration.

- An education program in line with the policy of the team to provide guidelines for 'applying for jobs', introduction to the learning company and the general rules of conduct.
- The student is largely aware of what he can learn in the learning company, what he can expect from his supervisor and how he can keep track of his learning outcomes in the company.
- A contribution to the day to day routine of the professional practice, where it is clear what can be learned in and out of school and how this is coordinated with the team and the practice trainer.
- A contribution to the day to day routine of professional practice with assignments designed on the basis of current knowledge in the professional field. The assignments are coordinated with the team and with the practice trainer. Within this, specific attention can be paid to the functional use of language and arithmetic in the context of the profession.
- Guidance tailored to the practical training (within team agreements).
- A way of working in which teachers/trainers continuously follow developments in the profession and in which they share insights with the team.

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