



INT VET DUAL
Introduction of Vocational Education and Training

Within Erasmus+, KA3

**National Authorities for Apprenticeships:
Introduction of Elements Dual VET Slovak
Republic**

Brochure



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1. Introduction

With the adoption of the Act 61/2015 Coll. on vocational education and training, the Slovak Republic ranked among the countries that implement vocational education and training through a system of dual education. The new legislation is the result of the transformation process of vocational education and training and employers acting as one of the bodies coordinating VET. The pupil is being prepared at the workplace of the employer and has signed with him an apprenticeship treaty under which the employer is fully responsible, finances and implements practical training of pupil through its professionally qualified instructors who are employees of the company. Theoretical education gets a pupil in secondary vocational school, with which the employer has signed a treaty on dual education.

The process of putting the law into practice has brought to the shore many challenges facing education in secondary vocational schools for a long time and one of the most pressing encountered by employers, but very vocational schools appeared, **inadequate in providing continuing education of pedagogical staf involved in the preparation of pupils in vocational education**. This problem is not specific only to Slovakia, education of VET teachers and VET trainers and their further professional development is one of the strategic priorities of the countries of the European Union as set out in **the Conclusions of meeting in Riga in 2015**.

2. Description of the Project

Reason for the project

The Slovak Republic was facing an increasing demand for a shortage of skilled workforce in the manufacturing and automotive industries. Due to demographic developments as well as the discontinuation of work-based training models during the transformation period, there was no replacement for qualified workers leaving the labour market. This trend was accompanied by disturbingly high youth unemployment up to 34% in 2012. This was a clear indication of a skills mismatch, pointing to the need to improve relevance and quality of the VET system.

Aims and objectives

The project wants to respond to this unsatisfactory situation. It wants to contribute to modernise VET in Slovakia and with it to give a stimulus to the countries of the Danube Region. Due to the current difficult labour market situation the countries are looking for ideas for sustainable, work-based dual VET in order to reduce the unemployment rates among young people and to strengthen the economic performance.

To achieve these goals, the project aims to

- Promote a national VET system reform
- Set-up of a competence center for dual VET (Danube Academy)
- Mobilize SMEs and companies for dual apprenticeships

- Implement an experience exchange for apprenticeships

Outputs, results and products

The main outputs, results and/or products of the project will be:

- report containing the **results of an employer survey among companies in order to identify the labour market needs for technical apprenticeships,**
- report containing a **review of Slovak legislation and VET pilot activities, especially an analysis and review of the new Slovakian TVET law** and implications for technical apprenticeships and an analysis and review of Slovakian VET pilot schemes as well,
- action plan for **setting up a Danube Academy,**
- training concepts, **5 pilot trainings of further education for VET teachers and trainers,**
- establishment of a **community of practice,**
- **sustainable strategy.**

Target groups

The project is addressing different relevant stakeholders to promote a sustainable and demand-driven VET system in the Slovak Republic. This includes addressing the enabling political framework (policy level), the involved intermediary institutions and reaching out to the direct beneficiaries of improved training conditions. Hence, the main direct target groups are:

- Policy and decision makers, public authorities at national level
- Chambers/associations and human resource development personnel in SMEs
- VET students, VET providers, VET teachers and trainers
- Social Partners, public employment services and other VET stakeholders

Impact envisaged

The project aims to contribute to a comprehensive VET system reform both in terms of consolidating system-level requirements for the introduction of apprenticeship schemes in Slovakia and by promoting pilot experiences in the manufacturing sector. By increasing the quality of work-based learning for the future workforce the project can contribute to the Europe 2020 strategy and the Bruges Communiqué. Concrete impacts of the project shall be:

- fostering the national VET system reform,
- establishment of a Competence Centre for dual VET (Danube Academy),
- a stronger and sustainable mobilisation of SMEs and companies for dual apprenticeships,
- an ongoing experience exchange for apprenticeships,
- the close link between the project and national VET competent bodies enables the transfer of knowledge and elaborated models into on-going reforms and initiatives.

3. Partners of the Project

3.1. Ministry of Education, Science, Research and Sport of the Slovak Republic

<http://www.minedu.sk/>

The Ministry of Education, Science, Research and Sport of the Slovak Republic is the central body of the state administration of the Slovak Republic for elementary, secondary and higher education, educational facilities, lifelong learning, science and for the state's support for sports and youth.

The Ministry manages schools and school facilities at the territory of the Slovak Republic through generally binding rules, by providing vocational guidance to all founders, it administers the network of school and school facilities in the Slovak Republic.

Through regional school authorities it provides for realization of the state administration. The competences of the Ministry are set out by law.

The Ministry of Education, Science, Research and Sport of the Slovak Republic became in 2014 the coordinator of the international project *National Centers – Introduction of Elements of Dual Vocational Education and Preparation in the SR*, which is co-financed by the European Commission within the Program ERASMUS+.

3.2. State Vocational Education Institute, Slovakia

<http://www.siov.sk/>

STATE VOCATIONAL EDUCATION INSTITUTE (ŠIOV)

SIOV is a professional – methodological, pedagogical, advisory, co-coordinative, and educational institution, directly managed by The Ministry of Education, Science, Research and Sport of the Slovak Republic. It is the only professional and pedagogical guarantor for the issues of vocational education and training for the whole network of secondary VET schools in the Slovak Republic, with extensive expertise in the field.

SIOV is a modern state institution, fulfilling its responsibilities for improving and streamlining education at secondary vocational education in secondary VET schools, covering various national and international school projects.

SIOV is working on raising the level of the teaching process, underpinned by the high level of pedagogues' expertise, and contributes to the increasing of employment opportunities for young graduates of vocational schools.

Ako partner projektu has implemented the project tasks related to the dissemination of the project, in a wide range of dissemination activities, according to the project work package WP5. SIOV has contributed with analytical works in the field of teacher education, comparing the situation among Austria and Germany and Slovak Republic.

3.3. The Ministry of Economic Affairs, Employment and Housing Baden-Württemberg, Germany

<http://mfw.baden-wuerttemberg.de/en/home/>

The Ministry of Economic Affairs, Employment and Housing Baden-Württemberg is responsible for the economic policy of the federal state with more than 11 million inhabitants. Its tasks include the promotion of the economy, in particular the small- and medium-sized business sector, as well as economic research. Urban and residential construction is also supported.

The Ministry acts also in different areas as supervisory authority e.g. for the chambers of industries and commerce, chambers of handicrafts and the stock market. Major activities are e.g. promotion of vocational education training (Dual System), strengthening small and medium-sized enterprises, fostering long-term growth, competitive opportunities & high level of employment, promotion of new technologies and innovations to maintain the competitiveness of the economy, active management of change from an industrial to a knowledge-based information society.

The Ministry has a lot of experience in the implementation and promotion of the dual VET system in Baden-Württemberg / Germany. In the Erasmus+ project, the Ministry was an important expert and project partner for the development and implementation of dual VET structures in Slovakia. Furthermore, the Ministry was an important part of the knowledge and experience exchange so that the Slovakian partners could profit from the long practical experiences in Baden-Württemberg and Germany with the Dual VET System.

3.4. Landesakademie für Fortbildung und Personalentwicklung an Schulen, Baden-Wuerttemberg, Germany

<http://lehrerfortbildung-bw.de/akaprojekte/>

The Academy was founded in 2004 as the central training facility for teachers of the State of Baden-Wuerttemberg. It is a legally responsible public-law institution. It provides in-service training for teachers and executives on behalf of the Ministry of Education, Youth and Sports. There are three locations of the “State Academy for In-service Training and Human Resource Development at Schools” in Baden-Wuerttemberg: Bad Wildbad serves schools by implementing courses for general education, Comburg offers training for executives and Esslingen is responsible for vocational colleges. More than 36,000 teachers and multipliers attend the 1,859 courses being offered by the State Academy. The performance of the Academy is rated with the grades A or B by more than 90 percent of the participating teachers. Tasks of the Landesakademie in the project are Work package 2 - Quality Monitoring:

Development of a quality assurance plan

- Setting up of a quality management group (QMG) which is responsible for quality assurance
- Development of a quality assurance plan

Quality Monitoring and Evaluation

- Regular meetings of the QMG
- Implementation of the quality assurance plan to be followed by the partners for the specific task for which each has assumed responsibility
- Evaluation of the results by the QMG and analysis of improvement possibilities

3.5. Wirtschaftskammer Österreich – (WKÖ) (Austrian Federal Economic Chamber), Austria

<https://www.wko.at/Content.Node/iv/index.html>

The Economic Chamber Organisation is established by law and consists of the following autonomous bodies:

the Federal Chamber (Austrian Federal Economic Chamber – WKÖ), 9 regional chambers, Representative Professional Organisations, Specialised Professional Groups. All the chambers and representative professional organisations are self-governing bodies by public law and represent their members' interests.

Though the bodies are subject to statutory regulatory oversight and examination by the Austrian Court of Audit, they are nevertheless autonomous and independent from the state, in as far as they are financed by member contributions, set their own agendas and have their own decision-making processes carried out by representatives elected by democratic ballot.

The law stipulates compulsory membership in the chambers and representative professional organisations for all entrepreneurial activities in crafts and trades, industry, commerce, banking and insurance, transport and logistics, tourism and leisure and information and consulting. The chambers represent collective interests across all members, while the representative professional organisations represent the mutual interests in their profession.

At the national level, the WKÖ is the economic chamber responsible for Austria, thereby making it the largest and most comprehensive self-governing body within the Economic Chamber Organisation. The tasks of the WKÖ in the public interest are governed by law, as are its bodies and their appointments, structures, financing and membership. Based on the Economic Chamber Law, the WKÖ is the official organisation representing the mutual interests of its more than 500,000 members at national and European levels. In addition, the WKÖ provides its members with comprehensive information and services with a global network of about 100 foreign trade centres.

Concerning dual vocational training the Economic chamber Organisation is acting on delegated authority from the ministry of Economy.

Apprenticeship offices at the regional Economic Chambers act on delegated authority from the Ministry of Economics:

- Accreditation of training companies
- Approval and registration of apprenticeship contracts
- Organisation of examinations (the examination boards consist of representatives of the social partners)
- Awarding of the qualification
- Administration of financial incentives for training companies

The initiative for the introduction of new apprenticeships and further development of existing apprenticeships often come from companies via Social Partners. Social Partners also submit opinions on draft training regulations.

WKÖ already established a close cooperation with the Slovak government and the employers' associations concerning the introduction of dual vocational training in terms of

legislative questions as well as the implementation of concrete pilot actions. Participation in the project not only helped to intensify the long-standing cooperation, but also to support the organization of the qualification of the teachers and trainers to improve the basic conditions of the company's vocational training components in Slovakia. As a result, the qualification requirements of the Austrian companies who are already in the region can be better met in the future to secure the company's own skilled labor force. To be part of the project helps the WKÖ to support the increase of the competitiveness of the enterprises and to strengthen the network between the stakeholders and companies in Slovakia.

3.6. German-Slovak Chamber of Industry and Commerce, Slovakia

<http://www.dsikh.sk>

SNOPK meets in the Slovak Republic following:

1. Official Representation of German Economy

SNOPK is the central actor in the promotion of foreign trade of the Federal Republic of Germany. Represents German economic interests in the Slovak Republic, provides information on Germany and promotes it.

2. Membership Organization

SNOPK associates Slovak enterprises that are active in bilateral economic relations. These member companies give a weight and voice to SNOPK in representing their economic interests before the representatives of politics, economy and administration.

3. The service provider for companies

SNOPK offers companies from Slovakia and Germany services to support their foreign trade activities.

The same time as the project started the pilot activities of SNOPK in Slovakia supporting the implementation of German dual system in some regions began developed. SNOPK was in a project responsible for doing the market research in the field of support for dual education and professions missing at the labour market, as well as for transfer of experiences from Germany in dual VET during the implementation of the project.

3.7. Federal Institute for Vocational Education and Training (BIBB), Germany

<http://www.bibb.de/>

The Federal Institute for Vocational Education and Training (BIBB) is recognized as a center of excellence for vocational research and for the progressive development of vocational education and training (VET) in Germany. It is – among others – in charge of the development of training regulations and one of the leading places for VET research in Germany.

BIBB works to identify future challenges in VET, stimulate innovation in national and international vocational systems, and develop new, practiceoriented solutions for both initial and continuing vocational education and training.

As BIBB has been responsible for the modernisation of the ordinance on trainers aptitude (Ausbildereignungs-Verordnung, AEVO) in Germany it has strong experiences in this field. Furthermore the experience in the field of VET legislation is very strong. Through this experience, BIBB could contribute to the aims of the project, especially on the topic of in-company trainers.

3.8. Associated partners

3.8.1. Federal Ministry of Science, Research and Economy, Austria

<http://www.en.bmwf.gv.at/Seiten/default.aspx>

3.8.2. Volkswagen Slovakia

<http://en.volkswagen.sk/en.html>

4. Results of the project

4.1. Identification of Labour Market Needs for Vocational Education and Training (VET) in the Slovak Republic

<http://www.minedu.sk/data/att/8960.pdf>

4.1.1. Introduction

The Slovak-German Chamber of Commerce and Industry (SNOBK) completed a survey named: *"Identification of Labour Market Needs for Vocational Education and Training (VET) in the Slovak Republic"* within the EURASMUS+ European programme project named: *National Authorities for Apprenticeships - Introduction of Elements Dual VET Slovak Republic*. The project's partners were involved in drafting the contents of the survey questionnaire, specifically the Ministry of Education, Science, Research and Sport of the Slovak Republic, the State Vocational Education Institute (SIOV), the State Ministry for Finance and Economic Affairs of Baden-Württemberg, Germany, Esslingen Regional Academy (Landesakademie Esslingen), Germany, the Austrian Economic Chamber (WKÖ) and the Federal Institute for Vocational Education and Training, Germany (BIBB).

Industrial companies in Slovakia were the target group of this survey focused on technical professions. Employers in the SNOBK internal database were contacted, while the Federation of Employers' Associations of the Slovak Republic and the WKÖ were involved in the distribution of questionnaires and the Slovak Chamber of Industry and Commerce (SOPK) also disseminated information on its website. These efforts resulted in the formation of a sample of 72 companies used to obtain relevant results from the survey of employer needs. However, the majority of those respondents are already committed to vocational training. According to the latest figures released by the Ministry of Education SR1, 130 companies – mainly from the production sector - intend to introduce dual vocational as of September 2015. Overall, there are 3,685 industrial companies giving work to 10 or more employees 2.

1) Ministry of Education SR <http://www.minedu.sk/zamestnavatelia-do-dualu-ziadaju-1-800-ziakov/>

2) Statistical Office of the Slovak Republic, 04/2015

Company representatives were asked to respond to open questions and multiple choice questions focused into four thematic areas:

- *basic company details* (name, primary business activities and size of the company);
- *labour force education and composition* details (attained level of education, a school with the best qualified graduates, under-qualified vocations and causes thereof and the need for re-qualification);
- *company apprenticeships* (existing cooperation with schools and its form, conditions for delivering on-the-job practical instruction and training);

- *dual education in Slovakia* (interest among employers in participating in a dual education system and related information).

The survey was conducted from 23 February 2015 to 16 March 2015. Employers could respond anonymously or provide the name of the company and a contact email address.

The purpose of this research is to better adapt vocational education to company practices and the needs of employers in Slovakia. The results of this survey are to contribute to comprehensive reform of the vocational education and training system at the system level and support for pilot projects building on practical experience from industry in Slovakia.

4.1.2. Basic company details

2.1 Companies by sectors

The *mechanical engineering* sector accounted for 36% of all respondents, the largest individual group in the survey of employer needs. The *auto industry* at 29% was the second largest group, followed by other companies that did not fit into a category defined in the survey, such as the *wood industry, construction industry, and textile or garment industry and retail sector*. These were followed by companies in sectors such as *electronics* (8%), *mining and metallurgy* (6%), *power* (4%), *chemicals* (4%) and *transport, forwarding and logistics* (2%).

2.2 Companies by region

The largest group of companies involved in the survey were companies from the *Trenčín Region* (24%), followed by companies from the *Bratislava Region* (18%), the *Nitra Region* (12%), the *Trnava, Žilina and Košice Regions* (all at 11%), companies from the *Banská Bystrica Region* (10%) and the fewest respondents were from the *Prešov Region* (3%).

2.3 Size of companies by number of employees

The same number of *medium enterprises* (50 – 249 employees), and *large enterprises* (250 and more employees) participated in the survey (each accounting for 45%). *Small enterprises* (up to 49 employees) accounted for the remaining 10%.

4.1.3. Labour force

3.1 Employee education and training

A clear majority of companies was formed in answering the "*From what schools do you recruit your labour force?*" question. 97.2% of companies recruited their labour force from *secondary vocational schools*. Some of them also reported *grammar schools (secondary schools preparing students for university-level studies)* (15.3%).

3.2 Secondary education

The structure of employees with secondary vocational education among contacted companies was as follows: most employees have *complete secondary vocational education* (4 to 5-year education program with graduation alternatively with vocational certificate) (33.1%), followed by employees with *secondary vocational education* (3 to 4-year education program with vocational certificate) (29.6%), employees with *complete secondary general education* (4 to 8-year grammar school with graduation) (9.4%) and the smallest portion of employees with *lower secondary vocational education* (2-year education program with leaving examination) (5.5%).

3.3 Verified schools

The following schools were most frequently mentioned in answers identifying the schools from which companies had the best experience:

- SPŠ Nové Mesto n. Váhom (secondary industrial school)
- SPŠ elektrotechnická Bratislava (secondary industrial school, specialised in electrical engineering)
- SOŠ Handlová (secondary vocational school)
- SOŠ technická Šurany (secondary vocational school, specialised in technology)
- SOŠS Kysucké Nové Mesto (secondary vocational school, specialised in mechanical engineering)
- SPŠ strojnícka Košice (secondary industrial school, specialised in mechanical engineering)
- SOŠ polytechnická Prievidza (secondary vocational school, specialised in polytechnics)
- SOUS Považská Bystrica (secondary vocational school, specialised in mechanical engineering)

3.4 Vocations with insufficient qualifications

Companies reported the greatest difficulties in finding qualified graduates with secondary education in the vocations of *tool setter* and *electrician* while the fewest problems were encountered in the vocations of *coach-builder* and *auto body painter*. The ranking of other vocations is shown in the table below.

Table 1: Vocations with insufficient qualifications

Overview of vocations

- | | |
|----|------------------------------------|
| 1. | Tool setter, electrician |
| 2. | Mechatronics technician |
| 3. | CNC/NC operator |
| 4. | Tool maker |
| 5. | Machinery and equipment programmer |
| 6. | Machinist |
| 7. | Form builder |
| 8. | Auto mechanic, auto electrician |

3.5 Causes of insufficient qualification

Companies reported *insufficient practical experience* as the greatest cause of insufficient qualification (66.7%) followed by *insufficient number of graduates* (58.3%), *insufficient skills among graduates* (37.5%) and then *insufficient theoretical knowledge* (27.8%). *The absence of the required specialisation in the region* was the least reported reason for insufficient qualifications among graduates (19.4%).

3.6 Insufficient knowledge

Companies reported that knowledge in the area of *machines and equipment*, followed by *metal processing and machining technologies* and then knowledge of *electronics and electrical engineering* were insufficient in graduates. Insufficient knowledge is ranked by specific thematic areas in the table below.

Table 2: Insufficient knowledge

Overview of knowledge

- | | |
|----|---|
| 1. | Machines and equipment |
| 2. | Metal processing and machining technologies |
| 3. | Electronics and electrical engineering |
| 4. | Technical drawing |

5. Tools and jigs
6. Properties of materials
7. Applied informatics, work with software
8. Health and safety at work

3.7 Insufficient skills

Companies reported skills in the areas of *machinery and tool set-up and maintenance*, followed by *knowledge of standards and technical documentation* and then *operating machinery and instruments* as insufficient in graduates. Insufficient skills are ranked by specific skills in the table below.

Table 3: Insufficient skills

Overview of insufficient skills

1. Machinery and tool set-up and maintenance
2. Knowledge of standards and technical documentation
3. Operating machinery and instruments
4. Programming machinery
5. Assembling and disassembling equipment
6. Methods of measurement
7. Hand working and machining materials, quality control
8. Information and communication technologies

3.8 Demand for graduates in individual vocations

Companies responded that they most need graduates with secondary education in the vocations of *tool setter*, followed by *electrician* and *CNC/NC operator* on an annual basis. The ranking of other vocations for which there was increased demand from companies for graduates is shown below. We also noted increased demand for vocations not included on the questionnaire, specifically *industrial mechanic*, *machinery and equipment mechanic*, *miner and seamstress*.

Table 4: Ranking of the most in-demand vocations

Overview of vocations

1. Tool setter
2. Electrician
3. CNC/NC operator
4. Machinist
5. Tool maker
6. Mechatronics technician
7. Machinery and equipment programmer
8. Form builder
9. Auto mechanic
10. Auto body painter
11. Auto electrician
12. Coach-builder

3.9 Employee re-qualification

Companies provided a clear differentiation with respect to the question regarding the need for the re-qualification of employed graduates. Re-qualification was needed at 51% of companies and not needed at the remaining 49%.

3.10 Duration of re-qualification

The companies that reported the need for re-qualification when employing graduates (51% of contacted companies) said that such re-qualification took from 3 months to 2 years; however, a period of *6 months or 1 year* was mentioned most frequently.

3.11 Employees from socially-disadvantaged backgrounds

60% of the contacted companies did not maintain specific records involving this topic or did not respond to this question. The remaining 40% of companies reported an average of 6.3% of all its employees were from socially-disadvantaged backgrounds

4.1.4. Practices in your company

4.1 Cooperation with secondary vocational schools

Up to 76% of companies reported on-going cooperation with secondary vocational schools. The remaining 24% did not engage in such cooperation.

4.2 Forms of cooperation Companies reported various forms of cooperation with secondary vocational schools. Some are involved in a *pilot project* and provide *premises for the practical component of instruction*. They serve as *training companies* and provide *summer apprenticeships, re-qualification courses or continuing education for teachers* and even *lectures for students*. Companies reported that they supported secondary vocational education to some extent, both *materially and in the form of financial sponsorship*, while also organising various *lectures* and *open houses* in their facilities.

4.3 Employing apprentices after completing education and training

58.3% of the total number of queried companies responded to this question. These companies reported that 47.9% of graduates, on average, could be employed after successfully completing vocational education and training.

4.4 VET facilities in companies

Most of the queried companies did not have a dedicated VET facility. Only 24% of companies responded affirmatively to this question.

4.5 Special VET masters/apprenticeship teachers/instructors in companies

35% of companies reported that they had special VET masters, apprenticeship teachers or instructors.

4.6 Educational level of vocational education masters, apprenticeship teachers and instructors in companies

54% of companies with special vocational training masters, apprenticeship teachers or in-house instructors reported that these staff members had *secondary vocational education and training*. The remainder of specialised staff members at these companies had university-level education with additional pedagogical education.

4.7 Education of vocational training masters, apprenticeship teachers and instructors

All companies with specialised staff members (35% of companies) reported these specialists were involved in continuing education in 100% of cases.

4.8 Continuing education of vocational training masters, apprenticeship teachers and instructors

Continuing education for these specialised staff members takes place inside companies using unspecified *re-qualification trainings, courses and workshops*.

4.1.5. Dual education in Slovakia

5.1 Interest in dual education among companies

Up to 82% of all queried companies reported an interest in being involved in dual education.

5.2 Financial support for dual education from companies

Of the 82% of companies that expressed an interest in dual education, 75% of them also reported that they were willing to participate financially in dual education. This option was precluded by the remaining 25%.

5.3 Number of positions for dual education students

86.1% of queried companies responded to this question. These companies are able to create 13 positions for dual education students on average and per year

5.4 Vocations for which companies are able to create positions for dual education students

Nearly 19% of companies reported being able to create positions for dual education students for the vocations of *electrician/electrical engineer* while 17% were able to do the same for the vocations of *mechanic and tool setter* with the same number reporting for the vocation of *machinery and equipment setter*. 16% of companies could create positions for the vocations of *industrial mechanic* and *machinery and equipment mechanic*. 13% of companies could create positions for dual education students in the vocation of *CNC operator*. 12% reported the same for the vocations of *mechatronics technician, tool maker and machinist*. 6% reported the willingness to create positions for *welders and mechanical engineering workers* with 3% of companies were able to create positions for dual education graduates in the vocations of *production operator and quality controller*.

4.1.6 Conclusion

The mechanical engineering (36%) and auto industry (29%) were the two largest groups involved in the survey to identify labour market needs for vocational education and training (VET) in Slovakia. The largest groups of contacted companies were in the Trenčín (24%) and Bratislava Regions (18%). Large and medium enterprises in terms of number of employees (each accounting for 45%) were the largest groups involved in the survey.

A vast majority of companies, 97.2%, draw their labour force from secondary vocational schools and a majority of their employees have complete secondary vocational education (33.1%) and secondary vocational education (29.6%).

Companies have the best experience with graduates from secondary vocational schools such as SPŠ Nové Mesto nad Váhom, SPŠ elektrotechnická Bratislava, SOŠ Handlová, SOŠ technická Šurany, SOŠS Kysucké Nové Mesto, SPŠ strojnica Košice, SOŠ polytechnická Prievidza and SOUS Považská Bystrica.

Companies reported the most difficulty in finding qualified graduates with secondary education in the vocations of tool setter and electrician, mechatronics technician, CNC/NC operator and tool maker. Companies consider insufficient practical experience the greatest cause of insufficient qualification, while the absence of the given specialisation in the given region was considered the least significant cause of insufficient qualification. Companies highlighted insufficient knowledge of machinery and equipment as the primary deficiency among graduates. The skills that graduates lack the most include machinery set-up and maintenance skills. The lack of graduates in the vocations of tool setter, electrician, CNC/NC operator and machinist was most felt by companies on a year-to-year basis. More than half of companies reported that employed graduates required re-qualification, which in most cases lasted anywhere from 6 to 12 months. Most companies did not record any classification of employees on social or national grounds.

Three quarters of companies confirmed on-going cooperation with secondary vocational schools. These companies are involved in a dual education pilot project or provide premises for the practical component of instruction. They serve as training companies, provide

summer apprenticeships, re-qualification courses or continuing education for teachers, lectures for students and even provide material and financial support to schools. Companies that provide the practical portion of education are able to employ nearly half (47.9%) of graduates who successfully complete such training and education. Almost one quarter (24%) of the queried companies had practical training facilities in their company. 35% of companies have specialised staff members (vocational education masters, apprenticeship teachers or instructors) while companies confirmed their continuing education in the form of re-qualification training, courses or workshops. 82% of companies that participated in the survey expressed an interest in involvement with dual education, with three quarters of the companies willing to participate financially in dual education. These companies are able to create 13 positions for dual education students on average and per year. Most of these positions would be in the vocations of electrician, tool setter mechanic, machinery and equipment setter, industrial mechanic, machinery and equipment mechanic, CNC operator, mechatronics technician, tool maker and machinist. Lower demand was noted for the vocation of welder and definitively for the vocations of production operator and quality controller.

4.2. Review of Slovak Legislation and VET Pilot Schemes

<http://www.minedu.sk/data/att/8959.pdf>

4.2.1. Analysis and review of new Slovak TVET law and implications for technical apprenticeships

4.2.1.1. Important facts about the economic situation in Europe before 2015

A large number of EU countries were faced with serious economic problems in 2012. Youth unemployment reached in some countries up to 50%, a large number of young people dropped out of school without formal qualifications. Young people should be given new prospects through high-quality and market-required training programs.

Practical teaching in the workplace of the employer and dual education or a combination thereof is the cornerstone of strategic documents such as the strategy of education and training ET 2020, the Europe 2020 strategy (Strategy for smart, sustainable and inclusive growth) and Copenhagen process in vocational education and training. These initiatives and the strategies of EU support and highlight the dual education and vocational education as an essential and elemental component of modernization of vocational education and training.

Current status of vocational education and training, high youth unemployment and lack of interest in studying technical fields of education have been the driving force behind the activities of the German government organizing a ministerial conference, which resulted in the signing of a memorandum of cooperation in vocational education and training in Europe.

4.2.1.1.1. Signature of a Memorandum

On 10 and 11 December 2012 in Berlin, a Ministerial Conference was held which resulted in the signing of a memorandum. Ministers of the participating countries stressed out the importance of increased cooperation and support of activities that are meant to introduce dual education, apprenticeships and practical trainings in the workplace of employers in vocational education and training of the partner countries.

Ministers of the partner countries have agreed that over the next five years they support the following areas of cooperation:

- ✓ increase the attractiveness and quality of vocational education and training;
- ✓ involvement of social partners and the private sector as responsible actors in the field of vocational education and training;
- ✓ mutual support modernization of vocational education and training;
- ✓ increase mobility in vocational education and training as a contribution to the development of the European labor market and education sector
- ✓ closer links to existing instruments of European cooperation in vocational education and training and the use of structures and programs.

At the same time, it was agreed that from 2013 they would implement the following activities:

- ✓ the creation of at least 30 flagship projects in order to create regional structures between businesses and chambers of commerce in partner countries over the next two years;
- ✓ grant of up to 10 million euros from the German side to the financing of German partners in these projects with the objective to establish partnerships between businesses, chambers of commerce and educational institutions;
- ✓ Having regard to the foregoing, the appropriate co-financing by partner countries to support its partners in the flagship projects if they are to set aside funds in partner countries;
- ✓ Development of the EURES network as a system of European placements for apprentices;
- ✓ in the school year 2013/2014 to define at least 10 fields of education for the implementation of the above activities;
- ✓ further cooperation in using the new programming period and resources from the ESF;
- ✓ The Expert group on vocational education and training in all countries, including the co-ordinator in each case;
- ✓ to support projects within ERASMUS +;
- ✓ setting up a common long-term cooperation platform in order to ensure further development of cooperation and review progress under this MOU.

The signatories of the Memorandum are Germany, Slovakia, Latvia, Greece, Italy, Spain and Portugal.

4.2.1.1.2. The course of subsequent activities in VET in Slovakia

On April 25, 2013 an International Conference on dual education was held, which has been raised to call for the transformation of the vocational education and training in Slovakia and the introduction of a dual system of education in vocational education and training. One of the starting points for the development of the conference was the signing of a memorandum in Berlin. Germany was represented at the conference by Ms Kornelia Haugg, Director General of Vocational Training of the Federal Ministry of Education and Science of Germany.

At the conference, the German employers presented the dual training system as well as their cooperation with the Slovak secondary vocational schools.

In November 2013, a meeting of representatives from Ministry of Education of SR, BMBF, BIBB, AHK, DIHK, T-Systems, T-Mobile Deutschland was held in Bonn, Germany. The object of the visit were consultations and exchange of conceptual principles with German partners on vocational education and training as well as a presentation of dual training in IT technology in Germany and Slovakia through the company T-Systems and Secondary Vocational School of Electrical, Košice. The subject of presentations by Germany were examples of good practice of the German Chamber of Commerce, secondary vocational schools, T-Mobile and BIBB. The program included practical training excursion of the center T-Mobile as well as interviews with apprentices. The Slovak delegation was led by former state secretary of Ministry of Education Mr. Štefan Chudoba.

4.2.1.1.3. European Alliance for apprenticeships

In response to the signing of the memorandum was followed in July 2013 signed by the European Alliance for apprenticeships, which supports EU Member States as well as businesses to create high-quality and attractive places for apprenticeships and for work-based learning. The activity emerged from the collaboration of EU countries that have dual systems of education implemented and major executives from the European Commission. The Alliance was signed as a joint declaration between the Directorate-General of EC for Employment, Social Affairs and Inclusion and Education, Culture, Sports and Youth.

4.2.1.1.4. Memorandum of understanding

Between the Austrian Chamber of Commerce (WKO) and the Ministry of Education, Science, Research and Sports of Slovakia was on February 12, 2014 in Vienna signed a memorandum of understanding. Memorandum strengthen cooperation between the Slovak Republic and the WKO in implementing elements of the dual education system in vocational education and training in Slovakia using rich experience of WKO with dual education and transfer of its parts abroad. Based on the Memorandum was in Zlate Moravce launched a pilot project called "Young Star" for the purpose of introducing elements of the Austrian dual system of education in vocational education and training in Slovakia.

4.2.1.1.5. Joint Declaration on Cooperation in VET

Building on previous cooperation and by creating legislative conditions for the entry of companies into the dual system of education has shifted further the relations in the field of education neighboring countries. The culmination of this cooperation was the signing of the Joint Declaration on Cooperation in Vocational Education and Training between the Ministry of Education, Science, Research and Sport of Slovakia and the Ministry of Education and Research of the Federal Republic of Germany on 25 September 2015. Both sides declared their interest in cooperating in the next transition vocational education and training, as well as in the creation and implementation of projects or mobility of students and teaching staff and career counseling.

4.2.1.2. Important features of Slovak VET

Vocational Education and Training (VET) has a strong tradition in Slovakia and it is one of the essential components of education here. Orientation for industry, subcontracting manufacture and former directly linking schools with businesses create good preconditions so that VET can be further developed. The VET is the only segment of upbringing and education which is fulfilling the needs of the labour market and that ensure its exclusive position.

There are 32 groups of fields of study recognised by legislation for secondary schools and most of study programs emphasis not only on theoretical knowledge, but on practical skills, experiences and habits, too. For that reason, it must be part of educational programs of secondary vocational schools practical training aimed at gaining relevant practical skills, experiences and habits.

This practical training is most effective when a substantial part is performed directly in the workplace of employers. The basic condition for the effectiveness of VET segment is its ability to respond to changing labour market needs. The fulfilment of this condition requires regular analysis of data on labour market developments and close cooperation with employers.

4.2.1.3. Advantages of the Slovak VET system

- A majority of young people are educated in vocational programmes and it has good status

In 2012/2013, nearly 72% of secondary school students graduated from VET. It is nearly as high as in the Czech Republic, and higher than in other countries with similar economic structures (Poland, Hungary). According to a recent survey, parents continue to see VET education as an educational path that can support employability of their children, in particular with respect to the upper secondary streams finishing with the maturita.

VET institutions build on a long tradition that dates back to the Czechoslovak system before 1970s that provided for a strong link between VET schools and state-owned enterprises. With the economic transition the system evolved in the 1990s into a school-based system. The 2008 reform introduced governance mechanisms for linking secondary education more closely to the labour market. The VET tradition and past experiences of reforming are assets in designing changes that can improve responsiveness to the labour market.

- Both key governmental policy makers and non-governmental stakeholders share an un-derstanding of the need for reform

The 2013 State of Education Report reflects a developing consensus:

- the quality of VET should be increased so that graduates are able to enter the labour market successfully after finishing their studies.
- the role of employers should be strengthened by enhancing both their re-sponsibilities as well as rights in the VET system.
- measures should be taken to increase the interest of pupils in VET.
- New Act on VET provides the direction for reform

The New Act aims to establish a clearer division of rights and responsibilities for stakeholders, employers and employer associations particularly through a clear legal contractual relationship between schools, pupils/apprentices and firms.

- Large employers in particular are keen supporters of more extensive workbased learning in VET.

Many large employers, employers' associations and foreign chambers of commerce are actively engaged in helping to build a better VET system. Fragmented structures and voluntary memberships of employers' associations and unions put limitations of broader representativeness of interests, since the implementation of 2009 VET law a framework has been in place which allows a regular exchange and coordination of the system. The new proposed legislation builds upon this basis and seeks to simplify the coordination framework while making employer rights and responsibilities more explicit, in particular in the provision of elements of dual VET system.

- The Slovak VET system is flexible

The VET system in Slovakia is relatively comprehensible with a small set of vocational pathways (with and without maturita) while the number of programmes is modest in international comparison. In 2013/2014, 436 VET programmes existed in total.

Slovak upper secondary education is fairly flexible and able to accommodate different local models for the division of learning between theory and practice. Such flexibility is achieved through the autonomy of schools to develop school-level curricula and in the capacity of the VET streams of upper secondary education to adjust the mix of theory and practice.

- Slovakia has traditionally performed relatively well in keeping pupils in the education system

In 2013, early leaving from education and training stood at 6.4%, about half of the EU28 average (12%).

- Strong economy with relatively well recovering from the global economic crisis

For Slovakia, the income gap relative to the upper half of OECD countries converged from over 60% in the early 2000s to close to 40% by 2013. Between 2001 and 2011, growth in GDP per capita was the highest in the OECD and the country recovered relatively well from the global economic crisis.

4.2.1.4. The Act n. 61/2015 on Vocational Education and Training in Slovakia

The Act on VET was accepted by the Slovak National Council on 12 March 2015 and it is entered into effect on 1 April 2015. The aim of the new act is to enable a smooth transition of secondary vocational schools from education to the labour market and reduce the risk of unemployment for young graduates. There are incorporated elements enabling the preparation of students in the dual education.

When we have to speak about the legislative process, we have to say that a working group for development of the draft Law on VET was created by representatives of the Ministry of Education, Science, Research and Sport of Slovakia and the Ministry of Economy of

Slovakia, representatives of employers and employers' associations, representatives of school found-ers (selfgovernment regions Žilina and Bratislava), representatives of employees and a solving group of the national project RSOV(Development of VET).

The draft of the Act had been continuously consulted with other experts in the various parts of the content.

4.2.1.4.1. Regulated issues

The Act n. 61/2015 on Vocational Education and Training in Slovakia regulates the following issues:

- vocational education and training offered to pupils attending secondary vocational school,
- the types of secondary vocational schools
- practical training,
- dual education system,
- verification of employers' capability for the provision of practical training in the dual education system,
- contractual relations between the employer and secondary vocational school and between the employer and pupil in the course of practical training,
- the material and financial support of the pupils,
- coordination of vocational education and training for the labour market.

4.2.1.4.2. Organisation of VET according to the new Act – place of practical training

Vocational training, vocational practise and art practise are offered to the pupils:

- in the workshop,
- at the employer's workplace,
- at the workplace of practical training, if the pupil is trained in the system of dual education.

Practical courses are pursued by the pupils at the secondary vocational school. Where the nature of the practise works so requires, practical courses may be organized also at the employer's workplace or the workplace of practical training.

Where the nature of the occupation or the professional activities of the particular study branch or the particular training branch so require, vocational training, vocational practise and art practise may be temporarily organized also at a different place of productive work performance.

4.2.1.4.3. System of Dual Education

The new Act on VET No. 61/2015 Coll. makes a huge breakthrough in the transformation process of the Slovak VET system. It introduces a system of dual education system based on the experiences of the Austrian, German and Swiss partners. The system of dual education represents a boost for the attractiveness of VET due to its former tradition in

former Czechoslovakia, especially in the fields of machinery, automotive, construction, tailoring and chemistry industry. The strong connection and cooperation between secondary VET schools and employers is needed. The practical training as a work-based learning is fully organised and covered by the employer, who has to sign a treaty on dual education. In this treaty, the responsibilities and duties of both subjects in the system of dual education are defined. The work-based learning is provided by the employer at his workplace, which must be certified by a corresponding chamber of employers.

According to article 10 of Act on VET, the pupil in the system of dual education prepares himself or herself for his or her future occupation, occupations or other professional activities after the demands and requirements of the employer with whom the pupil has signed an apprenticeship contract.

The employer in the system of dual education has a very strong role to influence the VET provisions in VET programs. His own demands can be reflected in school curricula. In dual education, the employer has a responsibility to participate at the creation of school curricula.

- **Certification of Employers**

As it was mentioned above, the employer, who has been certified to provide the practical training in system of dual education, must fulfil certain requirements. These include:

The employer must fill in the application for the certification procedure in order to enter the system of dual education. The application must be sent to the representative chamber until 30th of September of the year that proceeds the 1st of September of the year in which the employer can provide the practical training in the system of dual education.

The application for the certification of employer to provide the practical training in system of dual education contains:

- ✓ identification data of the employer,
- ✓ main activities of the employer,
- ✓ field of study or fields of study in which the employer will provide the practical training,
- ✓ number of pupils in system of dual education,
- ✓ secondary VET school which the pupils will attend and with which the employer has signed treaty on dual education,
- ✓ the estimated number of VET teachers and secondary VET trainers under who the pupils will carry out their practical training and who are the employees of employer,
- ✓ the estimated number of VET teachers and secondary VET trainers under who the pupils will carry out their practical training and who are the employees of secondary VET school in case the employer does not have them,
- ✓ the estimated number of in-company trainers,
- ✓ school year from which the employer starts to provide the practical training,
- ✓ signature of the employer.

Annex to the application is a certificate of authorization of the employer to perform the activities which corresponds with the content of education in designated field of study and

certificate of availability of employer`s facilities for the corresponding part of the school curricula of a designated field of study. The requirements for material and technical equipment of the employer must match at the same level the requirements of eligibility of secondary VET school to provide the education in the designated field of study.

- **Treaty on Dual Education**

For the employer to enter the system of dual education, he must sign the treaty on dual education.

The treaty includes:

- ✓ identification data of the employer,
- ✓ identification of secondary VET schools,
- ✓ the obligation of the employer to provide pupils practical training at his own expense and responsibility,
- ✓ a commitment from secondary VET schools to organize vocational education and training in the system of dual education,
- ✓ the field of study in which the system of dual education will be performed,
- ✓ number of pupils in system of dual education,
- ✓ the form of practical training,
- ✓ the place of practical training,
- ✓ the number of VET teachers, secondary VET school trainers who are employees of employer under whose authority pupils will carry out the practical training,
- ✓ the number of VET teachers, secondary VET school trainers who are employees of secondary VET school (if employer does not have them) under whose authority pupils will carry out the practical training,
- ✓ the number of in-company trainers in case the pupil carries out his or her practical training under guidance of in-company trainer,
- ✓ timetable of practical training in accordance with the established organization of education and training in secondary VET schools,
- ✓ the manner in which the in-company trainer assesses and evaluates the pupil,
- ✓ financial provision of practical training and teaching staff,
- ✓ material provision for pupils,
- ✓ financial provision for pupils,
- ✓ form of participation of the employer at the final examination,
- ✓ a way of ensuring mutual rights and obligations of contractual parties,
- ✓ time period for which the contract has been concluded,
- ✓ form of withdrawing from the contract,
- ✓ date and signature of contractual parties.

The employer as well as secondary VET school can decide to sign more contracts with other employers or secondary VET schools respectively.

- **Apprenticeship treaty**

The employer and the legal representative of the underage pupil or adult pupil discuss the particulars of an apprenticeship treaty and conditions of practical training in system of dual education. This treaty can be signed, at latest, on 31th of August before the start of a first school year of pupil.

The apprenticeship treaty contains:

- ✓ identification data of the employer,
- ✓ name, surname and date of birth of the legal representative of pupil in the case of a underage pupil,
- ✓ name, surname and date of birth of the pupil,
- ✓ identification data of secondary vocational school which pupil attends,
- ✓ the obligation of the employer to prepare pupils for their occupation, occupations or professional activities in system of dual education,
- ✓ a commitment of the pupil to participate in the practical training directly by the employer in accordance with his specific needs and requirements,
- ✓ field of study,
- ✓ the form of practical training,
- ✓ the place of practical training,
- ✓ organization of study, including a timetable of practical training in accordance with provisions of organization of education and training in secondary VET schools,
- ✓ material provision for pupils,
- ✓ financial provision for pupils,
- ✓ form of ensuring mutual rights and obligations of the contractual parties,
- ✓ form of withdrawing from the contract,
- ✓ date and signature of contractual parties.

- **Material provision for pupils**

When pupil carries out his or her practical training on the workplace of the employer, the employer must provide him or her with the personal protective equipment and must conduct the assessment of health, sensory and psychological capabilities of pupil if it is required by the nature of the practical training.

An employer who provides practical training for pupil in system of the dual education has to finance the nutrition of pupil during the practical training.

In system of dual education the employer has the possibility, not the obligation to finance the accommodation of pupil in school dormitory and travel expenses from place of residence of pupils to the secondary VET school, workplace of employer or dormitory and back.

- **Financial provision for pupils**

The pupil who creates on the workplace of employer a productive work receives a reward for his or her productive work, which can be from 50% to 100% of the wage of real employees of

employer. The amount of the reward of productive work depends on the quality of the work performed and the behaviour of pupil.

In fields of study, which have been selected by the Ministry of Education, Science, Research and Sport of the Slovak Republic as insufficient on the labour market (the demand of the labour market is greater than the actual number of pupils in these fields of study), the state provides to pupils the motivation scholarship in order to motivate the young people to study technical fields.

It is supplied by monthly basis and is distributed among pupils in following way:

- ✓ 65% of subsistence minimum by average of grades of pupil up to 1.8
- ✓ 45% of subsistence minimum by average of grades of pupil from 1.8 to 2.4
- ✓ 25% of subsistence minimum by average of grades of pupil from 2.4 including 3.0.

The employer can also provide pupils with the business scholarship. It is paid on monthly basis up to the quadruple of subsistence minimum.

- **Support for Employers to enter the System of Dual Education**

Employers are motivated to take part in VET by fiscal incentives in form of tax exemptions, which are per pupil based and fixed according to the extent of provided work based training. Employers associations will certify employers in the dual system and they will be also subjected to external control from the State School Inspection as they will be responsible for the practical training of students.

Most of the expenses account for tax incentives (reduced tax base by 3,200 per pupil for 200 - 400 hours of work based learning per year, or 1,600 for less than 200 -400 hours).

- **Centre of Vocational Education and Training**

The secondary VET school can become a centre of VET. The founder of the school must give his consent and it is decided by the representative chamber of employers for the designated area of industry or services. The secondary VET school can use this title when:

- ✓ the secondary VET school cooperates with the employers in area of VET,
- ✓ has recommended training facilities designed by the normative of material and technical provision,
- ✓ is an educational institution for further education according to the Act on Lifelong Learning No. 568/2009 Coll. preparing for the occupation, occupations and other professional activities connected to the linked fields of study,
- ✓ usually those schools are marked for their higher standards in equipment and pedagogical and professional staff and cooperation with the employers.

4.2.1.5. SWOT Analysis of Act n. 61/2015 on VET

4.2.1.5.1. Analysis of the Act 61/2015 by Slovakia

Strengths of the new Act on VET:

- ✓ The Ministry of Finance abandoned its long-term resistance to tax policies as instruments for intervention in social and educational policies:
 - incentives for enterprises providing practical training in their certified training facilities are tax deductible, thus the initial costs are reduced by 22%, which corresponds to corporate tax;
 - additional tax deductible incentives are offered on a per capita principle depending on hours of offered practical training: EUR 3,200 per trainee for 400 hours of practical training per year or EUR 1,600 per trainee for 200 hours of practical training per year;
 - remuneration for productive work that amounts to 50% to 100% of a minimum wage is also exempted from levies.
- ✓ New "apprentices" can receive a company stipend offering practical training based on a training contract, remuneration for their "productive work" performed within practical training, and a motivation stipend from the State in cases of entering training identified as missing in the labour market.

This corresponds to the following income:

- company stipend can reach a maximum of four times the subsistence costs (currently EUR 361.68 monthly);
- remuneration for productive work equals 50%-100% of minimum wage (currently EUR 1.09 to 2.18 per hour);
- motivation stipend offered monthly in three levels equal to 65%, 45% and 25% of subsistence costs depending on student's learning performance with average mark limits 1.8, 2.4 and 3.0 (with 1 for the best and 5 for the worst learning performance); currently it corresponds to EUR 58.77 monthly for best performing students.

Recommendations for the future:

- ✓ offering state-financed partnership grants for schools and companies to cover transformation costs and motivating schools to enter a cooperation model that is less stable than the current one based on institutional contracts between schools and companies;
- ✓ creating quality assurance procedures for companies and graduates entering into the dual system;
- ✓ creating an infrastructure supporting supply and demand of trainees and various quality programmes, including training of experts on employers' side enabling the world of work to take full responsibility for providing high-quality training programmes;
- ✓ attracting trainees into the dual system. Mistrust of young people and their parents towards apprenticeship caused by labour market turbulences particularly in the 1990s must be overcome by offering generous incomes to apprentices and clear career progress opportunities. Slovakia still misses a

flexible qualifications system that would offer apprentices in blue-collar professions advancement to an institutionalised "master craftsman" qualification, non-university tertiary qualifications and recognition of results of non-formal and informal learning.

4.2.1.5.2. Analysis of the dual vocational education and training system of Germany in comparison with Slovakia

Strengths of the German vocational education and training system

- ✓ Most vocational training is carried out within companies according to specific vocational training regulations. The curricula offered by vocational training colleges are tailored to the training regulations for different vocations.
- ✓ The vocational training regulations and exams for different vocations are the same in each German federal state.
- ✓ The subjects tested in the exam are standardized and mandatory for each German federal state. Exams are conducted by honorary examiners who work in the industry themselves.
- ✓ The law requires that trainers working in enterprises must show professional and personal aptitude. They must pass an aptitude examination. Courses are available to prepare for this examination.
- ✓ The chambers of commerce and industry advise the companies offering training, monitor the training provided by these companies, assess the suitability of companies and trainers, register apprenticeship contracts and conduct the examinations. This ensures that standards remain high.
- ✓ Trainees receive apprenticeship pay from the company for the duration of their training. This means that the company is investing in its future employees which implies a high degree of self-interest and involvement on the part of the company. The level of apprenticeship pay varies depending on the sector.
- ✓ The trainees are already integrated in daily work processes because of their practical work in the company. It allows them to directly see their own progress and the impact of their training. This is highly motivating for trainees and results in trainings identifying strongly with the trade they are learning.
- ✓ In addition to teaching trainees trade-specific theoretical and practical subjects for 1-2 days per week, vocational training colleges also teach general education subjects, e.g. German, economics, civics and vocational English.
- ✓ In principle, after completing the training, all vocational trades offer the option of doing a further qualification (e.g. master certification). The rules governing this further vocational training are laid down in the Vocational Training Act.
- ✓ The flexibility of the vocational training system also offers the opportunity to continue education at a university level. In principle, the path to university education is open to everyone who completes their vocational training.
- ✓ There are many interesting career perspectives open to apprentices after completing vocational training. There are also the options to set up their own company.

- ✓ Companies benefit from the availability of extremely well qualified specialists with extensive professional skills and close ties to the company. It strengthens companies' competitive position.
- ✓ German vocational training integrates young people directly in the labor market. It keeps youth unemployment low. Because the vocational subjects taught and the final vocational qualifications are recognized by all companies, qualified specialists can easily transfer to other companies. This is an effective means of bringing together supply and demand on the labor market and balancing one against the other.
- ✓ The system does not just have the advantage that young people are integrated in the labor market, it also helps to integrate young people from different social classes into society.
- ✓ Trainees are included in the social security system very early on. By starting to pay social security contributions at an early stage in their career, young people are looking ahead and planning for the future.
- ✓ As small and medium-sized enterprises may be unable to offer the full training content required, training courses are also available from industrywide training centers. These industry-wide training courses, which run from the first to the final year of training, are designed to complement and support in-house training. Such industrywide training guarantees similarly high standards across all vocations and trades, irrespective of the capacity of the individual company to provide full training. The courses provide specific practical vocational skills and knowledge and are an integral part of the dual vocational training system. The industry-wide training centers are funded and operated by the chambers of industry and commerce and other economic organizations. Government subsidies are available for the construction and equipment of the necessary workshops and to run the training programs.

Factors that influence the successful introduction of a dual vocational and educational training system in Slovakia

- ✓ Young people and their parents often hold vocational training in lower esteem than a university education. It is important to demonstrate the wide range of interesting and cutting-edge trades and vocations to teachers, parents and pupils at comprehensive secondary schools along with the many opportunities offered by such trades and vocations.
- ✓ Companies need to receive more and better information e.g. from their commercial or industrial federations and chambers, and need to realize how important it is to invest in vocational training and personnel development and also, for example, that they should remunerate their apprentices. The tangible benefits of vocational training for companies need to be spelled out.
- ✓ To ensure a high standard of vocational and educational training, the instructors in trade schools/vocational training colleges and the trainers in companies must themselves be given appropriate training and the opportunity for professional development.

- ✓ Following the introduction of legislation mandating in-company vocational training, it is important that trade schools/vocational training colleges and companies are engaged in a continuous process of dialog and consultation.
- ✓ Once the training regulations have been drawn up and in-company training is available for specific trades, existing training programs which offer the same final qualifications but which are only based in schools should be discontinued.
- ✓ If the Slovakian chambers of industry and commerce are not able to carry out the duties required by the Vocational Training Act (which include advising companies offering training, monitoring in-company training, assessing the suitability of companies and trainers, registering apprenticeship contracts, carrying out the final examinations), it will be important to start developing and establishing alternative structures early on.
- ✓ It is important to involve representatives from the respective economic organizations and from the unions (social partners) when drawing up the training regulations for different trades. Representatives from the Slovakian Ministry of Economic Affairs should also be involved to ensure that economic and technological concerns are also taken into account.

4.2.1.5.3. Feasibility study of BIBB within Pilot project: Introduction of dual training structures on the example of a cooperative training in small urban areas in cooperation with international / German companies, central / regional administrations and colleges in Slovakia.

Starting point

- Introduction of the dual vocational education into the current school based VET by reforming the national VET act
- Among other points the aim of the reform is to introduce a 4-year vocational education with practical contents up to 60% and with two leaving-certificates ("Abitur" and recognized vocational qualification)
- At the time of the feasibility study the draft of the new VET act has been in the discussion phase!!!

Aim of the feasibility study

- Development of recommendations for action to conduct the pilot project in Nove Mesto v ad Vahom

Selected results of the feasibility study

- School curricula: is mainly autonomously developed by the schools; involvement of companies would be appreciated
- Practical qualification at vocational schools: schools complain that companies lack of interest to offer in-company trainings as part of the vocational education; technical equipment and teaching methods in schools are not "up-to-date"

- Assessment of the share of the practical qualification according to the new VET act: at least 50% of theory needed, to achieve the "Abitur" certificate
- Financing VET: financial support of companies would be appreciated; general willingness of companies to financially participate at VET
- Start of the practical qualification at earliest in the 2nd year of education, so in the 1st year theoretical basics can be taught
- Obstacles in introducing dual VET: especially image of the VET leaving-certificate; offer of incompany trainings difficult for small companies, because of unstable order situation and staff shortage

Summary of the current status

- The new VET act, that became law in April 2015 already considers most points, which were identified as obstacles in the feasibility study
- Companies should be more involved when developing curricula for incompany trainings
- It is recommended to develop a step by step plan to modernize the technical equipment at the schools
- Next to pedagogical qualifications of incompany trainers, practical qualifications of school teachers are necessary

Expectations for the future

- The Slovakian-German pilot project in Nove Mesto vad Vahom decisively supports the VET reform
- Intensifying the DSIHK campaign "fit4future" can improve the image of VET
- Accompanying supporting measures with focus on small enterprises would be useful for the pilot project

Possible measures

- Development and implementation of structured vocational orientation
- Qualification of training consultants
- Development and implementation of analysis of incompany training potentials in small companies
- Development of practical qualifications of teachers in selected professions
- Definition and testing of procedures in order to standardize the development of practical qualifications with social partners.

4.2.2.. Slovak VET pilot schemes and pilot apprenticeships

4.2.2.1. National projects in Slovakia for supporting VET system in 2013 - 2015

There are currently 3 national projects, which are aiming to improve the quality of VET system; State Institute of Vocational Education is responsible for their implementation.

- **Development of vocational secondary education in VET schools**

The strategic goal of the national project is to improve the quality of vocational education and training on secondary vocational schools in selected groups of courses. Implementation of the project addresses the issue of linking vocational education and training on secondary vocational schools with employers' needs, improving the quality and readiness of future graduates of secondary vocational schools in relation to their employability after graduation, cooperation between secondary vocational schools with trade and professional organizations, setting up a model multi-source financing and normative funding of secondary vocational schools, career guidance and professional orientation of pupils.

- **National system of qualifications**

The project is aimed at establishing a National System of Qualifications, the description of 1000 partial and full qualifications, setting the work system of sector councils, as well as to revise the National Qualification Framework. Within the implementation were developed: analysis, methodologies, four accredited training programs, the application software, upcoming portal for the public, and description of 1100 (partial and full) qualifications at different stages of development.

- **Promoting polytechnic training in primary schools**

There are two national projects supporting polytechnic training in primary schools, which aim to address the alarming situation of decision-making primary school students about their future career and career choices and the associated decision on the choice of secondary school:

- **Support for professional orientation of pupils of primary school to vocational education and training through the development of polytechnic education aimed at developing work skills and work with talents**
- **Support for polytechnic education in primary schools**

4.2.2.2. Other projects supporting VET system

- Enhanced cooperation with secondary VET school in Zlate Moravce in cooperation with 6 companies under the guidance of Austrian Chamber of Commerce,
- CVET project of Volkswagen Slovakia, to introduce dual education system,
- Project of post-secondary education in cooperation with VET school in Košice with T-Systems Slovakia,
- The cooperation with Slovak-German industry and business chamber in Nove Mesto nad Vahom,
- Danube Institute of dual education.

4.2.2.3. Project Volkswagen

- CVET project (requalification) of Volkswagen Slovakia, to introduce dual education system,
- the provision of theory and praxis is 80%:20% in favour of praxis,

- among hundreds of applications the best 24 were selected,
- the further education program is oriented for 3 education programs; mechatronics, industry mechanics and tools mechanics,
- in year 2015, according to new legislation, VW will run these programs in formal education

4.2.2.4. Examples of a Good Practice

4.2.2.4.1. Austrian Federal Economic Chamber - WKÖ

The Austrian - Slovak dual VET in the Nitra region

- Despite a high youth unemployment rate, more than 150,000 skilled worker positions will remain vacant on the Slovak labour market between 2015 and 2017, according to Slovakian official projections. In order to support Austrian companies to meet their demand for skilled workforce in Slovakia, the Austrian Federal Economic Chamber, financially supported by the go-international initiative of the Austrian Federal Ministry of Science, Research and Economy **established elements of dual VET in the Region of Nitra.**
- This **pilot project** entitled "**Young Stars**" is scientifically supported by the research institute "ibw Austria - Research & Development in VET" and implemented in cooperation with 4 Austrian, 2 Slovakian and 2 German companies as well Slovakian authorities, in particular the Slovak Ministry of Education, Science, Research and Sport, and Slovakian employer associations.
- After more than two years of close cooperation between all partners involved and hard work on several implementation steps, the consortium succeeded in establishing suitable framework conditions for apprenticeship training: **beginning September 2014, 33 apprentices started their training in two pilot school classes**, where the **job profiles "metalworker"** and "**mechatronic**" are imparted!
- Although draft legislation intended to amend the existing legal framework for VET in Slovakia by introducing elements of dual VET on the systemic level is currently under way, the **consortium was successful in providing for crucial elements of dual VET** already under the existing legal regime:
 - By foreseeing an arrangement in which 60% of the apprenticeship training is practical in-company training, the **company becomes a training place** for the first time. Theoretical learning amounting to 40% takes place at the VET school in Zlate Moravce.
 - The **curricula** for both job profiles were adapted according to both, **businesses' needs** and the requirements of the VET school. This ensures a practiceoriented training that imparts labour-market relevant competences.
 - The successful implementation of contracts between companies-school and companies-students as well as the introduction of motivation

scholarships financed by companies represents a **first important step from a student to an apprentice-status in terms of training relationship!** Graduates of the apprenticeship pilot programme receive a Slovakian school-leaving-certificate as well as an indenture.

- On the basis of the lessons learnt from the project, **WKÖ** actively **supports the Slovak Ministry of Education in ongoing reforms on the systemic level**, in particular in the revision of the vocational training act as well as in administration of the apprenticeship system.

As in Austria, WKÖ is responsible for the governance and administration of apprenticeship training, WKÖ is particularly well placed to provide advice on the **crucial role of intermediaries and organisations of the world of work**. These institutions ensure that VET is geared towards the specific requirements of companies and the labour market!

4.2.2.4.2. Other Examples of Good Practice

- **T-Systems Slovakia and Secondary school in Košice**

Another project is organized in the ICT technologies in Kosice. The project is realized by Secondary School of Electrical Engineering in Ko.ice, in partnership with company T-Systems Slovakia from 1 September 2013 through the three-year post-secondary higher professional education in the field of study "Computer Systems", which is based on the close links between schools and firms. From 1 September 2015 are pupils educated in the vocational education training in the system of dual education.

- **The cooperation with Slovak-German industry and business chamber in Nove Mesto nad Vahom**

The flagship of the current German-Slovak cooperation between schools and businesses is a project implemented by the Secondary vocational school in Nove Mesto nad Vahom, where are from 1 September 2015 prepared twelve students in the field of "metalworker" and fourteen students in "mechatronic" in the dual education. Organization and promotion of employers who have entered into this project provides a Slovakia-German Chamber of Commerce (AHK).

- **Secondary vocational school in Michalovce and company BSH Drives and Pumps Ltd.**

Secondary vocational school in town Michalovce on the east of Slovakia has a good cooperation with company BSH Drives and Pumps Ltd. , which provides training for pupils in the field of "electrotechnic".

- **Secondary vocational school in Šurany and cooperation with company Osram, a.s.**

Pupils from Secondary vocational school in Šurany are prepared according the demands of employer in the company Osram, Nove Zamky, they run system of dual education. The school is involved in the Swiss-Slovak project supported through the Swiss-Slovak cooperation within the enlarged European Union, too.

4.2.3. Implications for the Danube Academy

Based on the results of the analysis of the Slovak legislation and the VET pilot schemes, the following conclusions for the role, function and structure of the planned Danube Academy for dual education can be drawn within the project INT-VET :

- The main aim of the Danube Academy (DA) should be education and training of VET teachers and trainers - focused on 7 professions resulting from a survey made by DSIHK: Tool Setter, Electrician, CNC/NC Operator, Machinist, Toolmaker, Mechatronics Technician, Machinery and Equipment Programmer
- The Danube Academy should involve a virtual network of competence centers and relevant training programs for VET teachers and trainers of the Danube Region countries.
- Target groups of the Danube Academy should be VET teachers and trainers.
- The Danube Academy should focus exclusively on **dual education** - the core of activities should be education and further training of VET teachers and trainers.
- The Danube Academy should be a qualification center for existing VET teachers and trainers in 7 defined professions.
- The Danube Academy should be a competence center for the 7 chosen professions providing consulting to companies and schools.
- The Danube Academy should help to prepare study programs for VET teachers and trainers of the 7 chosen professions based on the experience of BIBB, AHK and WKO.
- The Danube Academy as a center of excellence should organize networking activities for schools and companies providing VET in the 7 professions.
- An important task of the Danube Academy should be to initiate one or more pilot schools or training providers and competence centers for companies to transfer their practice all over the country or even in other countries of the Danube Region
- The Danube Academy should support the information platforms of the chambers for the 7 chosen professions
- The Danube Academy should focus on lifelong learning activities for VET teachers and trainers (to teach new applications) in order to secure the competitiveness of the companies
- The Danube Academy should organize a best practice exchange within the Danube Region ~V also through mobility actions (e.g. Erasmus+) of VET teachers and trainers.
- The Danube Academy should be - as competence center - a contact point for innovation in dual VET for the 7 professions in the Danube Region. A task should be the further development of European projects in order to secure the sustainability of the academy.

- The Danube Academy should be a central point for starting marketing and communication activities to promote dual VET in Slovakia and the Danube Region.

Summary

Vocational Education and Training (VET) has a strong tradition in Slovakia and it is one of the essential components of education here. The adoption of Act no. 61/2015 Coll. of vocational education and training, the Slovak Republic ranked among the countries which implement vocational education and training in the form of dual education. The new legislation is the result of a process of transformation of vocational education and training and operation of employers as one of the subjects of coordination of vocational education and training. Part of the review is the interpretation of relevant sections of the Act, the comparison with the German legislation, comments on the content of the law by the project partners as well as visions of the future.

One of the deciding factors in the success of introducing a dual system of education in Slovakia is long-term exposure of German and Austrian companies, especially in the automotive industry, mechanical engineering and electrical engineering as bearers of experiences with the dual education in these countries. Support for vocational education and training at European level is part of the Europe 2020 strategy. Support of vocational education and training is based on promoting the elements of the dual system of education. The European Commission calls on Member States and employers and entrepreneurs that are committed to promote quality improve the image and increase the attractiveness of vocational education and training in Europe.

In this sense, Slovak Republic already in December 2012 in Berlin declared its support for high-quality, refurbished, attractive vocational education and training, linked to labour market needs, co-responsibility of the social partners and the private sector for the quality of vocational education and training by signing a memorandum of cooperation in vocational education and training in Europe and the Memorandum of Understanding between the Austrian chamber of Commerce and the Ministry of Education, Science, research and Sport of Slovakia.

Following the above activities were underway in Slovakia several projects in cooperation with German and Austrian companies in the implementation of dual training into practice and linking vocational education and training to labour market needs. The review maps the existing pilot projects and schemes that showed how is moving Slovak VET.

As part of this project ERASMUS +, we would like to contribute to a comprehensive reform of the vocational education and training and the creation of a centre for vocational education and training in the dual training that would provide training of vocational teachers and teachers of vocational training as well as consulting for schools, employers and all who are involved in the dual system of education in technical fields.

Improving the quality of practical training with an employer can project contribute to achieving the Europe 2020 strategy and the Bruges Communiqué.

4.3. Analysis of Education and Continuous Education of VET teachers, Trainers and Instructors in Slovakia

4.3.1. Development of vocational education and training in Slovakia

The decisive change in vocational apprenticeships in Czechoslovakia was based on the nationalization of most enterprises in the period **1945 to 1951** as well as the establishment of the agricultural cooperatives. These measures led to the central management and apprenticeships for all sectors of the national economy. In 1960 the first steps were taken to establish the first facilities for the training of apprentices in the various businesses in which it coordinated general and technical-theoretical education, practical training and education outside of teaching. Since 1974 it was in addition to two to three apprenticeship training also introduced a four-year apprenticeship, which was leaving exam. A certain group of professions was intended only for training graduates.

Between the years **1978-1985** revise the teacher training schools providing primary, secondary and higher education Decree of the Ministry of Education of the Slovak Socialist Republic. 80/1977 Coll. on a uniform system of teacher training schools providing primary, secondary and higher education and other educational and educators.

The training of teachers and other staff were as follows:

- a) teacher training;
- b) further training for Heads of Cabinet of regional pedagogical institutes and district Educational centers;
- c) further training for senior staff;
- d) ongoing training for teachers and other educational staff;
- e) the ideological and political education teachers.

Teacher training had three stages:

- putting new teachers into practice.
- post-secondary or graduate school teachers,
- specialized training.

The aim of putting into practice new teachers to help new teachers to overcome initial difficulties at work and creatively apply acquired knowledge of basic training in practice. Putting teachers provide the national committees with teachers of vocational training organizations, who have been in employment, school directors and educational settings, head of vocational schools and training centers, and carried out by an induction teacher. Placing track a given school inspector.

The aim was to encourage post-secondary study ideological and political level teachers, innovate and supplement their pedagogical - psychological, methodological and technical - subject training received in high school. Online Dating teachers organize selected vocational schools in cooperation with regional educational institutions, universities and other professional and scientific institutions according to uniform curricula and syllabus approved of the Ministry. Online dating masters in vocational education and educators are organized in cooperation with the methodological centers, vocational training centers and methodical curricular and non-occupational education relevant ministries.

The aim of postgraduate studies was to encourage teachers ideological and political level teachers, upgrade, supplement, deepen and diversify their pedagogical - psychological, methodological and technical education -predmetové. Postgraduate studies were designed for teachers of schools providing primary, secondary and higher education, including teachers of vocational subjects (engineers - technicians, engineers - economists, etc.) To secondary vocational schools and training establishments who have graduated from university. Graduate school teachers organized by the faculties of universities according to uniform curricula and curriculum approved by the Ministry.

The aim of the specialized training is to ensure the further ideological and political, educational and professional development of teachers, improve their work, develop

pedagogical creativity and deepen their knowledge according to the needs of the school and individual interests, further training of teachers at different kinds of demanding teaching activities (induction teacher, head of the subject commission and methodical associations, educational consultant, instructor teaching techniques, leading activity corner, etc.). Specialised training organized regional pedagogical institutes, institutes, universities and other scientific institutions.

From 1985 to 1996 he governs continuing education of teachers Decree of the Ministry of Education of the Slovak Socialist Republic, 65/1985 Coll. the training of teachers. Further education consisted of:

- a) ideological – political education,
- b) placing novice educators in practice,
- c) post-secondary studies,
- d) postgraduate studies.
- e) specialized study,
- f) functional learning, continuing education,
- g) extension study.

Placing novice educators in practice organized by the school or school facility in cooperation with the district educational center or the Regional Pedagogical Institute, Central Institute for Teacher Education and sector education institutions.

Online contacted teaching staff organized secondary school designated Regional National Committee in collaboration with the Regional Institute for Education on with the central institution, possibly in agreement with the universities.

Postgraduate studies organized by universities in collaboration with the Central Institute or the sectoral education institutions.

Specialised training organized by Central Institute, regional pedagogical institutes, colleges, secondary schools and industry training facilities. Specialised training should leave the final interview. If the species were attending specialized study the prerequisites, it should leave the final exam.

Extension study was a special kind of study in higher education to expand educational and professional qualifications for educational activities in schools and school facilities. Extension of this trial acquires the vocational teachers in secondary schools who were university graduates of non-teaching study program and additional studies qualification to teach general subjects in primary and secondary schools.

From 1993 to 1995 it worked on the "**agenda for change in the governance**, financing and content of education and training in secondary vocational schools." The issue of vocational education and training in educational fields, respectively study programs at vocational schools at that time pay as founders:

- The Ministry of Education and Science of the Slovak Republic,
- Ministry of Economy,
- Ministry of Agriculture,
- Ministry of Transport, Communications and Public Works
- Ministry of Defence
- Slovak Association of Consumer Cooperatives
- Slovak Union of Producer Cooperatives
- Church
- Other natural or legal persons.

In terms of further training as a master training but also teachers of vocational subjects at the time, they played a significant role in organizations directly ministries (eg. Institute of Education building Bratislava, Nitra Agrionštítút ...). Within the organizational

structure of these organizations operate sectoral educational establishments or methodological training centers to carry out advisory and methodological activities for SOU. Also organize educational activities for masters in vocational training, instructors as well as teachers of vocational subjects SOU. An effective means of working with masters in vocational training are "model teaching days" and for teachers of vocational subjects' model teaching hours. "

From 1996 to 2009 he governs continuing education of teachers Decree of the Ministry of Education of the Slovak Republic no. 42/1996 Z.z. about. Continuing Education. Forms of further education have been defined as:

- a) placing novice educators in practice (hereinafter referred to as "putting into practice")
- b) preparing the senior teaching staff who belong surcharge riadenie4) (hereinafter referred to as "preparation leading educators")
- c) continuing education,
- d) specialized innovative study
- e) specialized education
- f) extension study.

Putting into practice the teaching staffs acquire the beginning of practical experience to perform the work and to adapt to the specific conditions of teaching practice. If you want to put it into practice it is organized by the school or school facility in cooperation with the Methodological Centre and the National Institute for Education, possibly with educational organizations established by central authorities.

Content of continuing education was mediation date information useful in teaching practice, deepening, development, and expansion of professional and pedagogical knowledge and skills of teaching staff are informed of changes in the concept of education and training reflected in the curriculum, curriculum, textbooks and new legislation in the field of education and new knowledge of pedagogy, psychology and didactics union. Continuous training is organized and its scope in accordance with the needs of teaching and professional practice by schools, educational facilities, methodical centers, the National Institute for Education and educational organizations of other central authorities.

Containing specialized innovative study was to prepare for the implementation of specialized teaching activities and research activities. Specialized innovation study organized methodical centers, the National Institute for Education and educational organizations of other central bodies.

Containing specialized qualification studies was to enable staffs who meets the requirements of professional and educational qualification, obtained a transitional period accorded to the teaching of the approbation of courses and instructors and vocational education with full secondary education to gain teaching skills to operate in special schools and educational facilities. Specialized education organized methodical centers, the National Institute for Education and other educational organizations of the central authorities, in cooperation with universities.

Extension of this trial acquire the vocational teachers in secondary schools who are university graduates of non-teaching field of study and supplementary pedagogical study, qualification to teach general subjects in primary and secondary schools. Extension study is a special type of study at higher education institutions to expand training and educational competence of the educational activities in schools and school facilities.

4.3.2. Information about status from 2009 till now about:

- **teaching/training force in VET , VET teachers and trainers CPD in Slovakia,**
- **practical training instructors in companies (work-based settings),**
- **the world of education and the world of work in Slovakia**

you can find on: https://cumulus.cedefop.europa.eu/files/vetelib/2016/ReferNet_SK_TT.pdf

4.3.3. Conclusions

A status of VET teachers and trainers in Slovakia is low. The 2013 OECD data confirm the strong frustration of lower secondary level teachers in Slovakia compared to other countries. Even, with only 4% of teachers believing that the teacher profession is valued in the society compared to the average of 30.9%, Slovakia ranked last among the TALIS countries. Similar results are also expected concerning VET teachers and trainers.

Despite the significant improvement in wages since the strike of pedagogical staff in 2012, the attractiveness of the teaching profession is still low.

This particularly endangers VET schools as knowledgeable specialists find better opportunities in business. It is time to rethink measures to attract people in mid-age with a relevant history in business to enter VET schools. This should not be about a competitive wage only, but predominantly about flexibility in forms of their engagement. With regard to this, also new measures aimed at provision of CPD for VET teachers and trainers are urgently needed.

Ageing of teachers in VET schools is in progress with the average age of 47.6 years in 2014 compared to 43.2 years in 2009. Similarly, the average age of trainers was 49 years in 2014 compared to 45.1 years in 2009. Ageing of teachers and trainers is significantly influenced by the extension of the retirement age, but it also signals a lack of young professionals interested in a teacher/trainer career. A share of pensioners working as teachers in VET schools is higher compared to grammar schools or lower secondary and elementary teachers.

No substantial barriers are visible in the provision of pre-service training in contrast to in-service training. Both pre-service and in-service training suffer from a lack of specialists in VET specific pedagogy/psychology.

This is harmful predominantly for inservice training. Furthermore, vocational subject teachers and trainers have comparably fewer opportunities for their subject-related CPD programmes.

Although the provision of continuing programmes for pedagogical staff is also open to non-state bodies, the market of in-service training services is still dominated by public bodies. MPC, ŠIOV and NÚCŽV, three institutions directly managed by the MŠVVŠ, have however only limited opportunities to enrich this market due to a lack of funding and specialists to cover a variety of VET fields. This is why measures to strengthen the position of professional/employers' organisations in VET have been in progress since 2009.

Since 2015, these institutions have been responsible for the provision of training for instructors of practical training in companies, and higher involvement of diverse professional/employers' organisations, in particular guilds, is envisaged towards teachers and trainers in VET schools. Lacking experience of this bodies in providing training in a systemic quality assured way is however a very serious obstacle that should be addressed in cooperation with countries where professional/employers' organisations have long-term experience in this.

Bridging the divide between the world of education and the world of work is an ultimate

challenge. Schools are permanently blamed for high unemployment of young people, but their partnership with companies is still insufficiently supported. Introduction of elements of dual VET by the 2015 Act on VET is a positive step in support of workbased learning opportunities, however, it should not be forgotten that this is not a panacea, despite high expectations of some politicians and employers' representatives.

4.4. Draft Pilot of Continuous Education of VET Teachers and Trainers in Slovakia with Involvement of Employers

4.4.1. Introduction

VET teacher and trainer professional development is one of the strategic priorities of the Riga conclusions (2015). In 2015, ReferNet partners from the EU Member States, Iceland and Norway prepared these thematic perspectives, providing excellent snapshots of the situation of teaching and training professionals who work in initial VET, both in school and work-based settings, and including apprenticeship schemes.

There are four distinct categories of VET teachers and trainers across the countries:

- teachers of general and vocational theoretical subjects in VET schools/centres;
- teachers of practical subjects in school workshops or simulated learning environments;
- apprentice tutors (mentors) in companies;
- practical training instructors who accompany students during work-based learning parts of school-based programmes, taking place in companies.

The reports describe how the countries support initial and continuing professional development (CDP) of teachers and trainers, how they organise cooperation and partnerships between the worlds of education and of work, and national and EU-funded projects on the theme. They also address country-specific challenges, such as introduction of apprenticeship in the country, ageing teaching force, lack of teachers, and need for competences to deal with emerging issues or new requirements. **Country reports were published in 2016 in a uniform format Cedefop at:**

www.cedefop.europa.eu/en/publications-and-resources/country-reports/teachers-and-trainers

Evaluation of the current document the current state of education of teachers in vocational education is a **"Report on the implementation of quality in vocational education and training in response to the recommendation of the European reference framework for quality assurance in VET EQAVET."** The report comes at a time when Slovakia has made significant progress in the process of transformation of vocational education and training at secondary vocational schools (hereinafter "GMP"). The report noted the cyclical indicators EQAVET quality assurance and general description as set EQAVET Recommendation. One of the criteria as well as investments in education teaching staff, which is assessed at:

- a. the proportion of teaching staff participating in training activities;
- b. the level of investment.

For evaluating and assessing the fulfillment of this criterion in the Slovak Republic report assesses:

- a) share of teachers participating in further training;
- b) the amount of funds spent on this training.

The conclusions of the indicator reads: **"weaker points in quality assurance in the Slovak Republic are teachers, which offer continuing education programs for teachers of**

vocational subjects and teachers of vocational training is very weak. A just salary of teachers of vocational subjects and teachers of vocational training does not create sufficient incentives for professionals from practice to go teach at secondary vocational school ". Unfortunately the report's conclusions contain a specific task or recommendations for education teaching staff in VET systems. The experience from the time when the act or sectoral training facilities. Methodological Centre for Vocational Training, however, could be helpful in addressing this deficiency.

Another document, which highlights the need for changes in the continuing education of teachers in vocational education, is a "**Report on the vocational education and training in Slovakia**", which was presented in February 2016. It was made by the years 2014 to 2015 **OECD experts** who have dealt with the system vocational education and training at secondary schools in Slovakia. The report assessed positively the high percentage of pupils enrolled in secondary vocational education of the total number of high school students in which we are among the top five countries in the OECD. The material on the other hand, notes that Slovakia is in education in enterprise environments minority of pupils, but these are already beginning to change after the introduction of the dual system of education. Underdeveloped in our country higher vocational education that OECD should pay more attention. **The weakness of our system is** the lack of information on graduates and their further professional application, as well as **insufficient practical experience in vocational teachers and masters in vocational education and limited opportunities to get them in the real environment**. The reports are available on the website:

www.oecd.org/education/oecd-reviews-of-school-resources-slovak-republic-2015-9789264247567-en.htm

www.oecd.org/education/a-skills-beyond-school-review-of-the-slovak-republic-9789264233348-en.htm

4.4.2. Analysis and position of VET teachers, trainers and instructors in Slovakia

a) The current legislative - VET teachers, trainers

Operating conditions for **teachers of vocational subjects and conditions of vocational teacher training and operating conditions of vocational training and preparation conditions of vocational education** is governed by Act no. 317/2009 Coll. of 24 June 2009 on the teaching staff and specialists and on amendments to certain laws.

To qualify for educational activities and to pursue professional activities is to acquire professional competence by completing the program of study or training program in the field of study required providing the **required level of education. The required level of education for teachers is at least a master's degree.**

A teacher who was educated completing the study program or educational program other than the desired field of study of the performance of educational activities complement the qualification requirements for the category and sub-category teaching staff getting an education in pedagogy, psychology and didactics subjects or didactic training (hereinafter as "pedagogical competence").

Education to supplement the educational qualification of teaching staff with a university education is provided by universities in supplementary pedagogical study.

The required level of education for teachers of vocational training is a university first degree and apprenticeship in the relevant field of study or a related course of study or complete secondary education and apprenticeship in the relevant field of study or a related course of study; in those fields in which apprenticeship is not exercised, the achievement of the required level of education and secondary vocational education in the relevant field of study or related fields and complement skills acquired education in pedagogy, psychology and didactics subjects or didactic training (the "pedagogical competence").

Education to supplement the educational qualification of teaching staff with secondary education completed by the higher and technical education ending with graduation exam provides vocational schools to the extent provided relevant training programs qualifying post-secondary studies.

Preparation of VET teachers

Professional competence of vocational teachers receives university studies at the respective universities (for technical vocational training at technical universities). Acquire teaching skills in the context of supplementary pedagogical study.

As an example of some universities we offer:

Department of Technical Education at Slovak Technical University in Bratislava provides an additional study on the basis of accreditation granted MŠVVaŠ SR on 12. 9. 2014 on the performance of educational activities teaching vocational subjects:

- engineering and material and technological subjects.
- Chemical Technology and food items,
- construction and architectural items.
- Electrical and IT subjects

Faculty of Comenius University in Bratislava offers the following types of supplementary pedagogical study:

- Education to complete the qualifications for obtaining teaching skills for graduates in the fields of musical instruments and singing. The study is designed for graduates of non-teaching university studies II. degree in musical instruments and singing.
- Education to complete the qualifications for obtaining educational qualification of teachers for pedagogical and social academies. The study is designed for graduates of non-teaching a Master courses in social work.

Slovak University of Agriculture in Nitra currently has the following accredited programs DPŠ graduate engineering curricula valid until 31. 12. 2019

- the teaching carried teacher professional economic subjects
- the teaching carried teacher professional technical subjects
- the teaching carried teacher professional food items
- the teaching carried teacher professional agricultural items

The training staff provides the methodological and pedagogical center, which is in accordance with § 14 para. 2 font. c) of Act no. 596/2003 Coll. on state administration in education and school self-government and on amending and supplementing certain acts as amended budget organization established MŠVVaŠ SR. MPC activity is focused on methodological guidance and continuing education of teachers and non-teaching staff. In this context, MPC provides the following activities:

- organizes and carries out continuous education of teaching and non-teaching staff of schools and school facilities
- provides professional and methodological activities in the field of continuing education teachers and other employees.

Preparation of trainers

They currently offer training programs for teachers of vocational training colleges and training institutes. Examples include:

Faculty of Comenius University in Bratislava offers the following types of supplementary pedagogical study:

- Education to complete the qualifications for obtaining teaching skills for teachers of vocational training. The study is designed for graduates I or II. degree of university study.

Faculty of Natural Sciences of Matej Bel offers the following types of study:

- Bachelor's full-time and part-time study teaching practical training. The study is designed for graduates of secondary vocational schools. The study plan includes compulsory, elective and optional subjects that are focused on vocational schools not only in the technical field. It is about student knowledge of the problems of pedagogical-psychological disciplines and didactics of vocational subjects and vocational training. As part of optional courses, the student has the opportunity to focus on those areas that are closest to him professionally and which correspond to its secondary vocational education (specialist). Successful completion of bachelor thesis defense and state examination of pedagogy, psychology and selected parts of didactic training and vocational subjects and graduate a bachelor's degree (Bc.). On the basis of educational attainment can work as a master of vocational training on the type Sos.

- Postgraduate part-time study Teaching technical vocational subjects. The study is designed for graduates SP Teaching practical training. The study plan includes compulsory, elective and optional subjects that are focused on vocational schools in the technical field. In the context of compulsory and compulsory optional subjects, the student has the opportunity to focus on those areas that are closest to him professionally and which correspond to its secondary vocational education (specialist). The master study is the attention given to selected areas - materials and technologies of metals, non-metals and wood, electrical, machinery and equipment. Successful completion of the thesis defense, the state examination at least one selected special subjects and didactics of vocational subjects, graduate obtained a master's degree (Mgr.). On the basis of educational attainment can graduate to work as a master of vocational training, respectively after meeting other criteria, as well as a teacher of vocational subjects in secondary vocational schools.

Dubnica Technology Institute in Dubnica offers teaching staff the opportunity to supplement your teaching skills for teaching in schools and educational establishments (adding qualifications) undergoing supplementary pedagogical study for masters in vocational training.

b) Instructor

The instructor operates from **April 1, 2015 in vocational education and training, that person** does not belong to teaching staff, **but operates in the preparation of students as part of practical training with an employer.**

The in-company trainer is a natural person under whose guidance the pupil pursues practical education and training at the employer's workplace or the workplace of practical training, provided that the in-company trainer

a) has a contractual employment relation with the employer or is the actual employer acting as a self-employed person,

b) has acquired at least the level of

1. secondary vocational education in the particular training branch or related training branch to that in which the pupil is trained,
2. complete secondary vocational education in the particular study branch or related study branch to that in which the pupil is trained, or

3. higher vocational education in the particular study branch or the related study branch to that in which the pupil is trained,

c) has practised the occupation or the professional activities for the minimum of 3 years within the extent of the educational standards prescribed for the relevant study branch or within the extent of the educational standards for the relevant training branch within which the pupil is trained,

d) holds a certificate or another proof of professional licence, if such professional licence is required, and

e) **has a certificate of completion of the in-company trainer training issued by the relevant professional/employer`s organisation focused on**

1. safeguarding the pupil's rights and duties in the course of practical training,

2. the organisation of practical training,

3. the measures of health and safety at work during practical training,

4. the educational standards for practical training in the particular study branch or the particular training branch,

5. the frame teaching plan for the particular study branch or the frame teaching plan for the particular training branch, and the frame syllabi for vocational training, vocational practise and art practise in the particular study branch or the the frame syllabi for vocational training, vocational practise and art practise in the particular training branch, if the in-company trainer gives instructions at the workplace of practical training, and

6. the scope of the in-company trainer's participation in the pupil's assessment and classification.

(2) A natural person acting as an in-company trainer for the first time without meeting the condition set in paragraph 1 e), must satisfy this condition within one year of the commencement of his/her activities connected to practical training of pupils.

Preparation of Instructors

The success of the introduction of the dual education system stands or falls on the preparedness of companies to cope with the task of training young people for their future careers. Key role in the process will play instructors and their professional preparedness. Who wants to educate young people, he needs a solid teaching skills.

Training and certificate on completion of training is within the scope of the professional or professional organizations that in addition to the legally stipulated requirements to adapt their conditions and needs.

As an example of how to approach education instructors may also serve experience of the instructors for the company in collaboration with WKO or SNOBK.

In Germany, within the framework of the instructors working for years been run and practice-tested concept of "Ausbildung der Ausbilder" (ADA), which provides uniform qualification standards according to the German Decree on eligibility trainers (AEVO). The demand for this concept by German companies abroad gave rise worldwide operational training facilities adapted to their local conditions "Ausbildung der Ausbilder International".

Under license from DIHK Bildungs SNOBK GmbH offers from 2015 companies in Slovakia this training course, adapted to Slovak conditions. The aim of the training is to provide basic labor pedagogical competencies. Future instructors will receive an overview of the legislative and legal basis of the instructor. To know the process of learning to plan properly, they need an overview of how the school system works. The key is knowledge and competence in pedagogy and didactics, preparation of curricula, pupil assessment.

Training is completed by a written test and a practical test where the future instructor

demonstrates the acquired teaching skills. Graduates receive bilateral training certificate entitling to perform work under the Slovak instructor, as well as the German criteria. ADA International Training instructors are offering the quality and comparability at international level.

4.4.3. Continuing education in Slovakia

Continuing education as part of lifelong learning is an ongoing process of acquiring knowledge, skills and competences with a view to maintaining, restoring, improving, expanding and updating of professional competencies of teaching staff and specialists needed to conduct educational activities and to pursue professional activities.

The provider can be:

- a) school or school facility under a special regulation
- b) College,
- c) an organization established by the Ministry or to ensure the fulfillment of tasks in the field of continuing education.
- d) educational organization of another central state administration body under a special regulation,
- e) church or religious society or other legal entity that is the subject of learning activities.

Types of continuing education are:

- a) adaptation training,
- b) update training,
- c) educational innovation,
- d) specialized education
- e) action learning

The training staff provide methodological and pedagogical center, which is in accordance with § 14 para. 2 font. c) of Act no. 596/2003 Coll. on state administration in education and school self-government and on amending and supplementing certain acts as amended budget organization established MŠVVaŠ SR. MPC activity is focused on methodological guidance and continuing education of teachers and non-teaching staff. In this context, MPC provides the following activities:

- organizes and carries out continuous education of teaching and non-teaching staff of schools and school facilities
- provides professional and methodological activities in the field of continuing education teachers and other employees.

Methodological and Pedagogical Centre (MPC) adoption of Act No. 317/2009 Z.z. can provide practical training teachers in collaboration with college education to complete qualifications in the field of education, psychology and methodology of training. The project "Modern education for knowledge-based policy" develops a methodological and pedagogical center program of continuous education - qualification courses for teachers of vocational training to obtain a teaching qualification.

As a supplement to the MPC, the **State Institute of Vocational Education** is also authorized to provide continuing education for teachers of vocational subjects and masters, but due to lack of resources, can provide only vocational training ESF projects.

4.4.4. SWOT analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> • the legislation governing the assumptions, the conditions of training and further training of teaching staff • teaching staff interested in lifelong learning • the experience of sectoral activities or educational facilities, methodological training centers in the years 1985-1996 	<ul style="list-style-type: none"> • Lack of opportunities for skills upgrading in various fields of education, • insufficient links between the education and further training of teaching staff with employers, • inappropriate setting of credit system.
Opportunities	Threats
<ul style="list-style-type: none"> • Cooperation of institutions providing education and long life education for VET teachers and secondary vocational school trainers with employers. • Professionalization of employers structures in relation to the performance of tasks in the system of vocational education and training. 	<ul style="list-style-type: none"> • Isolation of the education system to labor market needs. • Financial security of Employers structures (membership optional)

Summary

Slovakia has a relatively well elaborated system of professional training for teachers and trainers of vocational training. The problems are educational activities ensuring greater expertise in relation to the field of education or vocational subjects of theoretical instruction and training. Such educational activities not offered accredited educational institutions and those offered by employers as part of their workers does not reflect the credit system.

The problem can also be considered excessive emphasis on educational attainment. This requirement is a serious problem, especially in the Champions training. It is worth attention Austrian model where, in the context of educational attainment is a possible career path without requiring an increase in the level of education and completion of a master test can be achieved qualifications suitable for the performance of the master training. Thus achieved qualification level corresponds to a degree that reaches undergraduate level.

Currently, there are no systemic security solutions raising the skills of teachers and trainers of vocational training.

For instructors, the process of their education is set by means of employers ensure that the conditions for their training.

4.4.5. The experience of the CPD of VET teachers, trainers and instructors abroad

The vocational education and training in EU countries is not uniform and therefore vary the operating conditions for teaching specialized subjects, practical training teachers and instructors, and not their existence and inclusion in the structure of education in this sense as they know the law and school system Slovakia Republic. Here are two examples of countries that have inspired to create the conditions and legislative amendments to implement a dual system of education in vocational education and training in Slovakia.

Austria

Conclusions for the company-based VET sector in Austria

Although the overwhelming part of apprenticeship training is held in companies and IVET trainers need to take on the role of trainers, mentors, educators and superiors towards their apprentices, the legal requirements for basic qualifications are very low and no requirements are made on their CET.

Two reasons are mentioned for this situation: on the one hand, because the task of IVET trainer should be as easily accessible as possible and open to as many people as possible, on the other hand, because apprenticeship training is most often provided by IVET trainers in addition to their activity as skilled workers. This means for company-based training, much more so than for school-based training, that the level of professionalisation, especially regarding the pedagogical element, is fairly low.

Apprenticeship training is considered a selforganising process, the quality of training is seen as being sufficiently ensured by the given standards (declaration, job profile, activity description), by the training companies' own interests in well-qualified staff, and by apprenticeship-leave exams. It is true that Austrian apprentices frequently achieve good results in international competitions. But there are also indications of problems connected with quality such as failed apprenticeship-leave exams, non-appearance at the exam (despite the fact that the training period was completed) and apprenticeship graduates who have difficulties becoming established on the labour market (cf. Lassnigg/Laimer 2013, Dornmayr/Löffler 2014).

More information on:

https://cumulus.cedefop.europa.eu/files/vetelib/2016/ReferNet_AT_TT.pdf

Germany

Trainers in companies and teachers at vocational schools are the backbone of VET in Germany. They work in partnership at the interface between the educational sector and the labour market and assume joint responsibility in training tomorrow's skilled professionals. They are thus a key factor in the quality and attractiveness of VET. The standards set for the initial and further training of trainers and for the university education of vocational school teachers are essential elements of quality assurance. The possible fields of activity of the training staff have significantly expanded and become more attractive due to the close interlinking of IVET and CVET.

Diverse paths of professional development are established by opportunities for specialisation and the possibility of university access with all its offers. Not only subject-specific aspects of the respective occupation but also pedagogical aspects must be learned and put into practice by

the training personnel. Trainers and teachers are therefore not just imparters of knowledge in a professional and vocational perspective and with an educational policy assignment but also act as general educators. They accompany the young people on their path into a profession and pave the way to a self-determined life as an empowered and mature citizen.

The demands on the training staff, however, are constantly changing, for example due to the media habits or the changing expectations of the young people and society as a whole. Teaching and learning methods must be adapted to meet these challenges. It is no longer possible for trainers or teachers to just stick to the knowledge once acquired. Instead it becomes an individual process of lifelong learning that starts with the decision to participate in the training of young people.

More information:

https://cumulus.cedefop.europa.eu/files/vetelib/2016/ReferNet_DE_TT.pdf

4.4.6. Draft Pilot of Continuous Education of VET teachers and trainers with involvement of employers in Slovakia

Based on the analysis of the current state of the Slovak Republic, comparison of the conditions for further education of VET teachers in the EU, but mainly based on the comments that were raised during the discussions on this subject of the meetings of the Ministry of Education, Science, Research and Sport of the Slovak Republic and representatives of secondary vocational schools founders, district offices at the county, directors of secondary vocational schools involved in the system of dual education and employers' representatives, which took place from September to December 2016 and based on documentation of VET coordination bodies, other operators and stakeholders, was created the following draft of further education of pedagogical staff with the involvement of employers.

Continuing education provided by employers will share the educational programs and internships. Content of training programs and internships will be able to create the employer to the demands of the labor market will focus primarily on obtaining information about innovations in production processes, new educational media and new methods of vocational education and training. Their main objective is to upgrade and update the expertise of pedagogical staff.

When designing training programs for staff will be the starting model curricula and model curricula discussed by the Council for Vocational Education and Training and approved MŠVVaŠ SR in addition to the SEP. Specifically, the content focus will result from the proposals of employers and the needs of the teaching staff. Part of each training activity will be practical demonstrations through a learning hours or model "Sample learning day".

The flexibility of the system would be preferable if training programs and internships are not accredited, but this should now faced resistance from teaching staff who require accredited training programs from which to obtain credit and the subsequent increase in salary. The credit system does not create conditions for raising the level of education of teachers it would be appropriate to find another way to upgrade and update the professional skills of the teaching staff and also to provide them with career and salary advancement.

At the beginning of the transformation of continuous education of pedagogical staff (PS) to be resolved as follows:

1. untie the continuing education of the only accredited training programs,
2. create a new accreditation / certification committee composed of 31 experts from professional and professional organizations representing groups of vocational training (Professional organisations)
3. define precisely the conditions, criteria for allocating credits / benefits for the successful completion of education and in non-accredited provider of continuing education,
4. plan for Education PS particularly useful for obtaining specific skills
5. enshrine in legislation the **possibility for employers** to some aspects of further education:
 - through training programs
 - through internships
 - developing training programs for PS
 - creating internships for PS
 - acting as a guarantor of educational programs and internships
 - acting as an assessor in the accreditation / certification commission PS
 - acting as teacher training
 - financing education or part,
6. enshrine in legislation **the employer's obligation in dual education** to provide a certain part of further education:
 - through training programs
 - through internships
 - developing training programs for PS
 - creating internships for PS
 - acting as a guarantor of educational programs and internships
 - acting as an assessor in the accreditation / certification commission PS
 - acting as teacher training
 - financing education or part,
7. to define in legislative for teachers conditions of further education at the employer:
 - determine what type of training programs and internships PZ what can and must complete
 - determination of the frequency options or obligations graduation education
 - time limits space for further education
 - determine the number of days, weeks or months learning
 - granting credits or other benefits for women's learning needs
 - demonstrate the foreground / skills practical demonstration
8. to define in legislative conditions of further education for schools:
 - incorporated into further education and internships to contract of dual education
 - give the headteacher legal instruments to maintain a teacher at school for example make participation in further education teaching responsibilities remain a certain period at the school, respectively. when leave school to reimburse the cost of this training
 - The Director of the SOS allow the order to be accepted as teachers of vocational subjects and nepedagógov in the interim period until a sufficient amount of PZ trained by employers

4.4.7. The way of implementation to existing structures of VET

Although the provision of continuing education programs for teaching staff is also open to non-governmental organizations in the market of educational services is still dominated by **public organizations MPC ŠIOV and NÚCŽV, the three institutions directly controlled MŠVVŠ which have only limited opportunities to enrich the market due to lack of funds and specialists cover various fields of vocational training.**

In view of this, the basis for proposals training staff become knowledge from Germany, where this activity is provided by the Academy of further education and experience in preparing teaching staff of vocational education in Slovakia from 1993 to 1995.

In the Slovak Republic we consider as an usefulness to use existing networks of **centers of vocational education and training (CVET).**

Implementation into existing centers of vocational education and training (CVET) and change them to LifeLongLearning centers would really help.

CVETs are based on existing secondary vocational school, which had been chosen by Professional organisations, selfgovernment regions and employers because of its uniqueness. There are more than 40 functional CVETs in Slovakia which concentrate professional education and training for various industry sectors, not all of them are on the same quality level. It will be necessary to diferenciate between them and find the best. We could ensure that CVET in the future will be able to respond flexibly to the needs of the labour market in the context of lifelong learning. This is the main motive of optimizing secondary schools in each autonomous region of Slovakia.

Lifelong learning has a high priority in Slovakia these days, as well as in European Union, so to start the process we need to analyse the form and extent of the full involvement of secondary vocational education in the LLL system by CVET.It will help that schools could work together more effectively with employers to support the restoration project on vocational education and training and focus the learning process in different fields to CVET.During the transition process vocational school should be the bearer of vocational education and training according to labour market needs and not just formal but also informal education.

There are another educational centres for example employer training centers and training departments, which carry on further education these days and can act as supportive educational centres.

Secondary vocational schools currently have unused capacity. Employees complain of low salaries and therefore seek other sources of income outside of school. Use of existing CVET as well as lifelong learning centers and the creation of on the basis of the needs of employers, would be an excellent opportunity for some vocational schools to recoup their lost credit and for other would finally create a competitive environment that lifted their quality.

These centres meet their technology with the latest requirements of employers, because they were created based on their needs. The quality of education would be increased by the fact that the educational staff who would be involved in teaching pupils in full-time study followed the teaching unemployed people would collect feedback on what is really essential to the practice.

CVET could become the next period of qualifying centres which could take place qualifying exam to obtain certification in accordance with the standards.

The next **important step is the establishment of institution that ensure the involvement of employers in the whole educational process.**

After the experience of EU countries, **it should be a state-funded, directly managed organization of the Ministry of Education, Science, Research and Sport of the Slovak Republic focused** on supporting vocational education and training / education in the dual system of VET.

In the event that it would be financially and staffing support for **ŠIOV – State institute of vocational education, could have becomeThe Danube Academy, which will be able to carry out further training of VET teacher and trainers.**

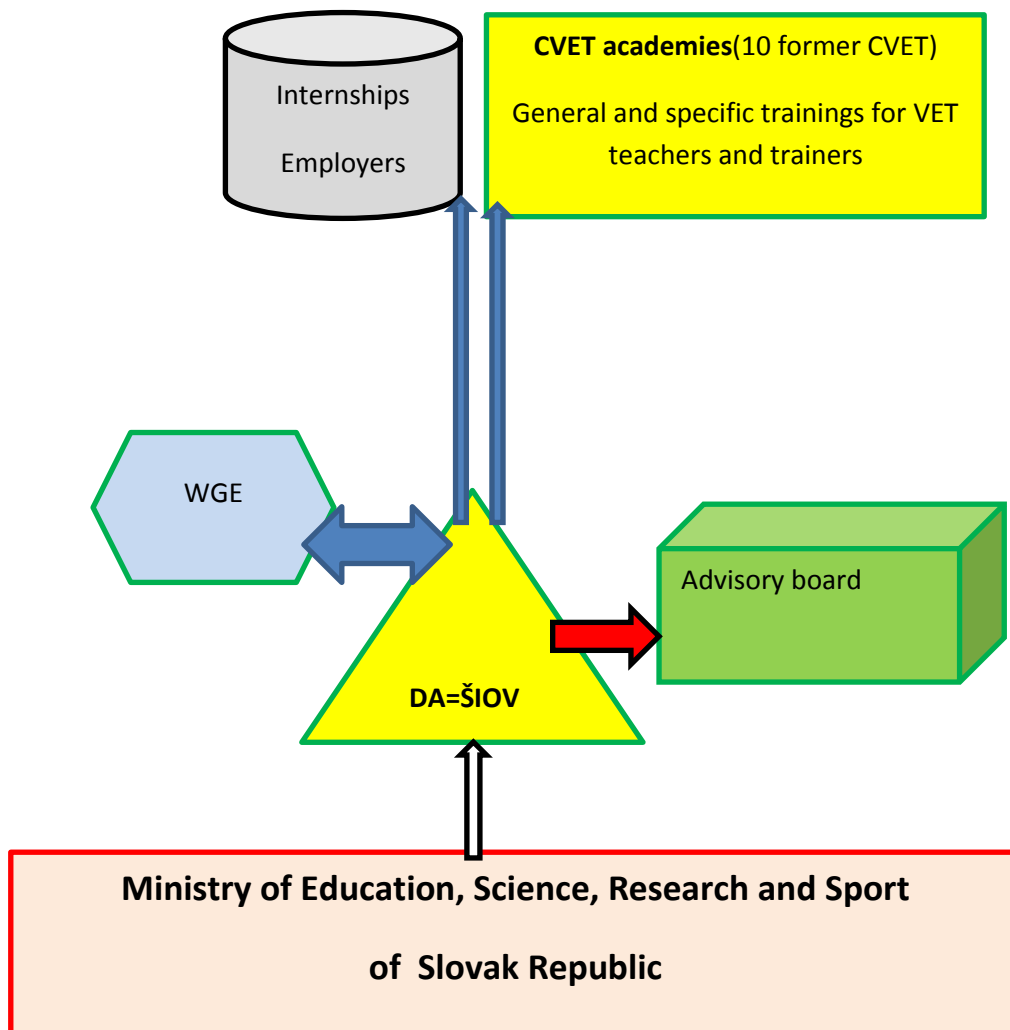
If do not, we need to create a new organization (**Danube Academy** for further education) whose functions within Slovakia **will be to carry out further training of VET teachers and trainers of vocational training.**

DA - Danube Academy

It is a state-funded, directly managed organization of the Ministry of Education, Science, Research and Sport of the Slovak Republic focused on supporting vocational education and training / education in the dual system of VET. Its operation is based on close cooperation with professional and occupational organizations, secondary vocational schools, employers and other stakeholders who are interested in developing further training of target groups through formal and informal education.

1. Target groups: VET teachers and trainers

2. Structure:



- **Ministry of Education, Science, Research and Sport of the Slovak Republic** manages and finances the organization and has supervision on the content of continuing education.
- **WGE - Working group of experts** is composed of 31 experts from employer organizations representing the fields of studies (Unions and Associations who are responsible for content of further education (courses, programs, internships) according to the needs of employers, universities and teachers.
- **Advisory Board** is responsible for strategy of further education and is made up of representatives from different ministries, chambers and associations.
- **CVET Academies - Centers of Vocational Education and Training** are former CVET(secondary vocational schools) to be determined by employer organizations the best ones (in terms of quality, equipment, supplies in the region,) can also be two of the same fields of studies, but in the future be reckoned with only one in Slovakia with a view to specialization of schools. They

are the places where the further education will be provided for target groups.

- **ŠIOV – State institute of vocational education** provides consulting services in the field of further education of target groups following content of state curricula for students on secondary vocational schools.

3. Its main tasks are:

- provide the further education for VET teachers and trainers of vocational training,
- create a database of educational programs and internships,
- create a database of three groups of lecturer: experts from secondary vocational schools (teachers, masters, instructors), experts in the field of science and research (experts from universities), experts from industry, agriculture, trade and services (from companies, organizations, self-employed),
- manage COVET Academies in Slovakia,
- act as a first contact institution of communication and marketing in the Danube region in Slovakia in VET / system of dual education,
- organize exchanges of good practice in VET / system of dual education in the Danube region,
- develop VET with maximum support of system of dual education,
- create strategy for promoting the VET / system of dual education nationwide,
- be a consultative center for employers in VET / system of dual education,
- be the competence center for VET / system of dual education for students, parents, primary schools, secondary schools,
- cooperate in VET / system of dual education with universities.

4. Its other tasks include:

- in cooperation with ŠIOV, professional and occupational organizations, secondary vocational schools, employers and other stakeholders, to create courses, internship programs and continuing education of VET teachers and trainers of vocational training,
- create a database of courses, programs and internships,
- create a database of trainers,
- inform the target groups about education,
- provide free education to target groups except for internships to be paid by the employer,
- encourage lifelong learning activities by target groups

Conclusion

Implementation of dual education in vocational education and training joined in 2016 to the second school year of its existence, in which all interested stakeholders in Slovakia and also the structure of VET in the European Union expect that the planned changes in our school system will move forward, and therefore **Ministry of Education, Science, Research and Sport of the Slovak Republic in response to European documents, Agenda 2030** and the current program of the government with regard to the involvement of employers in training of VET teachers and trainers **plans in 2017:**

- **meetings with the Ministry of Economy and the Ministry of Finance for the creation the Danube Academy as a center of further education for VET teachers and trainers at the State Institute of Vocational Education,**
- **negotiate proposals in relation to the involvement of employers in further training of VET teachers and trainers,**
- **arrange legislative conditions for the establishment of a new accreditation center,**
- **find out level of changes needed for transformation of some CVET to the real centers of further education for VET teachers and trainers.**