

VET experiences of the Polish-German-Portuguese partnership on adapting VET to the needs of the labour market and how to make it more attractive.

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Project partnership



- ✓ Academic Secondary School in Lomza, Poland leader.
- ✓ FAV Service gGmbH, Germany.
- ✓ EduPlus European Centre for Education and Skills Development, Lda, Portugal.

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### Introduction

The 'VET in partnership' project was implemented by the partnership of Akademicka Szkoła Ponadpodstawowa in Łomża, Poland (leader), FAV Service gGmbH, Germany, EduPlus - European Centre for Education and Skills Development, Lda, Portugal (partners). The partnership is formed by organisations working in vocational education and the labour market. The common area is acquiring, training and preparing qualified employees for the expected professions. In this respect, attracting willing people to formal VET education is essential. A critical moment is students' transition from primary education (ISCED 1 and 2) to secondary education ISCED 3 and 4.

Input problems identified by partners in the context of the statutory action and the need for cooperation:

- the phenomenon of misguided choices in terms of vocational training and future careers in the labour market,
- low attractiveness of vocational training and decreasing number of students opting for vocational training,
- the presence on the labour market of young people whose education does not correspond to the needs of the labour market.

The partnership has identified priority areas in the area of VET:

- adapting vocational education and training to the needs of the labour market,
- contributing to innovation in vocational education and training,
- increasing the flexibility of opportunities in the VET sector, most relevant and in line with the project objectives.

The most relevant topics addressed by the project are:

- social responsibility of educational institutions,
- cooperation between educational institutions and business
   In embarking on the project collaboration, its objectives were set:
- the creation of a targeted cooperation network providing a forum for the exchange of experience and innovative practices on



- adapting vocational education and training to the needs of the labour market,
- learning about ways to make vocational training more attractive,
- mutual learning on cross-sectoral cooperation, increasing the link between the learning phase and the
- employment,
- exchange of information and experience on the scale of the problems mentioned above,
- incorporate the solutions learned into everyday practice.

The target groups of the project are:

#### For ASP:

- management staff responsible for the implementation of the curriculum, the creation of cooperation with the socio-economic environment, the creation of a strategic basis for the development of the school's attractiveness in the education market, the development of educational offers and the personal and social development of students, the creation of a European dimension in vocational training. They will be the school headmaster, deputy headmaster and a specialist in project management, including international projects. In order to fulfil the tasks mentioned above, this group needs to build up and develop network cooperation in order to exchange experiences and innovative practices in the field of adapting vocational education and training to the needs of the labour market, and learning how to make vocational education more attractive.
- students, as recipients of the good practices learned, new solutions and the school's adopted practice, expect to be offered the European dimension of the ASP as a condition for obtaining employment and professional development,
- teaching staff as recipients of the good practices learnt, new solutions adopted and adopted into school practice. This target group, due to its peripheral location, does not have access to European practices, and the project activities will bring them closer to sustainable cooperation,

#### For FAV:

 the organisation's management, the managing director responsible for the implementation of statutory tasks and projects, and experts on developing the quality of vocational training, increasing the attractiveness of vocational training as a first choice. Getting to know



vocational training and labour market conditions are essential for implementing the statutory tasks.

- entrepreneurs providing dual vocational training. As providers of dual training, they are interested in attracting students and skilled workers.
- young people with insufficient vocational training. Various solutions, which also consider social and cultural factors, increase the possibility of professional and social adaptation.

#### For EduPlus:

- organisational managers are responsible for cooperation in preparing practical vocational training programmes (internships, apprenticeships, training, in various forms) and their implementation. They need to learn about good practices of vocational training solutions in different countries as a prerequisite for the organisation of practical vocational education and to train consistent with basic vocational education or work.
- local entrepreneurs are waiting for skilled workers,
- young people needing a vocational orientation relevant to the labour market. This group needs an original approach that can overcome their temporary passivity or low activity in the labour market.



#### 1. Characteristic of partners

1.1. ASP - leader (PL)



Academic Secondary School in Lomza is part of the Academic Schools Complex, established in 2009. The main activity is vocational education within the faculties:

- IT technician,
- electrical engineering,
- technical school of food technology.

There are currently 208 students in the IT technical school, including the IT and uniform profile. It implements the core curriculum and applies the rules of assessment and promotion established by the minister responsible for education. It provides pedagogical, psychological and health care. Additional activities to develop interests (robotics circle, canoeing club, science camps, integration trips, etc.) include more than 100 students. The ASP strives to ensure that students develop in accordance with their psychological and physical needs and abilities, impart knowledge and skills, respect personal dignity and worldview and religious freedom in accordance with the principle of equal opportunities. Since 2017, it has been implementing the European Development Plan. An element of the implementation was the implementation of 1 mobility project (Erasmus+) in 2017, in which 56 students completed work placements in Greece. Another element of EPR implementation was the mobility of 30 students in 2021. (Erasmus+). ASP is expanding its international contacts and acquiring partners to implement student and teacher mobility. It is transferring the experience and competences it has gained to the creation of a network of cooperation enabling the learning of good practices, the exchange of experiences and project cooperation for the quality of VET in response to new challenges (digital transformation and green energy) including through the implementation of strategic partnership projects.



**1.2. FAV - partner (D)** 



FAV is a non-profit organisation of more than 600 entrepreneurs in Thuringia. It aims to provide skilled workers according to the needs of its members through the organisation of apprenticeships, vocational training, vocational orientation in primary schools and the implementation of selection-oriented projects and vocational training for the needs of Thuringia. FAV promotes and organises vocational training and continuing vocational training. The FAV supports the creation of new qualified training places for young people. An important area of activity of the FAV is the improvement and increase of the quality of training. The FAV cooperates with public institutions and other business organisations in Thuringia as well as with foreign institutions such as vocational schools, labour market institutions etc. In addition to its core tasks, the FAV is involved in a number of projects aimed at promoting the quality of vocational training and further training and vocational orientation.

The FAV promotes the improvement of regional training structures and engages in innovative projects to strengthen young people's choice of vocational training.

The main groups of learners that FAV works with are:

- young people interested in working in the German market as skilled workers, according to the
- with the requirements required in this market. They are adults, from different European countries, with education at ISCED levels 3 and 4, but not in jobs according to their education profile or unemployed. They undertake apprenticeships in the dual training system under special financial conditions allowing them to learn and support themselves.
- employees of companies who, in order to maintain employment, need to update or upgrade their skills through courses and training,



 In the final years of primary school preparing to choose their future educational path, pupils require effective methods and tools to support their decisions in making a responsible choice of their future education and profession.

#### **1.3.EduPlus - partner (P)**

## European Centre for Education and Skills Develo

EduPlus is a company focused on the implementation of training programmes, internships, apprenticeships, study panels, and methodological workshops organised under various EU structures and programmes, mainly under the Erasmus+ programme. EduPlus was born out of the need for an innovative approach to the young worker, student, teacher, employer or listener. The organisation of internships, apprenticeships and training to improve professional competences is an important area of activity. It has also cooperated in the implementation of projects aimed at the professional activation of unemployed adults and young people from the NEET group. She has experience in the area of EU programmes, the

Erasmus+ or local programmes (e.g. Portugal 2020) of a VET nature. Mobility abroad with the help of EduPlus is intercultural. It is a Certificate, a professional qualification, internationalisation, and above all, it is an opportunity for the international transfer of qualifications and employment. The active involvement in the professional mobility sector allowed us to see the gaps and become convinced of the need for networking, exchange of experiences and learning about good practices in their practice.

It cooperates with dozens of employers who offer foreign trainees optimal conditions for professional development and soft skills development. For EduPlus, the student's personal development is no less important than professional development. The overarching goal is to draw the attention of politicians to the importance of vocational education, dual education, certification of acquired qualifications, and the integration of the labour market with vocational education.

It has bilateral relations with partners, especially from Poland, but does not network in terms of exchanging experiences to increase the attractiveness of vocational training, new solutions and good practices in the field of practical vocational training.

The primary groups of learners EduPlus works with are:



- young people who do not have a place in the labour market (NEET), for whom integration into the labour market requires building up professional competences corresponding to market needs,
- Vocational school students doing internships and work placements as part of their school vocational training,
- employees whose employment requires them to obtain or expand their professional competences with new, targeted skills obtained on the EU market.

A vital element of this practical vocational training is gaining the ability to work in a foreign language and multicultural environment.



### 2. The national system of formal vocational training in Germany

#### 2.1. Basic regulation

The most important prerequisites for vocational training are the free choice and exercise of a profession, which are provided for in the Constitution (Grundgesetz: Art. 12) and in the Federal Government's competence for extracurricular vocational training (Art. 72(1) and (2) and Art. 74(1)).

According to the Constitution, the Federation has the right to legislate on vocational education and training. The Vocational Education and Training Act (Berufsbildungsgesetz, BBiG) (reformed in 2005) is another crucial legislative document that provides for the organisation of out-of-school vocational training. Recent amendments to the law concern the recognition of time-limited periods of training abroad, an amendment to the standard allowing the promulgation of training regulations by the Federal Institute for Vocational Education and Training (Bundesinstitut für Berufsbildung, BIBB). Other essential pieces of legislation concerning the German vocational training system are:

- The Crafts Ordinance (Gesetz zur Ordnung des Handwerks, HwO) (amended 2006): regulates vocational training in crafts to a greater extent in agreement with the BBiG.
- The Instructor Aptitude Ordinance (Ausbilder-Eignungsverordnung, AEVO) (amended 2009) sets standards for the professional and work-related ability of instructors to teach.
- The Act on the Protection of Young People in the Workplace (Jugendarbeitsschutzgesetz, JArbSchG) (as amended in 2006): contains protective provisions for trainees and young employees
- The Workplace Constitution Act (Betriebsverfassungsgesetz, BetrVG) (amended in 2006): defines the rights of works councils to participate in the promotion and implementation of training measures.
- Social Code, Volume III Employment promotion: among other things, supports further training, vocational retraining and orientation training.
- The Act on Supporting Training for Professional Advancement (Aufstiegsfortbildungsförderungsgesetz, AFBG) (as amended in 2006): confirms the right to state support for qualified employees who have completed ITVET.



- The Act on the Protection of Participants in Distance Education (Fernunterrichtsschutzgesetz, FernUSG) (amended in 2011): regulates the licensing and form of contracts for distance learning courses.
- Lifelong Learning Recognition and Licensing Directive (Anerkennungs und Zulassungsverordnung Weiterbildung, AZWV) (as amended in 2007).

In Germany, there are two central governing bodies of the education system, including all levels of vocational education and training: the federal government and the states (Länder). Within the federal government, the Federal Ministry of Education and Research (Bundesministerium für Bildung und Forschung, BMBF) is responsible for policy, coordination and legislation on out-of-school vocational and continuing education; training assistance; general rules for the higher education system, etc.

The Federal Ministry of Economics and Technology (Bundesministeriums für Wirtschaft und Technologie, BMWi) or another competent ministry may officially recognise training professions by adopting legislation and issuing training regulations for training professions in consultation with the BMBF.

The Federal Institute for Vocational Education and Training (Bundesinstitut für Berufsbildung, BIBB) advises the federal government and vocational training providers and researches companybased vocational training. It also conducts a dialogue between the social partners on innovations in vocational training. At the regional level, the ministries of education and culture of the federal states are the competent authorities for school education in accordance with the provisions of the constitution. The ministries are obliged to cooperate among themselves and with the Federal Government. The platform for cooperation is called the Standing Conference of Ministries of Culture (Kultusministerkonferenz, KMK). It aims to ensure uniformity and comparability of education and higher education policy. As long as the parliaments have not approved the resolutions of the KMK of the individual federal states, they remain recommendations and are not legally binding.

There are vocational training committees in the Länder in which employers, employees and the highest authorities of the Länder are equally represented. Employers, trade unions and the government play an essential role in the decision-making process concerning education. Their close



cooperation strongly influences the content and form of vocational training, in which the requirements and interests of all stakeholders are taken into account.

The federal authorities and the Länder jointly develop the framework curricula for the dual education system. Their cooperation relates to regulations for vocational education and on-the-job training.

The rules for promoting and financing continuing education are laid down in the federal states' legislation on continuing education and employment. They recognise freedom in preparing curricula and independence in selecting staff of continuing and further education establishments.

Collective bargaining agreements, company contracts, and contracted employment are continuing education issues regulated by the federal states (http://www.unevoc.unesco.org/go.php?q=World+TVET+Database&ct=DEU).

#### 2.2. Structure of the vocational education and training system

There are various vocational training paths in Germany. In order to enter such training, full compulsory education is required, i.e. candidates must spend a minimum number of school years (generally ten) in general education, for which the Länder have sole responsibility. The Länder are solely responsible for school education in Germany. For this reason, there are different types of schools. However, the Länder agree on general standards so pupils can be transferred and final qualifications are universally recognised.

#### Vocational training organisations

The organisation of dual education requires a complex but clear division of responsibilities. Employers and trade unions play a central role in change initiatives, as the structure of vocational training must meet the requirements of the industry. If changes need to be made - for example, in qualification requirements - the federal government, the states and industry agree on the basic principles of adjustment. Work on the training regulations and framework curricula then continues and is continuously coordinated by the various partners involved.

#### Framework federal legislation



The activities of all actors involved in dual training (federal government, states and industry) are regulated by the federal framework provisions of the Vocational Training Act (BBiG). In addition, specific labour law provisions in various areas of law are also binding for initial and continuing vocational training.

For example, the laws and rules on work contracts also apply to training contracts, unless the BBiG provides otherwise.

#### Federal Government

The federal government is responsible for developing the training content for the professions it has recognised unless the training takes place entirely at school. Nationally binding recognition of training professions ensures that the basic principles agreed with the industry and the Länder are taken into account and that training in a recognised profession takes place only in accordance with the training regulations adopted by the federal government.

The federal government's tasks are not limited to the implementation of jointly agreed objectives: it also takes action to promote dual education.

These measures include not only individual support programmes, such as those under the Federal Training Assistance Act (BAföG) but also special funding programmes aimed, for example, at creating additional training places in disadvantaged regions.

The federal government funds special research projects to ensure that vocational training is constantly updated. In particular, vocational training research aims to lay the foundations for vocational training, monitor national and international developments, identify training needs in terms of objectives, content, structures and methods, and test the developed models under experimental conditions.

#### Federal States

The Länder are fully and solely responsible for school education. In dual education, this means that - after an agreement between the Länder and other parties involved in dual education - each Länder develops curricula for part-time vocational education professions. In addition, the Länder supervise the activities of the chambers.



Industry, employers and trade unions

Proposals made by the industry to develop or amend training regulations are taken into account by the Federal Government if they have been agreed by employers and trade unions.

Without the federal government's involvement, the social partners agree in free collective bargaining on further details of vocational training, especially the amount of allowance paid to apprentices. Some collective agreements also include provisions on issues such as the continued employment of training graduates under a fixed-term contract.

Employers and trade unions play a central role in change initiatives, as the structure of vocational training must meet industry requirements. If changes need to be made - for example, in qualification requirements - the federal government, the states and industry agree on the basic adjustment principles. Work on the training regulations and framework curricula then continues and is continuously coordinated by the various partners involved.

Industry - local authorities - chambers

As self-governing bodies of industry, the chambers were given public tasks in the field of dual education (competent bodies).

These include advisory and control functions for individual training contracts. The chambers' training advisors verify the suitability of companies and instructors for training and provide advice to both companies and trainees. They receive training contracts, check them and register them.

The chambers are involved in the general organisation of the examinations, setting the dates and appointing the examination committees that conduct the examinations. In addition, the chambers issue certificates, which are given to passers.

Examination boards are representatives of employers, employees and vocational schools.

The Chamber sets up a Vocational Training Council to be consulted on important matters concerning vocational training. It comprises equal numbers of representatives from companies, trade unions and - with an advisory vote - part-time vocational training schools (Federal Ministry of Education and Research, *Dual Vocational Training at a Glance, Berlin 2011*).

The organisation of dual education requires a complex but clear division of responsibilities. Employers and trade unions play a central role in change initiatives, as the structure of vocational



training must meet industry requirements. If changes need to be made - for example, in qualification requirements - the federal government, the states and industry agree on the basic adjustment principles. Work on the training regulations and framework curricula then continues and is continuously coordinated by the various partners involved.

Employers - Practical training provided by employers

Most apprenticeships are offered in business companies, the public sector and independent professions (healthcare, law, technology/science, and cultural activities). Companies conclude a training contract for a period of 3.5 years in agreement with the apprentice.

The company takes responsibility for teaching the required training content and supporting them in developing the professional competencies the trainees need.

If a company wants to train a young trainee, there must be at least one person (chef, employee) who is able to teach the trainee and has the necessary professional and personal competences (trainer). Therefore, the trainer has to attend a training course that gives theoretical and practical guidance on teaching. In order to become a trainer, a person must pass a certification exam at one of the chambers.

The company develops an individual training plan in accordance with the training regulations of the federal authorities. Differences due to operational practice are possible if all training content can be guaranteed incidentally.

Very often, small and medium-sized enterprises do not have the capacity to teach all training content. Sometimes this is due to a lack of qualified trainers, and sometimes it is due to their specialisation, which does not allow them to deliver all training content.

Its apprentices participate in external vocational training courses or integrated group training courses (organised jointly with other companies), during which all the necessary practical training content is imparted. The German government subsidises these external vocational training courses. (BMBF) (*European Centre for the Development of Vocational Training, Vocational training in Germany - a short description, Luxembourg 2007*).



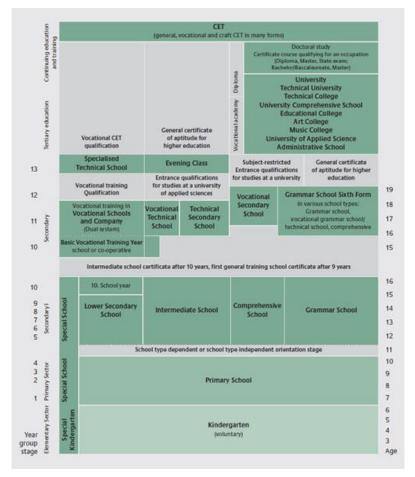


Figure 1: Structure of the vocational training system in Germany

Source: Federal Ministry of Education and Research, Status of recognition of non-formal and informal education in Germany - within the framework of the OECD action "Recognition of non-formal and informal education", Berlin 2008.

The majority of school leavers (more than 60% of the age group concerned) undertake dual education. Apart from the completion of compulsory schooling, there are no formal schooling



requirements for undertaking dual training. However, the school education of candidates is an essential criterion for most companies when selecting trainees (Federal Institute for Vocational Education and Training, VET Data Report Germany 2013 - Facts and analyses accompanying the Federal Report on Vocational Education and Training - selected findings, Bonn 2014).

The aim is to impart broad vocational content knowledge to enable you to perform your future profession with high competence.

The name 'Dual Training' illustrates the principle: two partners share responsibility for vocational education and training: The company concludes a training contract with the young trainee and takes responsibility for teaching the required training content. The company organises the learning for an average of three or four days a week on the basis of a training plan in order to qualify for one of the approximately 328 nationally recognised training occupations (Federal Institute for Vocational Education and Training, Index of Recognised Training Occupations, Bonn, 2015).

They train in the workplace and, at the same time, attend a part-time vocational school over a designated period of two, three or three and a half years.

On-the-job training familiarises trainees with the technological and organisational aspects of current work processes in enterprises. In addition, trainees contribute to the productivity of the company during training, which reduces the overall cost of vocational training for both companies and society as a whole. Companies bear the training costs and pay the apprentice an apprenticeship wage agreed upon between the social partners in the industry (employers' association and trade union). The apprenticeship wage increases with each year of vocational education and training. It amounts to approximately one-third of the initial wage of a skilled person.

The training period may also be extended in particular circumstances if this is the only way to ensure that the objective of the training can be achieved. Criteria for reducing the training period are, in particular, specific knowledge previously acquired at work or school or above-average achievements during training. Trainees attend a vocational school on a part-time basis for one or two days a week, where they learn mainly theoretical and practical knowledge related to their profession; in addition, they attend classes in general subjects such as economics and social studies and foreign languages. Systematic teaching in the vocational school is a necessary complement to



the process-oriented training in the company, which is more based on specific internal requirements.

Part-time teaching in a vocational school also considers complex processes: The theoretical content is therefore not taught in isolation but within the framework of the so-called learning areas (see Chapter 2) and is related to the profession's work as far as possible. (see chapters 2, 6 and 7)

#### Division of final examinations

The final examination consists of Parts 1 and 2, which take place on different dates and in a staggered manner. The task of the final examination is to determine whether the candidate has acquired professional competence. In the final examination, candidates are expected to demonstrate that they have acquired the necessary skills for this, that they have the required professional knowledge and skills and that they are familiar with the learning material provided for in the vocational school.

The chambers are responsible for the overall organisation of the examinations. Examination boards consist of representatives of employers, employees and vocational schools (*Federal Ministry of Education and Research, Dual education at a glance, Berlin 2011*).

Participate in the development and modernisation of curricula and training regulations.

Companies are involved not only in the practical issues of vocational training but also in developing curriculum outlines and training regulations. The first impetus to modernise curricula due to technological and organisational changes is usually companies.

Accordingly, companies communicate their adaptation needs to their professional organisations, which communicate these wishes to the Federal Institute for Vocational Training (BIBB) (European Centre for the Development of Vocational Training, Vocational training in Germany - a brief overview, Luxembourg 2007).

Benefits for employers - Human resources development



In-house training contributes to the systematic and long-term development of staff in companies, which thus remain primarily independent of fluctuations in the labour market. Recruiting qualified staff from outside would be more expensive and time-consuming. In addition, in-house training helps to minimise the risk of hiring the wrong person for the job, which entails additional costs.

Graduates of dual training are familiar with the company's processes and have worked with the company's employees for several years. They are qualified for a specific job and are usually highly loyal to the company. In addition, during their training at the company, they significantly contribute to the company's value creation (*Federal Ministry of Education and Research, Dual education at a glance, Berlin 2011*).

#### 2.3. FAV experiences and good practices in the area of VET

A specific experience of the FAV is its participation in directional projects for the vocational orientation of primary school graduates in the state of Thuringia.

MIfA project - Mittelthüringen region initiative for vocational training in small and medium-

#### sized enterprises

#### Project objectives:

The MIfA seeks to attract or reactivate regional small and micro enterprises (MMPs) as workplaces offering practical apprenticeship opportunities through advice and active support. Sustainable access of MMPs to potential candidate target groups (and vice versa) should be identified and ensured. The aim is to familiarise young people and parents with the newly established vocational training prospects in regional MMPs and optimise the recruitment of candidates.

#### Means to achieve objectives:

The external management of apprenticeships and traineeships, which is oriented towards the individual challenges of each company, offers support and advisory services to MMPs and activates, supports and trains these companies to initiate and ensure successful apprenticeships in the long term. Through tailor-made, modular qualification programmes, trainers will be prepared



for the changing demands of the labour market, apprenticeship learning and special requirements in the approach to trainees. MIfA also aims to increase the proportion of female apprentices.

#### Innovation and usability:

By putting regional stakeholders in touch with each other, sustainable structures for the targeted promotion of vocational training in the regional SMP will be created and implemented sustainably (structural support for vocational training). New strategies for recruiting and informing candidates are to increase and publicise the attractiveness of the MMP as an enterprise offering apprenticeship opportunities. Work packages specifically tailored to regional needs ensure relevance in the target region.

#### Unique advantages of the initiative:

MIfA increases the willingness of all relevant regional actors to work together on the project and thus facilitates access to the target groups. Doing so creates the best conditions for achieving the goals, and young people and MMPs are provided with unique opportunities for a perfect fit and shared perspectives.

#### Integration into regional structures, existing cooperation, networks

FAV Service gGmbH has an efficient and unique regional vocational training network thanks to its cooperation with strategic and operational partners. It cooperates intensively with all institutions involved in vocational training. By working strategically with regional labour market players, chambers, companies, business associations, trade unions, employment funders, jobseeker support providers, educational institutions, local/regional business promotion institutions, and, last but not least, vocational schools, it is possible to actively promote vocational training, influence its quality and ensure the development of qualified employees.

#### Specific needs of the project

Demand for skilled workers in MMP is high and growing. Practical in-company apprenticeships (traineeships) are a way to attract skilled workers. Due to the lack of a recruitment strategy, SMPs have difficulties attracting candidates; practical vocational training (apprenticeship) as a criterion for company attractiveness is not yet widely recognised as a resource, especially in SMPs. Practical apprenticeship offers in SMPs are not well known in the



region, and enterprises are not fully aware of the need to prepare internships and training attractively and communicate individual benefits among target groups. Practical apprenticeships in SMPs are implemented sporadically and in a disorganised way, and the available external support offers are rarely used due to a lack of knowledge compared to large and medium-sized enterprises. As a result, this often leads to drop-outs and failure in examinations. It is, therefore, important to quickly and sustainably improve the vocational training offered in MMP.

#### Regional relevance

The achievement of the project goals in the region contributes significantly to the involvement of SMP in the integration of regional and new opportunities for the transition from schools to practical vocational training (which has so far been reserved mainly for larger companies for organisational reasons and due to the availability of resources). Awareness of vocational prospects in SMP should be strengthened, with vocational training being initiated, secured and improved through the contribution and use of external know-how. Young people benefit from the opportunities for practical vocational training and the prospects offered "at home in the region"; SMPs benefit through new perspectives and opportunities arising from the development of skilled workers, and the region (mainly rural areas) gains new hope for the younger generation to stay "in place" and counteract unemployment or migration.

#### Integration of the project into the federal-state strategy

In addition, the project is expected to pave the way for students to find/create internship opportunities as a practical apprenticeship option at the MMP and to learn about businesses in the region that were not previously included. MIfA thus supports the recruitment of candidates at an early stage, attracting workplaces, and successfully helps to connect candidates with regional MMPs. By identifying candidates' interests, preferences and competences (in the previous career orientation process), a good match between apprenticeships/traineeships can be ensured, and an increase in drop-outs can be prevented.

#### The added value of the project for the target region

MIfA makes a sustainable contribution to promoting access to apprenticeships for candidates in MMPs, including those away from conurbations, and thus supports the career prospects of young



people. We support the initiation, maintenance and/or increase of MMP's involvement in vocational training (apprenticeships) and support the prospects of workplaces by ensuring the availability of young professionals. By making our network for developing professionals available to small companies and putting MMP in long-term contact with regional schools and project implementers, the project work produces sustainable results in the region.

Contribution to increasing the attractiveness of vocational training offers in MMP:

In order to increase their attractiveness in the eyes of candidates, workplaces must respond to changes in the vocational training market and candidates. Today, it is entrepreneurs who have to ensure that practical vocational training is attractive in the eyes of young people. MMPs have a particular problem with this. What do candidates expect from workplaces that teach them an apprenticeship? Most are looking for an establishment with prospects, a good working atmosphere and a proven quality of vocational training. Material aspects are essential but somewhat secondary. The above points can be used in particular by MMPs to profile their company accordingly. The team actively supports MMP in this process. The aim is to consistently highlight special features, strengths and opportunities in order to make the company attractive to candidates. The new generation sees the apprenticeship period as an investment in their professional future, in which they want to be as well and as broadly qualified as possible while at the same time posing pedagogical challenges to the training establishments. The social competences of the professionals being trained come to the fore. Trainers must approach young people individually, which requires openness, communication, and pedagogical skills. In addition, knowledge of the social conditions, the peer group to which the trainees belong and an interest in the social environment of the young people are essential prerequisites for successful interaction between trainers and trainees. Counsellors with regard to socio-pedagogical problems also support companies.

Our qualification training courses for MMPs with specialists and external experts cover the above topics. During the workshops, entrepreneurs learn how to apply methods and solutions. It is also planned to support cooperation between training specialists within local/regional networks and strengthen regional competencies sustainably. Tailored support offers for individual training internships, and even the possibility of gaining experience abroad during an internship are interesting aspects for young people, which can clearly contribute to their greater motivation and



guarantee the transfer of extensive training content. MIfA provides information about such opportunities and actively supports the planning, organisation and implementation. All groups of candidates should have the opportunity to learn about the increased attractiveness of the MMP.

Contribution of the project to the objective of supporting small and micro-enterprises in attracting and recruiting candidates

The project provides consultancy services to MMPs to shape an attractive image to attract new groups of candidates, initiate a change of mindset, and support the recruitment of candidates (fairs, online platforms, internship/apprenticeship pools). Open days for candidates with planning games should be organised in cooperating schools. Parents also play an essential role in the career choice process: it has been proven that young people pay particular attention to parental advice and opinions when choosing an internship. It is, therefore, essential to involve parents. MMP presentation processes that involve parents can contribute to success. During parents' evenings, the project team will present regional apprenticeship opportunities at MMP and convince them of new perspectives they had not previously considered. In addition to information meetings at schools, where pupils, teachers as well as parents learn about the apprenticeship companies and the professions on offer, organised excursions to the companies are planned. Pupils can participate in various thematic excursions in the workplaces (sorted according to vocational fields), find out onsite about the practical training opportunities at the MMP, and learn about the workplaces offering internships and apprenticeships. Familiarising oneself with the occupational field at the workplace is exciting for the students and allows them to find a suitable match for the company purely through personal contacts and practical experience. The project team represents MMPs at all renowned and regional job fairs or information meetings, as MMPs are usually unable to attend these for personal, time and financial reasons. Furthermore, we support MMPs in publishing internship offers on existing platforms. In addition, at our workshops, we also discuss and train participants on 'candidate sourcing', 'recruitment processes and procedures', 'interviewing' and other topics. The team supports recruitment and training processes and implements them in the long term to remove personal, technical and structural barriers. Active promotion of this offer (flyers, online information) should ensure that the MMP is recognisable to potential candidates in the region and,



at the same time, encourage students with weak or missing certificates, inhibitions, language deficiencies, and young people of foreign origin to apply for an internship at the regional MMP.

#### JOBSTARTER plus programme

JOBSTARTER plus supports the objectives of the Alliance for Vocational Education and Training and is part of the Federal Government's Qualification Initiative to increase educational opportunities and flexibility in the education system. The JOBSTARTER plus programme contributes to progress in the transition from school to practical vocational training by supporting structural development concepts in the regions. The programme links current vocational training policy issues with current regional conditions and the development potential of the economy and implements the principles of supporting business-oriented vocational training structures. Therefore, the concepts and services of the funded projects are primarily aimed at small and medium-sized enterprises.

The decline in the number of early school leavers in Germany due to the increased interest in academic training has an impact on the vocational training market in the form of a falling number of new vocational training contracts, a falling rate of apprenticeships and various problems, depending on the region, related to supply, recruitment or matching. The main objective of these funding guidelines is to ensure the stabilisation of regional apprenticeship markets and to strengthen vocational training as an essential pillar for securing skilled workers by improving integration opportunities and making training in small and medium-sized enterprises more attractive and of higher quality.

Support structures and advisory services for SMEs in industries experiencing recruitment and matching problems or operating in economic or research clusters

SMEs are finding it increasingly difficult to find young people willing to learn a trade and often need support to cope with recruitment or lack of fit in their industry. A key challenge is to increase the attractiveness and quality of vocational training. With an emerging skills shortage, it is imperative in many sectors to maintain SME involvement in vocational training and to attract new businesses into vocational training, especially where apprenticeship opportunities are poorly available. In business or research clusters, the culture and scope of vocational training are still very



different. At the same time, they are characterised by established links and proven exchange opportunities between members, which can be used as a basis for the development of integrated support and advisory services for vocational training in SMEs. Business or research clusters in the sense of this funding line are collaborative networks of production and supply companies, research and development institutions, existing competence centres, service companies and other business or research entities that have developed through mutual exchange along the value chain and/or have become regionally concentrated due to their common location. They are usually based on agreements on the type and extent of cooperation between the companies and/or institutions involved.

This programme aims to develop structures to reduce recruitment and matching problems in specific sectors or to increase the relevance and potential of vocational training in existing economic or research clusters. Accordingly, project objectives can also be implemented through the organisation of joint vocational training and the use of training modules.



### 3. The national system of formal vocational training in Portugal

#### 3.1. The education system in Portugal

The Ministry of Education is responsible for defining, coordinating, implementing and evaluating the national policy for the education system (which includes pre-school education, primary education, secondary education and out-of-school education) and for linking education policy to the regulation of qualifications and vocational training in Portugal.

In the field of VET as well as adult learning, the Ministry of Education and the Ministry of Labour, Solidarity and Social Security are responsible. Within these ministries' structure are departments that are part of the direct state administration, bodies of indirect state administration, advisory bodies and other organisations and entities within state-owned enterprises.

In Portugal, schools form a structure called school clusters, with their own administration and governing bodies. They consist of pre-school establishments and one or more schools that follow a common pedagogical concept.

The Ministry of Education is responsible for managing the network of pre-primary, primary and upper-secondary schools. School clusters enjoy some autonomy in terms of pedagogy, curriculum management and non-teaching staff.

The basis of the Portuguese vocational education system is the completion of a primary cycle of general education (basic education), which includes:

- cycle 1 grades I-IV,
- cycle 2 grades V-VI,
- cycle 3 grades VII-IX

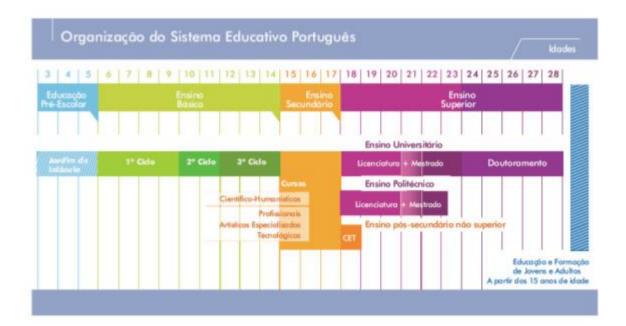
General primary education lasts a total of nine years (nine grades). Each education cycle ends with examinations.

The general education phase concludes with a Certificate for further study. The examination after cycle III includes a section on Portuguese language skills and a section on the main subject of the course of study. A vocational qualification is obtained by continuing on to upper secondary school (classes X, XI and XII) with a technical direction while attending a vocational course of choice.



In Portugal, the entity responsible for the organisation of the vocational education system is the State. Vocational training occurs at upper secondary school with a technical or vocational programme. Theoretical vocational training takes place at school, and practical vocational training takes place in the form of vocational courses and internships with employers. The student concludes the contract with the employer for practical vocational training.

A student acquires a vocational qualification after completing the 12th training cycle and passing a vocational examination conducted by an external commission. The evidence of qualification is the secondary school leaving certificate and a certificate confirming the completion of the vocational course and the acquisition of a qualification in the relevant profession.



### PROCEDURE FOR ACQUIRING VOCATIONAL QUALIFICATIONS THROUGH VOCATIONAL TRAINING - APPRENTICESHIP

Acquiring a qualification in a particular occupation includes vocational apprenticeship for young workers (15 -25 years). This training consists of alternate training provided by the Vocational Institute for Employment and Vocational Training - IEFP. This procedure aims to prepare young people for their first occupation and to facilitate their entry into a professional career. Vocational training is provided through:



 organise and sign a contract between the trainees and the company with an internship/training programme,

participation in vocational training (these vary in duration depending on their behaviour).
 Vocational training includes:

- socio-cultural training,
- scientific and technological training
- practical training (in a working environment and accounting for at least 30% of the total hours).

Training on the job is monitored by a mentor appointed by the entity responsible for the training component. Upon successful completion of the training process, participants receive:

- Level 2 vocational qualification and Level 3 primary school cycle certificate
- Level 3 vocational qualification and secondary school leaving certificate.

### **PROCEDURE FOR ACQUIRING VOCATIONAL QUALIFICATIONS THROUGH** LIFELONG **LEARNING**

The acquisition of qualifications as an electrician and automotive technician within the framework of continuing education is possible through further training. This procedure is aimed at adults who have not completed the stages of education or who have dropped out. The pathways for completing secondary education and acquiring qualifications are as follows:

- training course for adults,
- educational courses.

The Skills Recognition, Validation, and Certification - RVCC process is the most popular platform for accessing these courses. The aim of these courses is to improve the academic skills of the adult population and professional qualifications in the chosen profession by offering combinations and educational courses. The courses are based on the following:

- flexible learning pathways aimed at crediting and validating adult skills acquired through formal routes outside the usual and informal pathways;
- a coordinated educational pathway including primary and technical education or simply basic training;



Such courses culminate in the completion of a Level 3 vocational education and training cycle and the award of a Level 2 certificate or a secondary school certificate and a Level III vocational training certificate.

Participation in an EFA course that does not lead to the certification gives participants the authority to apply for skills validation certificates, which list all the skills validated during the course.

EFA courses are designed and delivered by relevant entities or third parties. In both cases, the training body must be part of a network of training institutions located in a national qualification system.

#### Other training

Further training courses for working-age or unemployed people are also offered for them as electricians and automotive technicians, including:

- qualification or retraining courses;
- refresher, updating or supplementary courses;

Typically, training pathways include units or modules leading to the acquisition of skills that can be validated for certification purposes from a lifelong learning perspective. Courses are usually designed to meet organisations' and employees' specific needs and circumstances. They can, for example, support the introduction of new equipment, technologies or organisational models for the modernisation of companies. They implement new production methods and forms of work organisation.

## **3.2.** Learning outcomes confirmed by the vocational examination on the example of selected courses in an electrician and automotive technician

Breakdown of the electrician and automotive technician professions under the National Qualifications Framework in Portugal

Automotive technician - 525083

Education and training area: 525

- Production and maintenance of motor vehicles;

National Qualifications Framework - Level 2 (Learning outcomes corresponding to level 2 - basic facts of work or science)



Qualifications:

(a) Maintenance and fault diagnosis,

(b) Repairs to the various mechanical systems of motor vehicles in accordance with the parameters and requirements specified by the manufacturer and safety and environmental regulations.

Electrician - 522060

Education and training area: 522 - Electricity and energy National Qualifications Framework - Level 2

Qualifications:

(a) construction of electrical installations in buildings and provision of controls,

(b) installation and maintenance of electrical, radio and automatic equipment in compliance with health, safety and environmental regulations and applicable legislation

Training achievements relevant to qualifications specific to the profession of automotive technician in Portugal

Learning outcomes common to all occupations

(OSH). Health and safety regulations

Follows health and safety and environmental protection rules and procedures when carrying out professional activities and takes responsibility for carrying out his/her activities.

Complies with the laws and regulations relating to electrical installations in the performance of his/her professional activity.

Organises appropriate workstations for proper career performance.

(PDG). Starting and running a business

Knows the technical documentation for business registration.

Knows the regulations for running a business and knows how to apply them. Adapts to new technical technologies and organises workstations to enable work to be carried out correctly.

(JOZ). Vocationally oriented foreign language

Speaks English or another foreign language appropriate to the task. Uses specific English technical vocabulary



(KPS). Personal and social competences

Interacts with other team members in order to perform jointly defined tasks while running a business; Complies with laws and regulations concerning the running of a business; is able to adapt to new technical technologies, and organises workstations in order to perform them correctly; takes responsibility for actions within the scope of his/her tasks; behaves assertively in relations with others; cooperates in the achievement of set goals. Takes the initiative to find the best solution. Training achievements corresponding to qualifications specific to the profession of automotive technician

Qualifications:

(a) Maintenance and fault diagnosis,

(b) Repairs to the various mechanical systems of motor vehicles in accordance with the parameters and requirements specified by the manufacturer and safety and environmental regulations.

The candidate must demonstrate knowledge of the following areas:

Technical drawing (interpretation of assembly drawings of mechanical and electrical parts); construction, operation and adjustment of petrol and diesel in passenger cars; construction, maintenance and adjustment of steering, suspension, brakes and active safety systems; construction, maintenance and adjustment of transmission system; construction, maintenance and adjustment of automotive ignition systems; construction, maintenance and adjustment of electrical power systems, turbochargers and antipollution systems; construction, maintenance and adjustment of car cooling and lubrication systems; operating and control systems for cars and trucks; technical standards (manufacturers' manuals); metrology (quantities, measurement procedures, standards and tolerances); mechanical technology; materials technology; equipment technology used in the diagnosis of passenger car faults; types of equipment and tools used in car repair; maintenance and testing processes for steering, suspension, braking and active safety systems; diagnostic procedures, wheel and tyre anomalies for cars; maintenance and testing processes for transmission systems; maintenance processes for drive and ignition systems;

Maintenance processes for power systems; maintenance processes for cooling and lubrication systems for light vehicles; diagnostic processes and components for engine charging and starting;



fault diagnosis and replacement processes for mechanical components of automotive air conditioning systems.

The candidate will: identify faults and use diagnostic equipment; identify and use a variety of equipment and tools used in different car maintenance systems; identify and recognise the properties of petrol and diesel in passenger cars; use methods and techniques applicable to the detection of anomalies in petrol; use techniques applicable to the maintenance of petrol and diesel engines; use appropriate techniques to diagnose petrol and diesel engine problems in a passenger car; identify and recognise the characteristics of steering, suspension, brakes and active safety systems; apply methods and techniques applicable to the detection of anomalies in steering, suspension, brakes and active safety systems; apply techniques for the maintenance of steering, suspension, brakes and active safety systems; use techniques for the testing of steering, suspension, brakes and active safety systems; apply methods and techniques applicable to the detection of defects in automotive wheels and tyres. Apply techniques for automotive spare wheels and tyres; identify and recognise characteristics of automotive transmission systems, apply methods and techniques applicable to the detection of anomalies in automotive transmission systems; apply techniques for the maintenance of light transmission systems; apply techniques for the testing of automotive transmission systems; identify and recognise characteristics of light vehicle ignition systems; apply methods and techniques applicable to the detection of anomalies in engine ignition systems; apply maintenance techniques to the ignition of powertrain systems; apply testing techniques to electrical power systems, turbochargers and emission control systems; define and identify characteristics of electrical power systems, turbochargers and emission control systems; identify and recognise performance characteristics of light vehicle cooling and lubrication systems; apply methods and techniques applicable to fault finding in automotive cooling and lubrication systems; apply maintenance techniques to engine cooling and lubrication systems; apply maintenance techniques to lighting and air conditioning mechanical systems; apply cooling system testing techniques; define and recognise performance characteristics for engine load and light engine starting; apply methods and techniques applicable to fault finding in starting and charging systems; apply techniques for replacing components of engine charging and starter systems; apply techniques and products necessary to maintain parts and condition of cleaning systems; with



procedures and products necessary to maintain cleanliness of workstation, tools and equipment used.

Training achievements corresponding to qualifications specific to the profession of electrician Qualifications:

(a) construction of electrical installations in buildings and provision of controls,

(b) installation and maintenance of electrical, RTV and automation equipment in accordance with health, safety and environmental regulations and applicable legislation.

The candidate must demonstrate knowledge in the following areas:

Technical diagram, welding and familiarity: Telecommunications systems; mechanics; electricity; electronics; home automation; typology and characteristics of materials relating to the construction and maintenance of electrical installations; typology and characteristics of materials relating to the construction and maintenance of lighting and electrical power equipment; typology and characteristics of materials relating to the construction and maintenance of electrical traction system installations; typology and characteristics of materials relating to the installation of infrastructure associated with television aerials; typology and characteristics of tools used in the construction and maintenance of electrical installations; types and performance of electrical installations; types and performance of electrical installations; Installation and testing techniques for electrical installations; Preventive, maintenance and maintenance techniques for lighting of power train equipment; Preventive, maintenance and maintenance techniques for power train electrical installations.

The candidate succeeds in interpreting technical specifications for electrical installations and maintenance; techniques and methods for preparing appropriate equipment, tools, components and materials applicable to the construction of electrical installations and the performance of maintenance; identifying and knowing the characteristics of various types of equipment, tools, components and materials used in the construction of electrical installations, lighting and TV4 antennas. Use the tools and materials necessary for the construction of electrical installations; defines the layout and location of electrical installations and equipment; use methods and



techniques to determine points and reference lines for electrical installations; knows the procedures for verifying the various modes of installations; use procedures and techniques for assembling and connecting circuits and knows the equipment specific to the risers and inputs of electrical installations and the installation of electrical lighting and drive systems, knows automation installations, electrical equipment installations and TV aerial installations; apply appropriate verification procedures, methods and techniques and test the operation of electrical installations, drive system electrical installations, aerial installations, TV installations, lighting installations and power supply installations; identify faults in electrical, lighting and power supply installations of electrical equipment and TV aerial installations; apply techniques and procedures for the replacement and maintenance of components of electrical circuits and fittings, electrical installations, lighting and power supply installations and equipment; apply health, safety and environmental regulations in business activities; apply electrical installation rules in accordance with current regulations.

#### 3.3. Procedures related to examinations for professional qualifications

In order to enter secondary school and thus start studying in the chosen field of study, a student must have a certificate of completion of nine years of primary education. Students over the age of 18 who wish to continue their studies follow programmes in adult education. Pupils are assessed at the end of each cycle. To be promoted, it is necessary to obtain a min. 10 points (on a scale of 0-20) as a result of a school-level assessment. At the end of the programme in mathematics and humanities, national examinations are organised for students. Pupils who complete this cycle of education receive a secondary school leaving certificate. Pupils who graduate from a technical or art school receive both a third-level vocational qualification certificate and a secondary school certificate. In vocational schools, pupils receive a level 3 vocational qualification certificate, which is also recognised as equivalent to a secondary school leaving certificate. Students who graduate from a post-secondary school receive a certificate of both technical specialisation and level IV technical skills. Upon completion of specialised technical education, a professional qualification certificate can also be obtained. Admission to higher education is contingent on state examinations (exams nacionais) covering a range of subjects designated by the Ministry of Science, Technology and Higher Education.



Vocational qualification examination. Final evaluation: Vocational courses The final classification is the result of the formula: CF = [2MCD + (0,3FCT 0,7PAP +)] / 3Where: CF = end of odds ranking, rounded to the nearest unit; MCD = simple arithmetic mean of the final results of all subjects FCT = on-the-job training classification, rounded to the nearest unit; PAP = professional classification ability test, rounded to the nearest unit. Vocational courses The final classification of the course is the result of the formula: CF = (mcfd MUFCD + EF) / 3Where: CF = end of odds ranking, rounded to the nearest unit;

Mcfd = is the simple arithmetic average of the final scores of all disciplines rounded to one decimal place,

Technology and technical courses

The final classification is the result of the formula:

CFC = (9MCD 1PAT +) / 10

Where:

CFC = end of course ranking (rounded to the nearest unit);

MCD = is a simple arithmetic mean, rounded to units,

PAT = technology aptitude test grades.

Currently, the system is organised in the form of a practical exam. The student's task is to prepare a presentation on a project on a chosen topic. He or she presents the work to a panel of external experts, who assess his or her work and decide whether to issue a certificate.

#### 3.4. Formal evidence of qualifications obtained



A person who passes the vocational qualification examination is awarded a vocational qualification certificate.

The certificate is awarded to a person who has passed the professional examination in all the qualifications required for the profession and has the required level of education.

Certificate of vocational qualification

A certificate of vocational qualifications is awarded to a person who has passed the examination confirming vocational qualifications (obtained at least 50% of the points).

The certificate confirming the occupational qualification contains the name(s) and surname, date and place of birth, identification number of the person who passed the examination confirming the occupational qualification, and name of the qualification.

Certificate of professional qualification

A certificate of professional qualification may be obtained by a person who has the following:

(1) certificates proving all qualifications and

(2) a certificate of completion of a lower secondary school or a current upper secondary school or a certificate of passing external examinations on the basis of the general curriculum.

Issuing a certificate

Graduates of schools providing vocational courses which have been awarded a secondary school certificate in a school year, and a certificate confirming qualifications in the occupation in which they are trained are issued on the basis of passing an examination. This certificate is issued by the Ministry of Education.

Deadline for issuing the certificate of professional competence

The Ministry defines the date of issue of the Certificate of Professional Qualification - as the date on which the qualification examination(s) in the profession was passed.

The headteacher of the school or establishment, or the employer or a person authorised by the headmaster, shall hand over to persons who have passed the examination certificates confirming their professional qualifications.

#### 3.5. EDUPLUS experiences and good practices in the VET area

EduPlus was born out of the need for an innovative approach in VET education aimed at the young worker, student, teacher, employer or learner. The potential of EDUPLUS comes from the staff's



experience from their previous positions. They have been involved in implementing various project activities, including Erasmusplus KA1 and KA2.

Its activities contribute to the promotion of VET education as an attractive educational and professional career path.

EduPLUS has experience in the area of counteracting social and professional exclusion and inclusion gained through the implementation of projects targeting unemployed people, including those in the NEET category. Thanks to this, it has a vast network of cooperation with public institutions in Portugal working for the labour market, and VET education, against social exclusion. EduPLUS has experience in the implementation of Erasmusplus KA2 projects, being a partner in the "Seniority" project (partners FAV and MANS). The idea behind the project "Senoratywność" was to counteract the IT exclusion of this group of people, as well as to create conditions for using their professional experience and passing it on to the younger generation.

EDUPLUS is already a proven partner in developing intellectual value, as it is a partner in the project "Integrated training programme package for VET students", number 2021-1-PL01-KA220-VET-000033085. The project addresses the intended target group, i.e. VET schools, and the partnership provides competence building for international cooperation in the KA2 VET area.

The results of the projects in which EDUPLUS participated included educational platforms and guides (e.g. to prevent pupils from falling behind), online platforms to facilitate the transfer of qualifications in various professions, or guides aimed at young entrepreneurs.

EDUPLUS collaborates with vocational schools in the District of Braga to improve the social and professional competences of students and teachers and to develop international cooperation, which also promotes VET education in the District. It has extensive entrepreneurial contacts related to the practical vocational training of students. As a result, it knows and constantly updates its knowledge of the problems and needs of target groups in Portugal, including those with fewer opportunities. Through this cooperation, he has access to these groups.

EduPlus best practices include:

- The creation of a network cooperation for the practical training of students involving vocational schools from Portugal and the EU and entrepreneurs able to transfer professional competences in specific areas,

- integration into the labour market and social and professional adaptation of NEETs,



- close cooperation with public institutions implementing policies (social, inclusiveness, VET education) at the local and Braga district level,

- intergenerational integration in social and professional competences,
- organising VET internships for students from different EU countries in international groups.



### 4. The formal vocational training system in Poland

#### 4.1. Structure of the formal vocational training system

In the educational system, vocational education takes place in the following types of secondary schools (public and non-public), including vocational education:

- first- and second-level vocational schools, the completion of which enables the holder to obtain a diploma confirming vocational qualifications after passing examinations confirming qualifications in a given profession,
- a four-year general secondary school, the completion of which makes it possible to obtain a secondary school certificate after passing the matriculation examination;
- a five-year technical school, the graduation from which enables one to obtain a diploma confirming professional qualifications after passing examinations confirming qualifications in a given profession, as well as to obtain a matriculation certificate after passing the matriculation examination;
- a post-secondary school for persons with secondary education, of a teaching period not longer than 2.5 years, making it possible to obtain a diploma confirming professional qualifications after passing examinations confirming qualifications in a given profession;
- **a special school** for pupils with moderate or severe mental handicaps and pupils with multiple disabilities, the completion of which makes it possible to obtain a certificate confirming adoption for work.

There are also **adult schools in** the school system:

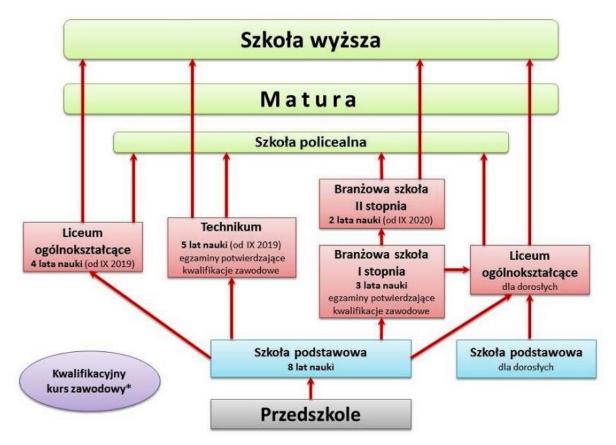
In these schools, a separate organisation of education is applied, and persons who are 18 years of age or who turn 18 in the calendar year in which they are admitted to the school are admitted. Adults have the opportunity to combine the acquisition of general education with the acquisition of vocational qualifications in the non-school system, particularly in vocational qualification courses.

The organisers of qualifying vocational courses can be:

– public schools providing vocational training in the professions in which they train;



- non-public schools with the status of public schools providing vocational training in the professions in which they provide education;
- public and non-public further education establishments, practical training establishments,
   further education and training centres;
- labour market institutions, including OHP;
- legal and natural persons are carrying out educational activities as part of their economic activity.



\*kwalifikacyjny kurs zawodowy to pozaszkolna forma kształcenia ustawicznego skierowana do osób, które ukończyły 18 rok życia

Fig. Structure of education in Poland

Source: https://ksztalceniezawodowe.bialystok.pl/struktura-szkolnictwa/



### **4.2.** Classification of occupations in Poland on the example of the professions of electrician and car mechanic

The Classification of Occupations of Vocational Education is a structured tabular system including, among others: names of occupations taught in the educational system, arranged by large, large and medium-sized groups in accordance with the group names established *in the classification of occupations and specialities for the needs of the labour market*, applicants - bodies at the request of which occupations were introduced to the classification, areas of education, types of post-primary schools, names of qualifications distinguished in an occupation, the possibility of providing education on vocational courses.

A characteristic feature of the current classification of vocational education is the distinction of individual qualifications within the framework of the professions, each of which includes a specific set of knowledge, skills and personal and social competencies, as indicated in the core curriculum for training in a given profession. Each qualification can be separately confirmed in the process of education in the system of external examinations.

D: :/ I	Group name competition/ Name profession	Applicant Minister with responsibility E for the profession		Types of school			Names of occupation-	Training in the form of
Digital symbol			Education area	SB	Т	S P	specific qualifications	qualification courses professional
1	2	3	4	5	6	7	8	9
74	Electricians and electronics engineers							
741	Building electricians, electro-mechanics and electrical fitters							
741103	Electrician	economies	Е	X			<ul> <li>K1. Installation and maintenance of electrical machinery and equipment</li> <li>K2. Installation and maintenance</li> </ul>	Х
							of electrical installations	Х

 Table 1. Position of the occupation of car mechanic in the NACE/Compatible with the group names of the Classification of Occupations and Specialities (excerpt from the classification proper)



Source: Own compilation based on the regulation of the MINISTER OF FAMILY AND SOCIAL POLICY1) of 13 November 2021 amending the regulation on the classification of professions and specialities for the needs of the labour market and the scope of its application

	Name of occupation group/ Name of occupation	Applicant Minister with responsibility for the profession	Education area	Types of school			Names of occupation-	Training in the form of
Digital symbol				SB	Т	S P	specific qualifications	vocational qualification courses
1	2	3	4	5	6	7	8	9
7	Industrial workers and craftsmen							
72	Metalworkers, machine and plant mechanics and related workers							
723	Machinery and plant mechanics							
723103	Motor vehicle mechanic	economies	М	X			K1 Diagnose and repair components and assemblies of motor vehicles	Х

### Table 2. Position of the occupation electrician in the NACE/Compatible with the group names of the Classification of Occupations and Specialities (excerpt from the classification proper)

Source: Own compilation based on the regulation of the MINISTER OF FAMILY AND SOCIAL POLICY1) of 13 November 2021 amending the regulation on the classification of professions and specialities for the needs of the labour market and the scope of its application

#### **Explanation of symbols in Tables 1 and 2**

Т	Technical college			
SB	Industrial school			
SP	College			
М	Education area mechanical and mining and metallurgy			
Е	Electrical and electronic education area			



Positioning of occupations in the European classification of skills/competencies, qualifications and ESCO occupations using the example of the professions of electrician and car mechanic

ESCO (under construction) - a multilingual classification assigning specific skills and competencies to specific occupations. The ESCO classification is based on three pillars:

- 1. pillar of the competition,
- 2. skills/competence pillar,
- 3. qualification pillar.

 Table. 3. Structure of the Polish Classification of Occupations for the Labour Market (KZiS 2010 based on the ISCO-08 version) - an example of the pillar occupation of electrician

Symbol KZiS 2010	Name of group/profession in KZiS 2010	Symbol ISCO- 08	Group name in ISCO-08
74	Electricians and electronics engineers	74	Electrical and electronics trades workers
741	Building electricians, electro- mechanics and electrical fitters	741	Electrical equipment installers and repairers
7411	Building and related electricians	7411	Building and related electricians
741103	<b>Electrician</b> (school occupation)	7411	Building and related electricians

Source: Regulation of the MINISTER OF FAMILY AND SOCIAL POLICY1) of 13 November 2021 amending the Regulation on the classification of occupations and specialities for labour market purposes and its scope of application; International Standard Classification of Occupations ISCO-08. International Labour Office, Geneva, 2012, p.289-290, 299-300.

 Table. 4. Structure of the Polish Classification of Occupations for the Labour Market (KZiS 2010 based on the ISCO-08 version) - an example of the pillar occupation of car mechanic

Symbol KZiS 2010	Name of group/profession in KZiS 2010	Symbol ISCO- 08	Group name in ISCO-08
7	Industrial and craft workers	7	Craft and related trades workers
72	Metalworkers, machine and plant mechanics and related workers	72	Metal, machinery and related trades workers
723	Machinery and plant mechanics	723	Machinery mechanics and repairers
723	Machinery and plant mechanics	723	Machinery mechanics and repairers



7231	Motor vehicle mechanics	7231	Motor vehicle mechanics and repairers
723103	Automotive mechanic (school profession)	7231	Motor vehicle mechanics and repairers

Source: as above

### The situation of professions in the European Qualifications Framework (EQF) and the Polish Qualifications Framework (PRK) on the example of the professions of electrician and car mechanic

The European Qualifications Framework (EQF) is a common European reference point, the main task of which is to bring together the national qualifications systems operating in different countries. The main objectives behind its development were to promote the mobility of citizens between countries and to show the benefits associated with the idea of lifelong learning (*European Classification of Skills/Competences, Qualifications and Occupations ESCO as an instrument supporting the adaptation of education to labour market needs*, Iżycka H., Marszałek A., Ministry of Labour and Social Policy, Labour Market Department, Warsaw, 2011, p. 37).

The Polish Qualifications Framework (PRK), like the EQF, distinguishes eight levels of qualifications. Each PRK level has been characterised by general learning outcomes required for a given level of qualification, i.e. knowledge, skills and social competencies. A unique Polish solution is the two-level characteristics (Table 5). The first level characteristics (universal) apply to all types of education. They are then developed into second-level characteristics in variants: typical for general education; for level 5 of the PRK, which is not typical for VET; typical for higher education; typical for VET. The characteristics of the first and second level levels should be read together (*Polish Qualifications Framework*, Chłoń-Domińczak A., Sławiński S., Kraśniewski A., Chmielecka E., Instytut Badań Edukacyjnych Warsaw 2015, p. 4).

The electrician and motor vehicle mechanic professions are situated at EQF level 3.



The following are the second-level characteristics typical of vocational education and training qualifications, PRK level 3. The entries - knowledge, skills, social competence - should be related to a specific professional activity.

Table 5. PRK characteristics defining level 3, typical of vocational education, including in the professions of
electrician and motor vehicle mechanic

	Descriptive	Essential	Level 3
	categories	aspects	KNOWS AND UNDERSTANDS:
	Therein	Methods and solutions	basic concepts and terminology relating to professional tasks
	Theories and principles	Business activities	elementary principles of self-employment and entrepreneurship
		Ethics	
(M)	Phenomena and processes	Characteristics and conditions	phenomena and processes relating to the professional tasks performed
Knowledge (W)		Methods and technologies	standard methods and technologies used in carrying out professional tasks
Kr	Organisation of work	Organisational arrangements	standard organisational arrangements used in carrying out professional tasks
		Health and safety at work	health and safety rules, standards and procedures relevant to the job tasks performed
	Tools and	Action	principles of operation and use of tools, machines and equipment used to carry out non-complex professional tasks
	materials	Features	the main features of the materials used and products manufactured
			CAN:
		Documentation	handle documentation for not very complex professional tasks
Skills (U)	Information	The calculation, analysis, synthesis and	search for, compare, evaluate and analyse information needed to perform professional tasks
		forecasting	carry out not very simple calculations related to professional tasks



	Planning and adjusting plans	prepare and revise, as appropriate to the circumstances, a plan for carrying out non-complex professional tasks
	Making	carry out activities comprising non-complex professional tasks
Organisation of work		organise the work of a small team of employees carrying out not very complex professional tasks
	Corrective action	solve simple problems occurring during the performance of not- very-complex professional tasks
	Circulation of information	receive and transmit information necessary for the performance of not very complex professional tasks

	Tools and materials	Use, selection	organise workplaces associated with non-complex professional tasks, taking into account safety requirements
	Learning and	Self-	analyse job offers in terms of competences and professional development
	professional development	development	independently establish contacts with potential employers
			IS READY TO:
			comply with the rules governing the performance of professional tasks
	Observe- no rules	Rules, instructions, law	to provide reliable information on matters concerning their professional tasks
( <b>K</b> )			honour arrangements for cooperation in the performance of professional tasks
Social competence (K)	Cooperation	Communication	communicate in a work environment in a way that does not interfere with the flow of information related to the professional tasks performed
Social e	1	Relationships in the professional environment	act as a team when carrying out professional tasks
	Reply-	Ethical standards	the diligent performance of the professional tasks assigned
	activity		take into account the immediate and deferred effects of the way in which professional tasks are performed



	control the quality of the professional tasks of the team within which he/she works
	taking responsibility for the professional tasks entrusted to them

Source: Polish Qualifications Framework, Chłoń-Domińczak A., Sławiński S., Kraśniewski A., Chmielecka E., Institute of Educational Research Warsaw 2015, p. 10.

#### 4.3. Institutions involved in the vocational training process

In Poland, there are many institutions involved in the vocational education process. Depending on the statutory powers granted, several levels of responsibility of institutions for the functioning and development of the vocational education system can be distinguished:

### System level (Minister of Education and Science, Minister of Family and Social Policy, Central Examination Commission)

The Central Examination Commission is responsible for preparing and conducting external examinations confirming specific knowledge, skills and competencies at the secondary and maturity school level and professional examinations. This Commission prepares training for candidates for examiners and cooperates with employers in the process of creating examination tasks.

The collaboration aims to:

- ensuring coherent, complementary actions to develop vocational training adapted to the needs of employers, local labour markets and a modern and innovative economy,
- 2) to promote and develop cooperation between schools and employers in vocational training and to increase the involvement of employers in practical vocational training.

The Ministry of Education and Science also carry out pedagogical supervision and coordinates the whole area of qualification modernisation concerning solutions for the development of education in a modern and practical way in cooperation with employers in order to respond to the needs of the labour market. In addition, it is developing additional tools for testing professional competencies and aptitudes. It also introduces changes to core curricula, curricula for different types of schools and professions, as well as new textbooks and other necessary documentation.



There is a Department of Strategy, Qualifications and Vocational Training (DSKKZ) within the Ministry of the Economy, which is responsible for carrying out the tasks of the Minister with regard to the coordination of strategic planning and implementation of lifelong learning policy and coordination of state policy in the area of vocational training.

The Department's remit includes, in particular, matters relating to:

- strategic planning in the area of the education system, including coordinating tasks related to the preparation of materials for strategic planning, modifying strategic documents as part of conducting development policy and monitoring their implementation;
- the coordination of lifelong learning policy, including the implementation of the Integrated Skills Strategy and support for the work of the Interdepartmental Team for Lifelong Learning and the Integrated Qualifications System;
- Integrated Qualifications System, including the Minister's role as the Coordinating Minister for the Integrated Qualifications System;
- projections of the demand for employees in the occupations of vocational education on the national and provincial labour market;
- co-operation with the Central Statistical Office with regard to researching labour market demand for workers in specific professions;
- monitoring the careers of post-primary school graduates using the resources of the Informatics Centre for Education and Science;
- career guidance in the education system;
- promoting vocational and lifelong learning;
- classification of occupations for vocational education and training;
- occupations of vocational education with special significance for culture and national heritage;
- experimental activities in vocational and adult education;
- the core curriculum for vocational education and the core curriculum for vocational training;
- additional vocational skills in selected vocational training professions;
- framework curricula for public schools providing vocational training and adult education;



- the establishment, transformation and liquidation of public schools providing vocational training and schools for adults;
- consenting to the establishment or operation of a non-public school providing vocational education that does not meet the conditions specified in Article 14(3) of the Act of 14 December 2016. Education Law, in particular recognised as experimental;
- work organisation and statutes of schools providing vocational and adult education;
- the conditions and procedures for the admission of pupils and students to schools providing vocational training and adult schools, and the transfer of pupils and students from one type of school providing vocational training to another type of school or between schools of the same type;
- the operation of public and non-public schools providing vocational training, excluding special schools;
- the operation of public and non-public schools for adults;
- the rules for assessing, classifying and promoting pupils and students in vocational and general education in adult schools, upper secondary vocational schools and post-secondary schools;
- developing specimens of certificates, diplomas and other forms for vocational training schools and adult schools;
- determine the conditions to be fulfilled by an applicant for a professional diploma or a diploma attesting to a professional qualification;
- the launch of vocational training;
- determine the conditions and procedures for organising and carrying out practical vocational training by students;
- apprenticeships for students of vocational-technical schools and lower secondary industrial schools who are not young workers;
- vocational training of adolescent workers and subsidising employers of the costs of this training;
- the rules for professional and vocational qualification examinations and externship examinations;



- maintain a list of arbitrators to hear appeals in respect of the vocational examination and the examination confirming vocational qualifications;
- the establishment of rules for the conduct of qualification examinations for the titles of journeyman and master in a profession by the examination boards of the chambers of crafts;
- the functioning and organisation of public and non-public further education establishments and public and non-public vocational training centres;
- determine the conditions and procedure for obtaining and supplementing general knowledge, skills and professional qualifications in non-school forms;
- to establish principles for the implementation and coordination of solutions for the development of lifelong distance learning;
- improving the accreditation system for continuing education in non-school forms;
- vocational training tournaments and Olympiads;
- the implementation of the priorities of the Copenhagen process in vocational training and cooperation with European institutions in the development of vocational training, including the European Centre for the Development of Vocational Training - CEDEFOP;
- participation in EU working, expert and high-level groups (Directors-General for Vocational Training) on the development of vocational training, adult learning and qualifications frameworks;
- cooperation and collaboration with governmental institutions, local authorities and social partners, including employers, in the development of vocational education and adult learning;
- cooperation with DKOPP on in-service training for teachers of theoretical vocational subjects and practical vocational training teachers in the form of industry-specific training;
- cooperation with DKOPP in supervising and coordinating pedagogical supervision in the country and supervising the activities of school superintendents within the scope of the department's jurisdiction;
- implementing the A3.1 reform as part of the National Recovery and Resilience Plan.
- Working with DFS to implement A3.1.1 investments as part of the National Recovery and Resilience Plan.



The HCCC carries out matters in respect of the Minister's oversight of:

- The Central Examination Commission for vocational examinations and examinations confirming qualifications in a profession and extramural examinations;
- Institute for Educational Research excluding educational research in the field of education and upbringing, digitisation of educational systems and higher education and science, innovation and the construction and development of the information society;
- The Centre for the Development of Education with regard to tasks related to vocational education and counselling.

The HCCCC provides services to the Government Plenipotentiary for Supporting the Educational Function of Schools and Institutions, Inclusive Education and Vocational Training - with regard to vocational training.

In order to support lifelong learning, an Integrated Qualifications System has been implemented in Poland since 2016. It is a system intended to guarantee the quality of the qualifications awarded, regardless of how the skills corresponding to these qualifications were achieved. All qualifications included in the Integrated Qualifications System are entered in the Integrated Qualifications Register (ZRK). This means that they correspond to the required quality assurance standards and are described in detail. The ZRK is a knowledge base of qualifications that all interested parties can use.

#### **Region level (Superintendent of Education, District Examination Board)**

The Education Superintendent, who is subordinate to the Minister of Education and Science and who directly exercises pedagogical supervision over the Education Superintendents, performs the tasks resulting from laws and other legal regulations in the voivodship area on behalf of the voivode. The Education Superintendents undertake a variety of activities in the field of vocational counselling in order to support the process of recruitment to secondary schools and to provide a wide range of information on forms and directions of vocational education, opportunities for acquiring vocational qualifications, as well as on the needs of the regional and local labour market. These activities should particularly target students.



The District Examination Boards (OKE) are part of the external examination system of the Central Examination Commission and also provide training for candidates for examiners based on materials prepared by the Central Examination Commission. The Boards of Education carry out their statutory tasks closely with the OKEs.

#### Local level (leading authority, school, Vocational and Continuing Education Centre)

The tasks of the leading authority related to the supervision of the work of schools and educational establishments include:

- disposal of budgetary resources,
- the school's health and safety operating conditions,
- the organisation of the work of the school or establishment.

Administrative matters and decisions concerning the financial resources of schools are the subjects of consultations between the school and the leading body, which is the local authority. In the case of secondary schools, including vocational schools, these are the county governor's offices or town halls. The procedure for the control of the school leading body results from the organisational regulations of the local self-government unit detailing the principles (criteria, objectives, etc.) or referring to separate control regulations.

Public further education establishments are Continuing Education Centres (CKUs). The operational structure of these establishments is to provide continuing education in non-school forms and in schools for adults.

The main tasks of the Centres include:

- the development and dissemination of methodological and teaching materials appropriate to the training provided,
- the preparation of a training offer aimed at participants in this type of training in order to increase their employability and cooperation with employers in this regard,
- collecting scientific and technical information for lifelong learning with particular reference to the directions and forms of that learning,
- carrying out practical vocational training resulting from the curricula for the profession.



The CKUs cooperate with the labour offices in terms of organising training and courses for the unemployed and with employers in terms of continuing education for employees.

#### Facility level - vocational school - plans, curricula, cooperation with employers

Vocational schools implement vocational training programmes based on centrally developed teaching recommendations. Many Polish employers find it challenging to recruit matching employees. The reason for this phenomenon is the mismatch between employees' qualifications and the labour market's needs. It is worth noting that the most common forms of cooperation, apart from extracurricular activities and apprenticeships, are: consultations, obtaining training materials, organising subject trips and organising competitions and olympiads for students.

#### Employer participation in vocational training

According to Polish legislation, a school is an autonomous entity that implements vocational education according to curricula approved by the head of the school. Vocational education includes the organisation of practical vocational training in the form of practical classes and apprenticeships. At the ASP in Łomża, practical training is carried out in the form of practical classes for the occupation of Informatics. Practical classes are aimed at mastering by students the professional skills necessary to start work in the profession. Practical vocational training is organised in , school workshops, continuing education establishments, practical training establishments or/and at employers.

Forms of cooperation between the ASP and employers

- organisation of pupils' practical activities,
- apprenticeships for students,
- school sponsorship for activities that increase pupils' professional knowledge (e.g. trips to trade fairs),
- enriching the school base with teaching materials in the form of donating equipment to the subject laboratories,
- a partnership agreement defining the company's contribution to the training process,
- provision of materials/raw materials for practical vocational training,
- Consulting and collaborating with employers in curriculum development,
- Cooperation in the organisation of professional knowledge and skills competitions,



- Funding of scholarships for students,
- practical training for vocational teachers,
- organisation of internships and placements abroad.

#### 4.4. ASP experiences and good practices in the area of VET

The Academic High School is a non-public school with public school privileges. It was founded by the Rector of the Agribusiness College in Łomża in 2009 and is located in the college buildings. Tuition is free of charge. The school educates in the profession: IT Technician.

The school's strengths also lie in its teaching facilities - modern classrooms, well-equipped workshops and laboratories, auditoriums, sports hall, canteen, and shop.

The ASP has no experience implementing projects financed by Erasmusplus and other funds, so it is actively working to establish targeted partnerships in this area. The ASP has network partnerships with:

- Associação Intercultural Amigos da Mobilidade (AI.A.M) from Portugal,
- EduPlus Portugal,
- FAV Service Germany,
- Koledz Vinnitsa Ukraine

#### The ASP has adopted a European Development Plan which aims to :

- 1. improving the skills and qualifications of staff/teachers by learning new teaching tools/methods,
- 2. improving the language skills of students and teachers,
- 3. implementation of new curricula taking into account the European dimension of education,
- 4. improving the organisation of teaching and learning, taking into account the opportunities offered by Erasmusplus and other European Union-funded programmes,
- 5. fostering attitudes of curiosity and acceptance of multiculturalism,
- 6. increasing students' knowledge of how the labour market works and of the requirements of employers in different EU countries,
- 7. fostering an attitude of mobility in the education and labour market among students,



8. increased involvement of teachers and students in European mobility programmes.

#### The strategic objective of the European School Development Plan:

- Improving pupils' skills through the organisation of placements abroad (using ECVET as a tool to improve pupils' professional competencies),
- enhancing teachers' skills and qualifications (with particular emphasis on their linguistic, cultural, methodological and IT competencies),

• improving the quality of vocational subject teaching, increasing knowledge and skills in relation to new technologies, organisational and technical solutions and vocational subject teaching methodology,

- enhancing the European dimension of the school,
- using international experience and good practice to integrate digital transformation, the environment and combating climate change as part of vocational training,
- creating the conditions for increasing the resilience of the education process to environmental variability, including pandemics, using good European practice.

#### Expected/planned effects/results of the implementation of the European Development Plan:

1. In the area of pupils and staff

- increased competence of teachers in teaching and self-development in introducing crosscutting themes of promoting the values of inclusion and diversity, tolerance of participation in democratic life,
- Increasing pupils' professional competencies, including the specific skills needed for the European labour market and employability, taking into account the themes and issues of the European Green Deal and digital transformation,
- A better understanding by teachers of educational practices, policies and systems in different European countries,
- greater capacity to create modernisation changes in the school and greater openness to the creeds associated with the Osnbruck Declaration,
- a greater understanding of the interrelationship between formal and non-formal education,
- increasing the quality of teachers' work for the benefit of their students,



- greater understanding and appreciation of the social, linguistic and cultural diversity of the EU,
- increasing support and promotion for mobility,
- Increasing the career and professional development opportunities for students,
- increased language skills of students and teachers,
- increased motivation and satisfaction in daily work and learning
- increasing environmental awareness in the context of climate creeds and the digital transformation of the economy,
- - developing students' specific professional skills in smart solutions to support facilities management for digital and energy transformation.

2. in the dimension of the ASP as an institution:

- adapting the educational offer and incorporating the objectives of the European education area,
- Creating innovative digital learning solutions to increase the school's alignment with sustainability requirements,
- greater capacity to create modernisation changes at school and greater openness to the EU, including the creation of blended programmes combining mobility and e-learning,
- more effective action to address the concerns of EU society,
- participation in creating and developing professional networks brings together representatives of different sectors.

In the framework of the two mobility projects carried out (Erasmusplus Programme), the ASP aims to ensure that the internship programmes develop specific skills in the context of the profession the students are learning, responding to ideas related to digital and energy transformation. The programmes will include learning about the latest technologies and solutions that are often poorly available in Poland. In addition, projects under the Podlaskie Voivodeship Operational Programme (ROP) are implemented in cooperation with the ARR in Łomża. As a result, pupils acquire new and complementary competencies, e.g. a SEP licence, which develops their professional competencies necessary in the labour market. As part of these projects, classrooms are equipped with modern equipment necessary for practical vocational training.



#### Summary and conclusions

Within the three very different education systems of Germany, Poland and Portugal, the system of examinations for vocational qualifications is, on the one hand, similar but has national specificities. Similarities of examination systems:

- The practical examination is the basis for the certification of professional qualifications in each country,

- external experts carry out the evaluation,

- a certificate of professional competence is issued

There is still a similarity between Poland and Germany in the examination process:

Examination boards are set up in both countries to organise and conduct examinations consisting of practical and theoretical parts.

Differences in examination systems:

- the organisations and institutions involved,
- examination tasks,
- procedure for applying for the examination,
- the organisation of examinations/examination procedures,
- duration of examinations,
- confirmation of qualifications,
- pass rates,
- re-examinations.

The specifics of the system in Portugal are:

- issuing of a certificate of professional qualification by the Ministry of Education,

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- professional competence is assessed by evaluating the presentation prepared by the student and presented to the examination.

- pupils who have received a school-leaving certificate are entitled to take a practical examination.

- examinations start after the end of the school year.

#### Germany - dual system

The dominant role played by the dual training system in Germany is primarily due to the many advantages of this system for its participants, which is the result of the multi-level cooperation between the federal/land government, the social partners/the Chamber and o businesses. A specific element is the way in which the dual training is financed, with entrepreneurs contributing to the costs of the training as well as being responsible for the learning outcomes, which contributes to its efficiency.

In Poland, the school system of VET education is the most developed. This education is provided by an upper or upper secondary school, which is responsible for the organisation of education and its results. Education at vocational schools is unpopular because it is considered unattractive, with the result that most students opt for technical schools.



#### Sources:

- Centrum Danych Badawczych Federalnej Agencji Zatrudnienia, FDZ Methodenreport -Niemiecka Klasyfikacja Zawodów 2010 - struktura, kodowanie i tabela przeliczeniowa, Nuernberg 2013.
- Europejska klasyfikacja umiejętności/Kompetencji, kwalifikacji i zawodów ESCO jako instrument wspomagający dostosowanie kształcenia do potrzeb rynku pracy, Iżycka H., Marszałek A., Ministerstwo Pracy i Polityki Społecznej, Departament Rynku Pracy, Warszawa, 2011
- Europejskie Centrum Rozwoju Kształcenia Zawodowego, Kształcenie zawodowe w Niemczech - krótki opis, Luksemburg 2007.
- Federalna Agencja Pracy, Niemiecka Klasyfikacja Zawodów 2010 Struktura i Klasyfikacja, Nuernberg 2013.
- Federalne Ministerstwo Edukacji i Badań Naukowych, Kształcenie dualne w skrócie, Berlin 2011.
- Federalne Ministerstwo Edukacji i Badań Naukowych, Niemiecki Raport Referencyjny EQR, Berlin 2013.
- Federalne Ministerstwo Edukacji i Badań Naukowych, Status uznawania kształcenia nieformalnego i incydentalnego w Niemczech - w ramach działań OECD "Uznawanie kształcenia nieformalnego i incydentalnego", Berlin 2008.
- 8) Federalny Dziennik Ustaw, Regulamin kształcenia mechatroników pojazdów samochodowych 20.07.2007, Bonn 2008
- Federalny Dziennik Ustaw, Regulamin kształcenia techników elektroników 25.07.2008, Bonn 2008



- 10) Federalny Instytut Kształcenia i Szkolenia Zawodowego, Arkusz danych dla techników elektroników, Bonn 11.01.2016
- 11) Federalny Instytut Kształcenia i Szkolenia Zawodowego, Arkusz danych dla technika mechatronika pojazdów samochodowych, Bonn 11.01.2016
- 12) Federalny Instytut Kształcenia Zawodowego i Szkoleń, Indeks uznanych zawodów szkoleniowych, Bonn, 2015 r.
- Federalny Instytut Kształcenia Zawodowego i Szkoleń, VET Data Report Germany 2013 -Fakty i analizy towarzyszące Federal Report on Vocational Education and Training - selected findings, Bonn 2014
- 14) http://landesrecht.thueringen.de/
- 15) http://www.dqr.de
- 16) http://www.unevoc.unesco.org/go.php?q=World+TVET+Database&ct=DEU
- 17) https://ec.europa.eu/esco
- https://www.aubi-plus.com/berufe/elektroniker-fachrichtung-energie-und-gebaeudetechnik-38/
- 19) https://www.aubi-plus.com/berufe/kraftfahrzeugmechatroniker-127/
- 20) International Standard Classification of Occupations ISCO-08. International Labour Office, Geneva 2012
- Koncepcja pracy szkoły Zespołu Szkół Zawodowych Nr 1 w Ostrołęce w latach 2013 2018, dostęp online: http://zsz1ostroleka.edu.pl/dok/Koncepcja\_pracy\_szkoly.pdf
- 22) Kształcenie zawodowe i ustawiczne vademecum. Krajowy Ośrodek Wspierania Edukacji Zawodowej i Ustawicznej, Warszawa 2013
- Polska Rama Kwalifikacji, Chłoń-Domińczak A., Sławiński S., Kraśniewski A., Chmielecka E., Instytut Badań Edukacyjnych Warszawa 2015
- 24) Program nauczania dla zawodu elektryk, 741103 o strukturze przedmiotowej, typ szkoły: zasadnicza szkoła zawodowa, rodzaj programu: liniowy, KOWEZiU, Warszawa 2012
- 25) Program nauczania dla zawodu mechanik pojazdów samochodowych, 723103 o strukturze przedmiotowej, typ szkoły: zasadnicza szkoła zawodowa, rodzaj programu: liniowy, KOWEZiU, Warszawa 2012



- 26) Reforma systemu kształcenia zawodowego w Polsce zakładane cele i oczekiwane rezultaty, Departament Kształcenia Zawodowego i Ustawicznego, Ministerstwo Edukacji Narodowej, Warszawa 2012
- 27) Rozporządzenie Ministra Edukacji Narodowej z dnia 07 lutego 2012 r. w sprawie ramowych planów nauczania w szkołach publicznych (Dz. U. z 2012 r., poz. 204)
- 28) Rozporządzenie Ministra Edukacji Narodowej z dnia 11 sierpnia 2015 r. zmieniające rozporządzenie w sprawie praktycznej nauki zawodu (Dz. U. z 2015 r., poz. 1183)
- 29) Rozporządzenie Ministra Edukacji Narodowej z dnia 23 grudnia 2011 r. w sprawie klasyfikacji zawodów szkolnictwa zawodowego (Dz. U. z 2012 r., poz. 7, z późn. zm.)
- 30) Rozporządzenie Ministra Pracy i Polityki Społecznej z dnia 7 sierpnia 2014 r. w sprawie klasyfikacji zawodów i specjalności na potrzeby rynku pracy oraz zakresu jej stosowania (Dz. U. z 2014 r., poz. 1145)
- 31) Statut Zespołu Szkół Zawodowych Nr 1 im. Józefa Psarskiego w Ostrołęce, dostęp online: http://zsz1ostroleka.edu.pl/dok/statut14.pdf
- 32) Stowarzyszenie Niemieckich Izb Przemysłowo-Handlowych, "Czym są Niemieckie Ramy Kwalifikacji", Nuernberg 2013
- 33) Ustawa z dnia 7 września 1991 r. o systemie oświaty (Dz. U. z 2004 r., Nr 256, poz. 2572 z późn. zm.)
- 34) Współpraca pracodawców ze szkołami zawodowymi Teraźniejszość i przyszłość, Krajowy Ośrodek Wspierania Edukacji Zawodowej i Ustawicznej, Warszawa 2013
- 35) www.arbeitsagentur.de
- 36) Zarys programu nauczania dla kształcenia zawodowego w zawodzie technik mechatronik pojazdów samochodowych, Uchwała Konferencji Ministrów Kultury i Edukacji z dnia 25 kwietnia 2013 r.
- 37) Zarys programu nauczania dla kształcenia zawodowego w zawodzie technik elektronik, Uchwała Konferencji Ministrów Kultury i Edukacji z dnia 16.05.2003 r.)

