

Erasmus+
KA220-VET – Cooperation partnerships in vocational education and training

"Leader of external cooperation of the vocational school (LEADext)"
No 2021-1-PL01-KA220-VET-000033019

Result O3.

A set of educational packages for the instructor and training participant in the field of a new competence "Coordinating the cooperation of the institution providing vocational education and training with external companies, including acquiring sponsors"

The project was implemented with the financial support of the European Commission. The project or publication reflects only the position of its author and the European Commission is not responsible for any included substantive content.

2023-2024

MODULE 1. COORDINATING THE COOPERATION OF THE INSTITUTION PROVIDING VOCATIONAL EDUCATION AND TRAINING WITH EXTERNAL COMPANIES, INCLUDING ACQUIRING SPONSORS

Modular unit: M1.U2. Creating patronage classes and organising dual education

**SET OF GUIDES
FOR THE PARTICIPANT AND THE INSTRUCTOR**

Compilation of the team:

Task Coordinator and Executor: Chamber of Commerce and Industry of Radom (Poland)

Executor: WIR Development and Innovation Foundation (Poland)

Executor: Jordbrugets Uddannelsescenter Århus (Denmark)

Executor: Federacion Empresarial Metalurgicavalenciana (Spain)

Executor: Action Synergy SA (Greece)

2023-2024

Reviewers:

Jakob Vest Arler (OKNygaard A/S, Brabrand, Denmark)

Tomasz Magnowski (Tadeusz Kościuszko Technical School Complex, Radom, Poland)

Dr Monika Mazur-Mitrowska (Mazovian Self-Governing Centre for Teacher Training, Radom Division, Poland)

Sofia Pakalidou (D Group, Athens, Greece)

Jose Manuel Puente Solaz (ESCUELAS JESUITAS TECHNIAN OF EMPLOYMENT AND TRAININGS, Valencia, Spain)

Methodological consultation:

prof. Daniel Kukla (Jan Długosz University in Częstochowa, Poland)

Editorial development:

Ewelina Sikora

Language correction:

Katarzyna Skoczylas

This handbook is a teaching aid for the module unit **M1.U2. Creating patronage classes and organising dual education** included in the module **M1. Coordination of cooperation between the educational institution and external companies, including the acquisition of sponsors.**

The M1 module also includes four other modular units:

- M1.U1. Acquiring external companies for cooperation and promoting vocational education,
- M1.U3. Obtaining support from external companies in the field of equipping workshops and school laboratories,
- M1.U4. Involving employers in vocational exams organized by the school, providing career counseling and preparing students to enter the labor market,
- M1.U5. Training of vocational school teachers in cooperation with employers

which together form the teaching case for the modular curriculum for the course **Coordinating the cooperation of the institution providing vocational education and training with external companies, including acquiring sponsors.**

The material in this guide reflects the views only of the authors, and the European Commission accepts no responsibility or liability whatsoever with regard to the content.

2023-2024



IZBA PRZEMYSŁOWO-HANDLOWA
ZIEMI RADOMSKIEJ

Chamber of Commerce and Industry of the Radom Area

Rwańska str. 86, 26-600 Radom (Poland); Telephone: 048 384 56 60; 600 245 881; 668 446 048

e-mail: izba@radomskibiznes.pl [http://](http://radomskibiznes.pl/) <https://radomskibiznes.pl/>

CONTENTS

1. INTRODUCTION.....	7
2. PREREQUISITES	11
3. TEACHING MATERIAL.....	12
3.1. Defining the term "patronage class" and indicating actions that can be taken within the patronage class.....	12
3.1.1. Detailed learning outcomes.....	12
3.1.2. Learning material.....	12
3.1.3. Exercises	17
3.1.4. Progress test (self-assessment)	20
3.1.5. Recommended sources of information.....	20
3.2. Indicating the benefits of various stakeholder groups from the creation of a patronage class.....	22
3.2.1. Detailed learning outcomes.....	22
3.2.2. Learning material.....	22
3.2.3. Exercises	26
3.2.4. Progress test (self-assessment)	30
3.2.5. Recommended sources of information.....	30
3.3. Creating a patronage class and drawing up an agreement between the school and the enterprise to create a patronage class.....	32
3.3.1. Detailed learning outcomes.....	32
3.3.2. Learning material.....	32
3.3.3. Exercises	37
3.3.4. Progress test (self-assessment)	40
3.3.5. Recommended sources of information.....	40
3.4. Defining the term "dual education" and indicating the benefits of introducing practical classes for students in the form of dual education for various stakeholder groups	41
3.4.1. Detailed learning outcomes.....	41
3.4.2. Learning material.....	41
3.4.3. Exercises	47
3.4.4. Progress test (self-assessment)	48
3.4.5. Recommended sources of information.....	49
3.5. Verification of the company in terms of the possibility of conducting practical classes for students in the form of dual education.....	51
3.5.1. Detailed learning outcomes.....	51
3.5.2. Learning material.....	51

3.5.3. Exercises	54
3.5.4. Progress test (self-assessment)	55
3.5.5. Recommended sources of information	56
3.6. Drawing up an agreement between the parties involved in the process of practical training of students for dual education in the company.....	58
3.6.1. Detailed learning outcomes	58
3.6.2. Learning material	58
3.6.3. Exercises	69
3.6.4. Progress test (self-assessment)	70
3.6.5. Recommended sources of information	71
3.7. Preparing a programme of practical classes organised in the dual education system.....	72
3.7.1. Detailed learning outcomes	72
3.7.2. Learning material	72
3.7.3. Exercises	76
3.7.4. Progress test (self-assessment)	77
3.7.5. Recommended sources of information	78
3.8. Verifying the possibility of implementing the learning outcomes included in the program of practical classes organized in the form of dual education in the company.....	79
3.8.1. Detailed learning outcomes	79
3.8.2. Learning material	79
3.8.3. Exercises	80
3.8.4. Progress test (self-assessment)	81
3.8.5. Recommended sources of information	82
3.9. Selection of instructors to conduct practical classes for students in the company.....	83
3.9.1. Detailed learning outcomes	83
3.9.2. Learning material	83
3.9.3. Exercises	86
3.9.4. Progress test (self-assessment)	87
3.9.5. Recommended sources of information	88
3.10. Preparing the student for practical classes organized in the form of dual education in the company and documenting the dual education process in the company.....	89
3.10.1. Detailed learning outcomes	89
3.10.2. Learning material	89
3.10.3. Exercises	94
3.10.4. Progress test (self-assessment)	96
3.10.5. Recommended sources of information	97
3.11. Monitoring the process of practical education for students	98
3.11.1. Detailed learning outcomes	98
3.11.2. Learning material	98
3.11.3. Exercises	102

3.11.4. Progress test (self-assessment)	104
3.11.5. Recommended sources of information	104
3.12. Diagnosing the knowledge and skills of students participating in practical classes organized in the form of dual education at the employer	106
3.12.1. Specific learning outcomes	106
3.12.2. Learning material	106
3.12.3. Exercises	111
3.12.4. Progress test (self-assessment)	113
3.12.5. Recommended sources of information	114
3.13. Evaluation of practical classes for students organised in the company's dual education system.....	115
3.13.1. Detailed learning outcomes	115
3.13.2. Learning material	115
3.13.3. Exercises	124
3.13.4. Progress test (self-assessment)	126
3.13.5. Recommended sources of information	127
4. GLOSSARY	128
5. LITERATURE	129

1. INTRODUCTION

The paper presents a guide for the trainee and the trainer of the professional competence "**Coordinating the cooperation of the institution providing vocational education and training with external companies, including acquiring sponsors**", which was developed in the Erasmus+ project "Leader of external cooperation of a vocational school (LEADext)". The project was co-financed by the European Union under the Erasmus+ Cooperation for innovation and the exchange of good practices Strategic Partnership for vocational education and training programme.

The following results developed in the "LEADext" project formed the basis for the student and tutor guide:

- IO1. Profile of professional competences in the field of coordination of cooperation between the educational institution and external companies, including acquiring sponsors;
- IO2. Modular training programme in the new competence "Coordinating the cooperation of the institution providing vocational education and training with external companies, including acquiring sponsors" in relation to ECVET requirements.

The materials developed as part of the handbook will primarily be used to create an e-learning course and can also be used for classroom teaching.

By learning to carry out the professional tasks assigned to the coordinator for cooperation of an educational organisation with external companies, the trainee will acquire the necessary knowledge and professional skills included in module M1. Coordination of cooperation between the educational institution and external companies, including acquiring of sponsors.

The module is divided into modular units containing, among other things, learning material, review questions, exercises that can be completed online as well as in the desktop version and a progress test, recommended supplementary literature, including self-study.

In the study, teaching materials have been prepared for the module unit **M1.U2. Creating patronage classes and organising dual education** included in module M1. Coordinating the cooperation of the institution providing vocational education and training with external companies, including acquiring sponsors.

The M1 module also includes four other modular units:

M1.U1. Acquiring external companies for cooperation and promoting vocational education,

M1.U3. Obtaining support from external companies in the field of equipping workshops and school laboratories,

M1.U4. Involving employers in vocational exams organized by the school, providing career counseling and preparing students to enter the labor market,

M1.U5. Training of vocational school teachers in cooperation with employers which were developed by the individual project partners.

The above-mentioned five modular units together form a complete **teaching case** for the modular curriculum for the course **Coordinating the cooperation of the institution providing vocational education and training with external companies, including acquiring sponsors**.

Before starting the training, the trainee should familiarise himself/herself with the prerequisites and the detailed learning outcomes, i.e. the knowledge, skills and attitudes that he/she will acquire on completion of the training within the given modular unit.

The handbook covers issues that the educational organisation's external relations coordinator may encounter in the course of his/her professional duties.

The development of the learning material drew on the experience of project partners in the field of cooperation between educational establishments and external companies. The learning material was supplemented with an online (e-learning) course to be carried out by the trainee himself.

The proposed training can also be delivered in a traditional (classroom, face to face) format. To this end, the trainer conducting the classroom training will be tasked with:

- familiarise yourself with the provisions contained in outcome two of the project, i.e. IO2. Modular training programme in the new competence "Coordinating the cooperation of the institution providing vocational education and training with external companies, including acquiring sponsors" in relation to ECVET requirements;
- preparation of the necessary teaching aids using the materials developed in the project to enable the online delivery of the training.

It is important that the trainee verifies his/her level of competence at entry before learning the module unit. This will be enabled by the provisions outlined in the 'Entry requirements' section.

Once you have familiarised yourself with the content of the individual topics included in the modular unit in the handbook and in the online course, you will be required to complete exercises and a progress test. The test will require the participant to carry out a self-assessment of the knowledge and skills acquired in the respective topic. A positive result of the self-assessment is a kind of pass to the next lesson topic specified in the modular unit. In the case of a negative result, it is recommended to repeat the content covered by the topic included in the modular unit.

In the case of online training, the basis for passing the modular unit will be the completion of a post-test. The test will be made available to the trainee after he/she has gone through all the content and completed the exercises and self-assessment tests included in the modular unit.

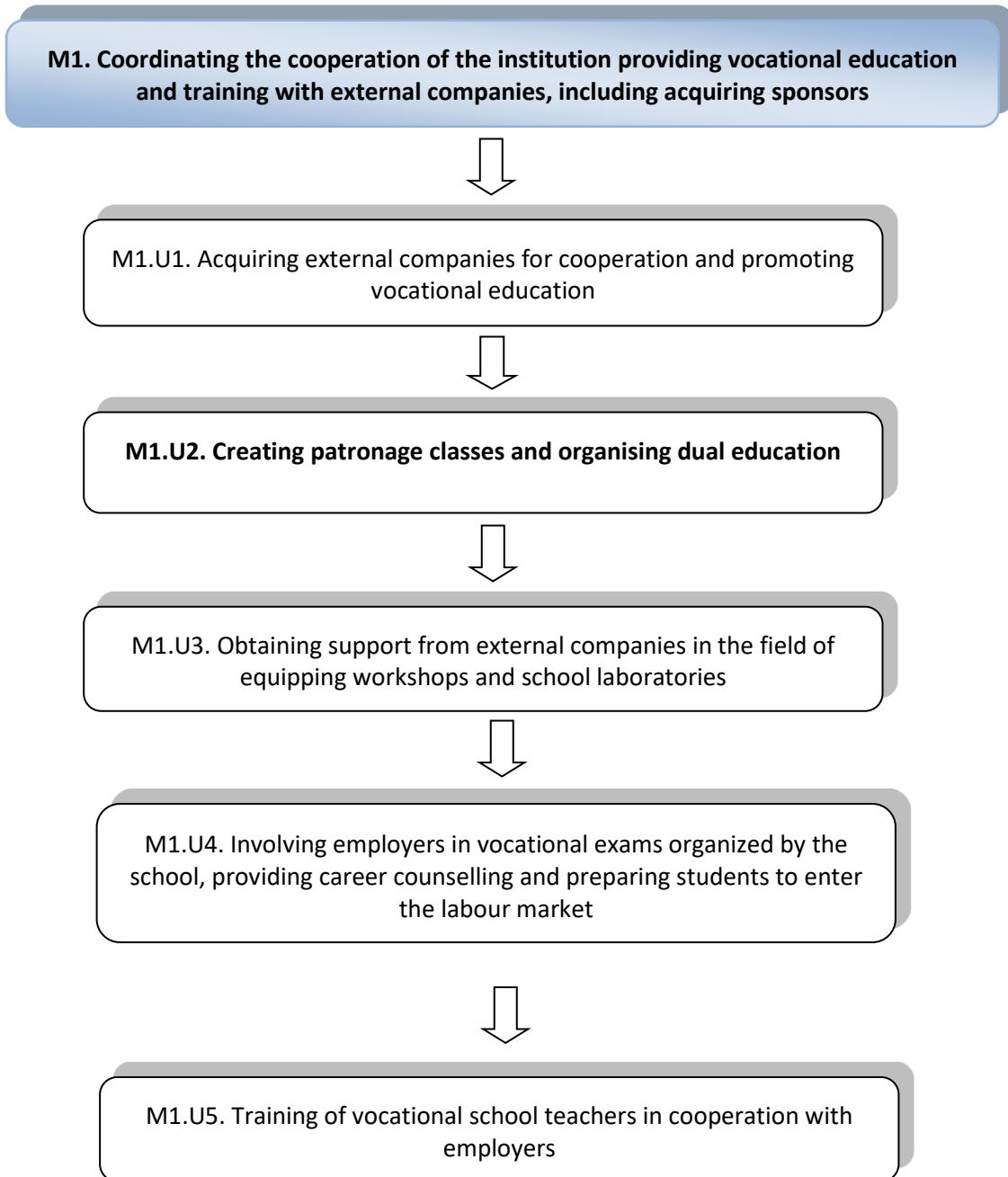
Note: in the case of educational content where there are references to legal acts, it should be remembered that these are current as of the date of preparation of the study and must be updated. The presented learning content in the modular unit is in accordance with the legal status as of 01.12.2023.

The table below shows the approximate number of hours which, in the opinion of the project partners, are necessary for the participant to master the learning outcomes specified in the individual module units.

Module name	The name of the modular unit	Number of teaching hours			Number of ECVET points ¹
		e-learning activities	Own work	Total	
M1. Coordinating the cooperation of the institution providing vocational education and training with external companies, including acquiring sponsors	M1.U1. Acquiring external companies for cooperation and promoting vocational education	20	15	35	15
	M1.U2. Creating patronage classes and organising dual education	20	30	50	
	M1.U3. Obtaining support from external companies in the field of equipping workshops and school laboratories	20	15	35	
	M1.U4. Involving employers in vocational exams organized by the school, providing career counselling and preparing students to enter the labour market	20	30	50	
	M1.U5. Training of vocational school teachers in cooperation with employers	20	35	55	
Total M1		100	125	225	

¹ As part of the partnership in the project, for calculating the number of ECVET points, it was assumed that there are 15 teaching hours per 1 point. This is due to the fact that in a vocational school there are about 900 didactic hours per year, which in terms of 60 credits gives 15 didactic hours per 1 credit.

From the trainee's point of view, it is important to know the training path recommended by the project partners. This is also shown in the figure below.



The material in this guide reflects the views only of the authors, and the European Commission accepts no responsibility or liability whatsoever with regard to the content.

2. PREREQUISITES

When starting to complete the programme of modular unit **M1.U2. Creating patronage classes and organising dual education**, you should be able to:

- use a variety of information sources,
- identify their own rights and obligations,
- recognise basic legal acts,
- participate in discussion, presentation and defence of their own position,
- feel responsible for their own and others' health (life),
- apply basic ethical principles (reliable work, punctuality, keeping one's word, honesty, responsibility for consequences, truthfulness),
- cooperate in a group, taking into account the division of tasks,
- operate a computer at a basic level.

3. TEACHING MATERIAL

3.1. Defining the term "patronage class" and indicating actions that can be taken within the patronage class

3.1.1. Detailed learning outcomes

As a result of learning within a topic, you will be able to:

- define the term patronage class,
- name and explain the activities that can be undertaken as part of an umbrella class,
- recognise the term patronage class,
- distinguish between the activities that can be undertaken within an umbrella class,
- draw up a list of activities that can be undertaken as part of the patronage class,
- present to the parties the activities that can be undertaken within the framework of the patronage class.

3.1.2. Learning material

Patronage class

The establishment of a patronage class at the level of vocational education in a specific school profession comes down to its being supported by an institution, an enterprise. The scope of support varies and depends on the contract or agreement concluded between the parties, i.e. the authority running the school (or the school on the basis of a power of attorney) and the enterprise or institution (university), research institute. In Poland, the website of the Ministry of National Education indicates the following possibilities for a patron to support the activities of a vocational school:

- admission of pupils for work placements,
- equipping school laboratories with equipment and teaching materials,
- additional training,
- funding scholarships for the most talented students,
- participation of a company representative in the development of a curriculum tailored to the companies' profile,
- taking part in meetings of the board of education¹.

¹ Ministry of National Education in Poland: Obligation of schools to cooperate with employers.
<https://www.gov.pl/web/edukacja/obowiazek-wspolpracy-szkol-z-pracodawcami> (accessed 17.01.2024).

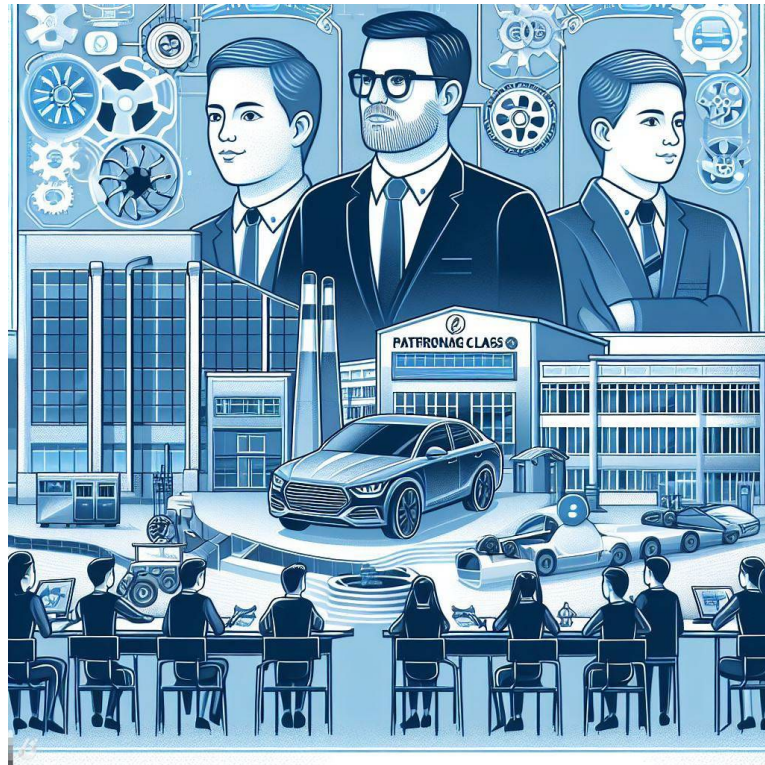


Fig. 1. The concept of 'patronage class' defined with the support of artificial intelligence

Source: figure generated using AI: <https://tiny.pl/cbfd5> (accessed 12.02.2024).

Examples of good practice – patronage classes:

- 1) in 12 vocational school complexes in the Opole agglomeration area, patron classes of the Opole University of Technology were created²;
- 2) patronage classes set up by companies³ :
 - MAN BUS Sp. z o. o. - has assumed patronage of a class training in the profession of automotive electromechanic at Vocational School Complex No. 3 in Starachowice⁴,
 - CELSA Huta Ostrowiec Sp. z o. o. has assumed patronage of a class in which students prepare for the profession of mechatronics technician at School Complex No. 3 in Ostrowiec Świętokrzyski⁵,
 - EKO Energia Polska, Kielce Technology Park has taken patronage of the training of students in the electrical technician profession, which is conducted at the Electrical School Complex in Kielce⁶,

² City of Opole website, project "Vocational training for the labour market - 3": <https://www.opole.pl/dla-mieszkanca/ksztalzenie-zawodowe-dla-ryнку-pracy-3> (accessed 12.09.2023).

³ Website of the dokariery.pl portal, article "Patronage classes as a ticket to the labour market": <https://dokariery.pl/-/klasy-patronackie-przepustka-na-ryнку-pracy> (accessed 12.09.2023).

⁴ Website of the Vocational School Complex No. 3 in Starachowice: <http://zsz3.net/uczniowie-klasy-patronackiej-man-zdali-egzamin/>, (accessed 12.09.2023).

⁵ AutomationB2B industry portal website, article: "Celsa's new mechatronics patronage class": <https://automatykab2b.pl/gospodarka/45897-nowa-mechatroniczna-klasa-patronacka-celsy>, (accessed 12.09.2023).

⁶ Kielce City Hall website, article "Another patronage class in Kielce's "Elektrek": <https://www.kielce.eu/pl/aktualnosci/kolejna-klasa-patronacka-w-kielckim-elektryku.html>, (accessed 12.09.2023).

- Volkswagen has extended its patronage to the education of students in the professions of automatics, automotive electromechanic, precision mechanic, mechatronics conducted at the Complex of Schools No. 1 in Swarzędz or the Complex of Polytechnic Schools in Września⁷,
- Peugeot Polska has provided patronage for more than a dozen classes in the profession of motor vehicle mechanic, including, among others, at Zespół Szkół Ponadgimnazjalnych nr 2 - Centrum Kształcenia Ustawicznego in Kluczbork⁸, Zespół Szkół Samochodowych in Warsaw⁹,
- BSH Sprzęt Gospodarstwa Domowego Sp. z o.o., Dalkia Łódź S.A., "Engorem" Spółka z o.o. and PGE Dystrybucja Oddział Miasto - Łódź have been patronising classes in power engineering at Zespół Szkół Ponadgimnazjalnych nr 9 (currently: Zespół Szkół Politechnicznych im KEN) in Łódź since 2008¹⁰,
- Five Spanish programs of good practices in Dual vocational training have been selected by the ministry: <https://www.navarra.es/es/-/cinco-programas-navarros-de-buenas-practicas-en-fp-dual-seleccionados-por-el-ministerio-en-el-listado-de-ejemplos-autonomicos-de-calidad-europea>
LA FORMACIÓN DUAL EN ESPAÑA: SITUACIÓN Y PERSPECTIVAS:
<https://www.ces.es/documents/10180/5232164/Inf0123.pdf>
Presentation of Good Practices in Dual Vocational Training:
https://www.youtube.com/watch?v=0GH7Xx9IB_0
- The Danish Vocational Education and Training (VET) system uses a dual education model, where students divide their time between school and work-based learning in companies like Maersk and Novo Nordisk¹¹.

Activities undertaken as part of the patronage class - examples

Example 1. Zespół Szkół numer 3 w Ostrowcu Świętokrzyskim (School Complex No. 3 in Ostrowiec Świętokrzyski) and CELSA Huta Ostrowiec signed a cooperation agreement on education in the mechatronics technician profession. As part of the agreement, the company will provide young people with, among other things:

- additional lessons in vocational subjects taught by company employees,
- in-house apprenticeship,
- cognitive visits and TQM training,
- The best students will be employed in this company or in partner plants¹².

Example 2. Zespół Szkół Elektrycznych w Kielcach (Kielce Electrical School Complex) and Kielce Technology Park, the company EkoEnergia Polska within the framework of patronage class enable students to

⁷ Volkswagen websites informing about the patronage of schools providing vocational training in trade education professions: <https://www.uczesiewwvp.pl/> or [volkswagen-poznan.pl/en/careers/uczniowie](https://www.volkswagen-poznan.pl/en/careers/uczniowie), (accessed 12.09.2023).

⁸ Kluczbork District website: Inauguration with a master driver, https://www.powiatkluczborski.pl/aktualnosci/peugeot_otwarcie.htm (accessed 14.09.2023).

⁹ Website of motofakty.co.uk: Aided education: <https://motofakty.pl/edukacja-wspomagana/ar/c4-16138769> (accessed 14.09.2023).

¹⁰ <http://obserwatoriumedukacji.pl/klasy-patronackie-w-szkolach-zawodowych/>

¹¹ Danish Ministry of Education, "The Danish Vocational Education and Training System," (2019). Available at: <https://eng.uvm.dk/upper-secondary-education/vocational-education-and-training-in-denmark>

¹² AutomationB2B industry portal website, article: "Celsa's new mechatronics patronage class": <https://automatykab2b.pl/gospodarka/45897-nowa-mechatroniczna-klasa-patronacka-celsy>, (accessed 12.09.2023).

participate in internships in companies, practical classes related to photovoltaic installations, solar power plants, their service and operation, which will translate into a better pass rate of professional exams¹³.

Example 3: Zespół Szkół nr 1 in Swarzędz, Zespół Szkół Politechnicznych in Września and Volkswagen Polska in Poznań provide patronage classes:

- practical vocational training in specially prepared, modern student workshops at the Volkswagen Poznań Training Centre,
- participation of the best students in additional training courses from the offer of the Volkswagen Poznań Competence and Organisation Development Centre,
- participating in exchanges and international projects in which they build electric vehicles, program controllers, etc. with colleagues from other factories. Depending on the profession and the nature of the exchange, trips are organised to Kassel, Hanover, Berlin or Mladá Boleslav, among others,
- participation of the best graduates in the Wanderjahre programme - a one-year stay at one of the group's overseas plants,
- concern's Best-Apprentice-Award for the graduate with the best results from the yearbook,
- practical vocational training from grade 2 onwards, additional training for students¹⁴.

Recruitment to the Volkswagen patronage class takes place by inviting the potential student candidate to a recruitment meeting, during which, among other things, he tells the committee about himself and why he has chosen the patronage class. The next stage of the recruitment process is connected with undergoing a compulsory medical examination, the result of which is a prerequisite for studying in a given school profession. The results of the recruitment process are communicated to the potential candidate for the patronage class by the recruitment committee.

Example 4 Zespół Szkół Politechnicznych im. KEN in Łódź and the companies BSH Sprzęt Gospodarstwa Domowego Sp. z o. o., Dalkia Łódź S.A., "Engorem" Spółka z o.o., PGE Dystrybucja Oddział Miasto - Łódź, Zakład Gazowniczy Łódź, Zakład Wodociągów i Kanalizacji Sp. zo.o. in Łódź enable the school and its students, among others:

- pupils' participation in vocational excursions, during which they are presented with various positions where they may work in the future,
- students' participation in work placements and didactic classes, which are conducted under the watchful eye of practical training supervisors - high-level specialists - so that students learn about the specifics of working in a profession,
- enable students to become familiar with the latest technologies used in the manufacture of products,
- students of patron classes to participate in integration trips organised by the company,
- participation of pupils in free German language courses,
- participation of students in additional paid work placements during the summer holidays,
- Providing students with textbooks for vocational subjects,
- pupil-graduates of patronage classes quickly find jobs in patronage companies,
- receipt by the best students of scholarships or performance awards, which are presented on the occasion of the end of the school year,
- school to cover the costs of organising the school's stand at the Łódź Education Fair,

¹³ Kielce City Hall website, article "Another patronage class in Kielce's "Elektrek":

<https://www.kielce.eu/pl/aktualnosci/kolejna-klasa-patronacka-w-kieleckim-elektryku.html>, (accessed 12.09.2023).

¹⁴ Vocational training at Volkswagen Polska:

https://www.uczesiewwvp.pl/_files/ugd/fa8364_14c4c59703184de9b33caa8f1599eda6.pdf, (accessed 12.09.2023).

- The school's opinion of the profession's curricula by employers,
- school to carry out joint projects with employers aimed, for example, at retrofitting classrooms, additional classes for students, specialised training,
- The school's employer support in recruiting students,
- school to retrofit an examination centre and co-organise examinations,
- school to create and retrofit a patron teaching room with teaching aids,
- school to prepare a programme of practical classes in the company together with the company,
- obtaining financial support by the school in the form of a donation¹⁵.

Example 5: Zespół Szkół Samochodowych in Warsaw and Peugeot Polska as part of an umbrella class makes it possible:

- pupils to use the assistance of modern Peugeot motor vehicles in practical classes,
- students to learn about technical innovations at the Peugeot Science and Training Centre,
- students to undertake work placements at authorised dealerships,
- students gain a Peugeot Certified Technician certificate, which is handed out at the end of the course to students in person by the President of Peugeot Polska
- schools with teaching aids for diagnostic laboratories, such as a Peugeot 607 car and mock-ups of various mechanical parts,
- schools to provide logistical and technical support¹⁶.

Example 6. In Spain is not common that companies support training centers, but the help in toher ways. The way of patronage it helpen sutdents that want to attend to vocational traianing or universidity with new kind of grants:

- The reduction of public funding for the spanish universities forces them to look for new financing ways. Companies requires and demands Talent, Research, Innovation, Entrepreneurship. This forces to establish between companies and the Universities, new porceses and collaboration forms as the patronage programmes. The purpose of a Patronage Program is to generate stable funding soources that allows the Universities continue developing projects with their students, that produce an extraordinary impact on the socioeconomic environment and that, otherwise, these project would not take place.
- ONCE Foundation Scholarship: For people with disabilities, this grant provides financial support to Vocational Training students to facilitate their access to education and training.
- Fundación Mapfre Scholarship: This grant is aimed to cover fees, school supplies and other costs related with vocational training.
- Repsol Foundation Scholarship: Offered by the Repsol Foundation, this grant helps students that study energy and sustainability vocational training.
- Amancio Ortega Foundation Scholarship: This grant provides the opportunity to study an academic year abroad to Vocational Training students, promoting internationalization and language learning

Example 7. In Denmark, patronage-style classes and vocational education are deeply integrated within the dual system of vocational education and training (VET). Companies play a significant role in shaping the curriculum, providing apprenticeships, and preparing students for the workforce.

¹⁵ Developed from: Patronage classes as a form of cooperation between employers and schools. Łódź experience: <http://obserwatoriumedukacji.pl/klasy-patronackie-w-szkolach-zawodowych/>, (accessed 12.09.2023).

¹⁶ Peugeot Polska patronage class: https://www.powiatkluczborski.pl/aktualnosci/peugeot_otwarcie.htm, (accessed 12.09.2023).

For example, TECHCOLLEGE in Aalborg collaborates with various industries to offer vocational training that combines theoretical education with hands-on work experience. Students alternate between classroom learning and practical training in industries such as IT, construction, and mechanics. Companies provide specialized workshops, mentorship, and access to modern technologies, helping students develop skills directly applicable to the workforce. Top students often gain employment at these partner companies after graduation. Another initiative is the "New Apprenticeship" program, where students can start their vocational education directly with a company. These companies provide training that allows students to acquire both practical skills and the theoretical knowledge typically covered in vocational schools¹⁷.

3.1.3. Exercises

Exercises recommended for the online version of the training:

Exercise 1.

Tick the statements that correspond to the definition of the term **patronage class**:

<input type="checkbox"/>	the patronage of a particular class by a company or institution.
<input type="checkbox"/>	within the umbrella class, a representative of the company leads the educational boards.
<input type="checkbox"/>	is a venture in which the company takes patronage of an entire school.
<input type="checkbox"/>	the extent of the school's (class's) support is defined in a contract or agreement between the school and the company.

Correct answer key:

the patronage of a particular class by a company or institution.

the extent of the school's (class's) support is defined in a contract or agreement between the school and the company.

For the person transferring the paper version to the online version, after each exercise:

If the answer is good, a message will appear:

Bravo!

You have mastered the material very well.

With the wrong answer:

Unfortunately, you have not been able to solve the task correctly.

Try again. Alternatively, repeat the topic again online or look at the student guide.

Exercise 2.

Evaluate the truthfulness of the following activities in terms of whether they can be undertaken as part of an umbrella class. Tick 'True' if the activity is possible to undertake as part of an umbrella class or 'False' if it is not possible to undertake.

¹⁷ <https://techcollege.dk/english/>

Statement	Truth	False
admission of students for work placements	X	
company purchase of equipment for school classrooms	X	
co-organisation of examinations by the school and the company	X	
preparation by the school, in conjunction with the company, of a programme of practical classes in the company	X	
sponsoring students with textbooks for vocational subjects	X	
covering the costs of pupils' participation in German language courses	X	
award of scholarships by the company to the best students	X	
introducing pupils to technical innovations	X	
provision of career guidance by the company		X
organising excursions for teachers selling the company's products		X

For the person transferring the paper version to the online version, after each exercise:

If the answer is good, a message will appear:

Bravo!

You have mastered the material very well.

With the wrong answer:

Unfortunately, you have not been able to solve the task correctly.

Try again. Alternatively, repeat the topic again online or look at the student guide.

Correct answer key:

Statement	Truth	False
admission of students for work placements	X	
company purchase of equipment for school classrooms	X	
co-organisation of examinations by the school and the company	X	
preparation by the school, in conjunction with the company, of a programme of practical classes in the company	X	
sponsoring students with textbooks for vocational subjects	X	
covering the costs of pupils' participation in German language courses	X	
award of scholarships by the company to the best students	X	
introducing pupils to technical innovations	X	
provision of career guidance by the company		X
organising excursions for teachers selling the company's products		X

Exercises recommended for the classroom version of the training

Exercise 1. Brainstorming

Mileage:

The method consists in collecting, in a short time, a large number of associations and solution ideas for a given keyword/problem. The facilitator explains the method to the group and presents the rules. A poster with the written rules can be displayed in the classroom (see attachment 1).

Slogan/problem: what activities can representatives of the vocational school and the employer undertake within the framework of the patronage class?

The method has a step-by-step process:

I. Generation of ideas

You can inspire the generation of ideas by posing questions or issues e.g.

- what associations you have,
- provide possible solutions,
- what idea(s) do you have for...?
- what do you associate ...? etc.

The trainer addresses the questions to the whole group. The trainer writes the answers on the board or asks one of the trainees to do so. All ideas are noted down. At the end, the trainer reads out all the written suggestions. Participants can ask questions about the individual ideas, ask for clarification and clarify their meaning. Answers are given by the authors of the ideas.

II. Evaluation and analysis of the ideas submitted

This stage serves to select the ideas submitted. You can make it in different ways:

- Together with the participants, group ideas for the same or similar solutions. Then divide the participants into as many teams as there are groups of ideas. The teams analyse and choose the best solution, present their results to each other. Together with the whole group choose the best solution;
- The trainer divides the participants into teams and assigns each team a proportional number of ideas from the resulting list. The teams analyse them and choose one which meets the criteria established earlier. They present their choice to the rest of the participants, together with a justification. All participants decide on the best solution;
- If the number of participants is small, two points can be allocated to each participant, time can be given to reflect on the list of solutions presented and they can be asked to choose the two best ones. The sum of the points for each solution determines which one will be taken into account.

III. Putting ideas/solutions into practice

The whole team, under the guidance of the trainer, works on developing the application of the chosen idea in practice. It is also possible to divide participants into teams to develop the implementation of the solution.

Organisational framework:

You will need: a whiteboard or poster to write down ideas, a poster with the rules for Brainstorming.

Turnaround time 10-20 minutes, depending on the option chosen.

Appendix 1 Poster - Brainstorming rules:

- Every idea is good, even the craziest ones.
- The quantity of ideas is more important than their quality.
- Inspire others with your ideas.
- Each idea is recorded in the form given by the author.
- We do not comment on ideas.
- We do not criticise ideas.
- We do not add our own proposals to the ideas of others.
- We take the floor at the sign of the presenter.
- We all participate on an equal footing in the submission of ideas.
- 5 minutes for submitting ideas.

3.1.4. Progress test (self-assessment)

Can you:	Yes	No
1) define the term patronage class?		
2) name and explain the activities that can be undertaken as part of an umbrella class?		
3) recognise the term patronage class?		
4) distinguish between the activities that can be undertaken as part of an umbrella class?		
5) draw up a list of activities that can be undertaken as part of a patronage class?		
6) present to the parties the activities that can be undertaken as part of the patronage class?		

If you selected the answer "NO", we propose you returning to the teaching material and its repeated analysis in order to achieve intended learning outcomes (knowledge, skills).

If necessary, use additional source of information prepared to each topic.

3.1.5. Recommended sources of information

Recommended literature – you can find more information on the topic in:

1. Baldysz B.: *Patronage class of the Opel plant in Gliwice*: <http://radasektorowa-motoryzacja.pl/wp-content/uploads/2018/09/Klasa-Patronacka-Zak%C5%82adu-Opla-w-Gliwicach.pdf> (accessed 20.12.2023).
2. *Gestamp Poland patronage class*, http://zspwrzesnia.pl/pliki/pliki_2019-2020/gestamp_2020.pdf (accessed 20.12.2023).
3. Komorniczak J.: *Patronage class. A tool used in the cooperation of vocational schools with entrepreneurs. Part IV. Kraków Technology Park 2019.* <https://www.kpt.krakow.pl/wp-content/uploads/2020/06/klasa-patronacka.pdf> (accessed 20.12.2023).
4. *Legal guide for the Polish family abroad - Spain*: <https://dziecizagranica.gov.pl/hispania/> (accessed 20.12.2023).
5. *Legal guide for a Polish family abroad - Greece*: <https://dziecizagranica.gov.pl/grecja/> (accessed 20.12.2023).

6. *Legal guide for the Polish family abroad - Denmark:* <https://dziecizagranica.gov.pl/dania/> (accessed 20.12.2023).
7. *Patronage system in Spain* <https://culturaymecenazgo.cultura.gob.es/blog/12-otras-formas-de-mecenazgo.html> (accessed 20.12.2023).
8. *Patronage at the universities* <https://www.uclm.es/empresas/mecenazgo> (accessed 20.12.2023).
9. *Ministry of Children and Education - Vocational Education and Training in Denmark:* <https://eng.uvm.dk/> (accessed 20.12.2023).
10. *TECHCOLLEGE collaborates with companies to offer practical vocational training.* <https://techcollege.dk/english/> (accessed 20.12.2023).

3.2. Indicating the benefits of various stakeholder groups from the creation of a patronage class

3.2.1. Detailed learning outcomes

As a result of learning within a topic, you will be able to:

- lists the stakeholder groups directly and indirectly involved in the patronage classes,
- defines what a benefit is,
- explains to the employer the benefits of cooperation with the school in connection with the creation of the patronage class,
- explains to the other parties their benefits of creating an umbrella class,
- recognises groups of stakeholders directly and indirectly involved in patronage classes in companies,
- develops sets of benefits for equal groups of stakeholders resulting from the creation of a patronage class.

3.2.2. Learning material

Stakeholder groups directly and indirectly involved in patronage classes

1. Directly – the parties signing the agreement or contract to set up the patronage class (Figure 2):

- 1) a representative of the governing body in charge of the work of the school or the head teacher or a designated person with authority to do so;
- 2) legal representative of the employer.



Fig. 2. Direct stakeholders - parties signing the agreement to set up a patronage class

Source: figure generated using AI: <https://tiny.pl/cbfcn> (accessed 20.01.2024).

2. Indirectly – entities benefiting from or participating in the implementation of activities resulting from the partnership agreement for the creation of a patronage class (note their list may be different, as it results directly from the scope of the agreement concluded):

- 1) students of the patronised class (Figure 3);
- 2) vocational subject teachers teaching in the patronised class;
- 3) careers advisors who wish, for example, to organise a trip for young people to a sponsoring company;
- 4) employees in the company holding the patronage who are delegated to activities related to the scope of the patronage agreement (e.g. employees who are supervisors of practical training instructors, HR staff);
- 5) lawyers representing the parties to the contract or agreement.



Fig. 3. A student taking a practical class in a company with his instructor
Source: figure generated using AI: <https://tiny.pl/cbff2> (accessed 20.01.2024).

3. Other stakeholders:

- 1) representatives of the school's governing body (local authority);
- 2) parents of pupils;
- 3) local community.

The basis of cooperation is the benefits of the parties involved.

If the parties entering into a cooperation agreement want to get the best out of it, the joint actions they take are advisable to:

- 1) have benefited both parties;
- 2) have fully exploited the parties' potential;
- 3) the measures taken were long-term, comprehensive and feasible.

In order for this cooperation between a vocational school and a company within the framework of a patronage class to be effective, it is also necessary to:

- 1) set common goals and expectations;
- 2) put the learner and their benefits at the centre;
- 3) conduct an open exchange of information and experience between the parties;
- 4) build trust and partnership on mutual respect and benefit;
- 5) monitor the effects of cooperation and make the necessary changes.

Benefits an employer may have from working with a school to establish a patronage class¹⁸:

- 1) educate employees according to their own needs and expectations;
- 2) to realise the potential and interests of students;
- 3) adapt the curriculum to the specific characteristics of the industry and the company;
- 4) influence the quality and effectiveness of education;
- 5) provide students with practical vocational training on modern equipment;
- 6) increase their attractiveness and visibility on the labour market;
- 7) build a positive image and relationship with the local community;
- 8) establish long-term cooperation with the school and local authorities;
- 9) gain access to the best talent and future leaders;
- 10) save time and money on recruiting and training new staff;
- 11) employ graduates who are already familiar with the company and its culture;
- 12) increase the company's innovation and competitiveness;
- 13) influence the development of staff competences and qualifications;
- 14) support the continuous professional development of employees;
- 15) use the experience and knowledge of staff to train students;
- 16) create career and promotion paths for staff, taking into account participation in the patronage class project;
- 17) increase the satisfaction and commitment of employees who will participate in the patronage class project
- 18) improve the working climate and atmosphere;
- 19) increase trust and partnership between employees and the employer;
- 20) benefit from various forms of financial and legal and tax support;
- 21) obtain reimbursement of pupils' education costs;
- 22) receive tax relief and wage subsidies;
- 23) obtain funding for the purchase of equipment and materials;
- 24) benefit from grants for organising internships and apprenticeships;
- 25) apply for funds for the promotion and development of patron classes;
- 26) stand out from other companies and increase your market advantage.

¹⁸ Developed with: Patronage class - what is it and how can it help? Edunet - Poland: <https://edunet-poland.pl/czym-jest-i-w-czym-moze-pomoc-klasa-patronacka/>; What is a patronage class and what are its advantages? ABCrozwoju.pl: <https://abcrozwoju.pl/czym-jest-klasa-patronacka-i-jakie-sa-jej-zalety/>; Advantages of cooperation between enterprises and vocational schools - Asystent4You.pl: <https://www.asystent4you.pl/zalety-wspolpracy-przedsiębiorstw-ze-szkolami-zawodowymi/>; Komorniczak J.: Klasa Patronacka. A tool used in the cooperation of vocational schools with entrepreneurs. Part IV. Kraków Technology Park 2019. <https://www.kpt.krakow.pl/wp-content/uploads/2020/06/klasa-patronacka.pdf> (accessed 20.12.2023).

The benefits that a vocational school can have from working with an employer to create a patronage class¹⁹:

- 1) improve the quality and attractiveness of vocational training;
- 2) adapt the curriculum to the needs of the labour market and the industry;
- 3) provide students with practical vocational training in real working conditions;
- 4) improve the results of professional examinations;
- 5) increase graduates' employability;
- 6) establish lasting cooperation with the company and other partners;
- 7) build a positive image and relationship with the local community;
- 8) obtain substantive and financial support from the company;
- 9) benefit from the experience and knowledge of the company's employees;
- 10) use equipment and materials provided by the company;
- 11) organise on-site excursions and workshops for students;
- 12) ensure that students are mentored and advised by company staff;
- 13) count on the company's help in promoting and recruiting for the patronage class;
- 14) increase the prestige and competitiveness of the school;
- 15) improve the climate and working atmosphere in the school;
- 16) take advantage of various forms of financial and legal-tax support;
- 17) count on funding for the purchase of equipment and materials;
- 18) benefit from grants for organising internships and apprenticeships;
- 19) apply for funds for the promotion and development of patronage classes;
- 20) stand out from other schools and increase your market advantage;
- 21) influence the economic and social development of the region;
- 22) increase the number and quality of educational offers for students.

The benefits that teachers working in a vocational school in which a patronage class is established can have:

- 1) influence the development of teachers' competences and qualifications;
- 2) support the continuous professional development of teachers;
- 3) enable teachers to undertake in-house internships and training;
- 4) increase teacher satisfaction and involvement;
- 5) increase trust and partnership between teachers and school management;

The benefits that students attending a patronage class at a vocational school can have:

- 1) provide students with practical vocational training in real working conditions;
- 2) increase pupils' motivation and involvement in the educational process;
- 3) increase graduates' employability;
- 4) provide students with certificates and attestations of their skills;
- 5) provide students with the opportunity to continue their education at tertiary level;

¹⁹ Developed with: Patronage class - what is it and how can it help? Edunet - Poland: <https://edunet-poland.pl/czym-jest-i-w-czym-moze-pomoc-klasa-patronacka/>; What is a patronage class and what are its advantages? ABCrozwoju.pl: <https://abcrozwoju.pl/czym-jest-klasa-patronacka-i-jakie-sa-jej-zalety/>; Advantages of cooperation between enterprises and vocational schools - Asystent4You.pl: <https://www.asystent4you.pl/zalety-wspolpracy-przedsiębiorstw-ze-szkolami-zawodowymi/>; Komorniczak J.: Klasa Patronacka. A tool used in the cooperation of vocational schools with entrepreneurs. Part IV. Kraków Technology Park 2019. <https://www.kpt.krakow.pl/wp-content/uploads/2020/06/klasa-patronacka.pdf>; Patronage classes the future of vocational education. ORE, Warsaw: doradztwo.ore.edu.pl/klasy-patronackie-przyszloscia-edukacji-zawodowej/ (accessed 20.12.2023). (accessed 20.12.2023).

- 6) increase students' mobility and flexibility in the labour market;
- 7) develop an entrepreneurial and innovative mindset in students;
- 8) develop soft and social skills in students;
- 9) prepare students to work in teams and across cultures;
- 10) develop students' language and digital skills;
- 11) enrich students with knowledge of the industry and the company;
- 12) increase students' sense of value and pride in their profession.

The benefits that parents of students may have in relation to the establishment of a patronage class at a vocational school:

- 1) increase the number and quality of educational offers for parents;
- 2) provide parents with information and guidance on their children's careers;
- 3) increase parental involvement and cooperation in the educational process;
- 4) increase parental satisfaction and confidence in the school;
- 5) increase parents' sense of responsibility and pride in their children;

The benefits that the local community may have in relation to the establishment of a patronage class at a vocational school:

- 1) increase the number and quality of educational offers for the local community;
- 2) provide the community with access to school and company equipment and materials;
- 3) organise workshops and training on the industry and the company for the local community;
- 4) increase community involvement and cooperation in school and company activities;
- 5) increase the local community's sense of identity and pride in the region.

In summary, the patronage class allows:

- comprehensive satisfaction of the needs of both parties,
- to realise their full potential,
- the fullest adaptation of cooperation to the needs of a specific company,
- creating the greatest opportunity for the educational process to translate into the student's future employment with the company²⁰.

3.2.3. Exercises

Exercises recommended for the online version of the training:

Exercise 1.

Indicate which of the given parties are involved directly (due to the signed agreement) and which indirectly (benefit from the effects of the signed agreement) in the activities related to the creation of a patronage class at the vocational school.

²⁰ Komorniczak J.: Patronage class. A tool used in the cooperation of vocational schools with entrepreneurs. Part IV. Kraków Technology Park 2019. <https://www.kpt.krakow.pl/wp-content/uploads/2020/06/klasa-patronacka.pdf> (accessed 20.12.2023).

Website	Directly	Indirectly
a representative of the governing body in charge of the work of the school or the head teacher or a designated person with authority to do so;	X	
employer's legal representative	X	
pupils of the sponsored class		X
teachers of vocational subjects teaching in the class covered by the patronage		X
careers advisors who wish, for example, to organise a trip for young people to a sponsoring company		X
employees within the patronage company who are seconded to activities related to the scope of the patronage agreement (e.g. employees of the		X
tutors of practical training instructors, HR staff)		X
lawyers representing the parties to the contract or agreement		X

Correct answer key:

Website	Directly	Indirectly
A representative of the governing body/head of school or the head of school or a designated person with authority to do so;	X	
employer's legal representative	X	
pupils of the sponsored class		X
teachers of vocational subjects teaching in the class covered by the patronage		X
careers advisors who wish, for example, to organise a trip for young people to a sponsoring company		X
employees within the patronage company who are seconded to activities related to the scope of the patronage agreement (e.g. employees of the		X
tutors of practical training instructors, HR staff)		X
lawyers representing the parties to the contract or agreement		X

For the person transferring the paper version to the online version, after each exercise:

If the answer is good, a message will appear:

Bravo!

You have mastered the material very well.

With the wrong answer:

Unfortunately, you have not been able to solve the task correctly.

Try again. Alternatively, repeat the topic again online or look at the student guide.

Exercise 2.

Assign the following benefits to the relevant parties who can directly and indirectly benefit from the creation of a patronage class in a vocational school

Student

prepare you to work in teams and across cultures

increase motivation and involvement in the educational process

increase their sense of value and pride in their profession

Employer

increase your attractiveness and visibility on the labour market

recruit graduates who already know the company and its culture

stand out from other companies and increase your market advantage

School

improve the results of vocational

adapt the curriculum to the needs of the labour market and the industry

increase graduates' employability

Parent

increase satisfaction and confidence in the

increase a sense of responsibility and pride in their children

Correct answers:

Student

prepare you to work in teams and across cultures

increase motivation and involvement in the educational process

increase their sense of value and pride in their profession

Employer

increase your attractiveness and visibility on the labour market

recruit graduates who already know the company and its culture
stand out from other companies and increase your market advantage

School

improve the results of vocational examinations
adapt the curriculum to the needs of the labour market and the industry
increase graduates' employability

Parent

increase satisfaction and confidence in the school;
increase a sense of responsibility and pride in their children;

For the person transferring the paper version to the online version, after each exercise:

If the answer is good, a message will appear:

Bravo!

You have mastered the material very well.

With the wrong answer:

Unfortunately, you have not been able to solve the task correctly.

Try again. Alternatively, repeat the topic again online or look at the student guide.

Exercises recommended for the classroom version of the training

Exercise 1.

Instant information: Who benefits from setting up a patronage class in a vocational school?

Mileage:

Participants sitting in a circle speak one sentence at a time on a given topic. The rule is that they all speak in turn and their statements are concise. The facilitator can write them down on a flitch. At the end, the facilitator summarises what has been said and draws a conclusion or initiates a discussion.

Organisational framework:

Time: 15 to 25 minutes

Important:

- Each participant should take the floor and, in as short a sentence as possible, name the problem or describe their state of mind (depending on the purpose of the instant information round).
- No one comments on the statements of others.
- Discussion of the issues gathered can only begin once everyone has spoken.

3.2.4. Progress test (self-assessment)

Can you:	Yes	Not
1) lists the stakeholder groups directly and indirectly involved in the patronage classes?		
2) defines what a benefit is?		
3) explains to the employer the benefits of cooperation with the school in connection with the creation of the patronage class?		
4) explains to the other parties their benefits of creating an umbrella class?		
5) recognizes groups of stakeholders directly and indirectly involved in patronage classes in companies?		
6) develops sets of benefits for equal groups of stakeholders resulting from the creation of a patronage class?		

If you selected the answer "NO", we propose you returning to the teaching material and its repeated analysis in order to achieve intended learning outcomes (knowledge, skills).

If necessary, use additional source of information prepared to each topic.

3.2.5. Recommended sources of information

Recommended literature - you can find more information on the topic in:

1. *Patronage class - what is it and how can it help?* Edunet - Poland: <https://edunet-poland.pl/czym-jest-i-w-czym-moze-pomoc-klasa-patronacka/> (accessed 20.12.2023).
2. *What is a patronage class and what are its advantages?* ABCrozwoju.pl: <https://abcrozwoju.pl/czym-jest-klasa-patronacka-i-jakie-sa-jej-zalety/> (accessed 20.12.2023).
3. *Advantages of cooperation between businesses and vocational schools* - Asystent4You.co.uk: <https://www.asystent4you.pl/zalety-wspolpracy-przedsiębiorstw-ze-szkolami-zawodowymi/> (accessed 20.12.2023).
4. *Komorniczak J.: Patronage class. A tool used in the cooperation of vocational schools with entrepreneurs. Part IV. Kraków Technology Park 2019.* <https://www.kpt.krakow.pl/wp-content/uploads/2020/06/klasa-patronacka.pdf> (accessed 20.12.2023).
5. *Patronage classes the future of vocational education.* ORE, Warsaw: doradztwo.ore.edu.pl/klasy-patronackie-przyszloscia-edukacji-zawodowej/ (accessed 20.12.2023).
6. *¿Qué beneficios tiene para la empresa su colaboración con el sector educativo? Un análisis de la Formación en Centros de Trabajo desde la perspectiva empresarial:* <https://vlex.es/vid/colaboracion-educativo-centros-empresarial-52475754> (accessed 20.12.2023).
7. *Partnership between Copenhagen School of Design and companies like Lego.* <https://www.globalpartnership.org/news/denmark-lego-foundation-pledge-over-us15-million-contributions-girls-education-accelerator> (accessed 20.12.2023).

3.3. Creating a patronage class and drawing up an agreement between the school and the enterprise to create a patronage class

3.3.1. Detailed learning outcomes

As a result of learning within a topic, you will be able to:

- explains how to set up a patron class,
- identifies the components of the agreement between the school and the enterprise to create a patronage class,
- describes the procedure for drawing up an agreement between the school and the company for the creation of a patronage class,
- develops a procedure for creating a patronage class,
- initiates the process of drawing up an agreement between the school and the company for the creation of a patron class,
- develops, in consultation with a lawyer, an agreement between the school and the company for the creation of a patronage class,
- presents and agrees with the company's party the content of the contract for the creation of a patronage class,
- recommends that the parties sign an agreement to create a patronage class.

3.2.2. Learning material

How do I set up a patronage class?

There is no single standardised procedure describing how to set up a patronage class.

So where to start?

Certainly by choosing the class and the profession you would like to patronise at your school. Initially find out if there is a company or companies in the local or national labour market that could patronise the class. You can make a preliminary survey of their interest in such an idea. You can enlist the help of alumni of the school employed by the company. You then have arguments to start a concrete conversation at the school.

After that, the school management has to be convinced of the idea and the governing body funding the school. Their agreement is the ticket to serious discussions with the company representative. With the management, you will agree on a proposal for the scope of cooperation within the framework of the company's patronage.

Now the stairs begin, you have to find a company or companies interested in patronising your class or profession. Why companies? In general, it is usually the case that a patronage class is run by a school in cooperation with one particular company. But there is no objection to several company representatives jointly supporting the school. Particularly in local labour markets with large companies, it is advisable to have an 'alliance' of several small companies with links to the industry or profession. One small company may not make it, but several do. This can also be one of the arguments when a representative of a small company refuses because they do not have the capacity to support a patronage class. But when you say

that you are planning an alliance of several companies for the patronage class, they might take action. The downside - it is more difficult to persuade several people to cooperate than one.

As mentioned earlier, you can use alumni of the school working in various companies in the region to make contact with a representative of the companies. Ideally, if there is an alumni association attached to the school, then you have an easier task with reaching them. If not, then it will be more difficult, but don't be discouraged by this. You can seek contact with the company, including through the parents of young people who are currently studying at your school. Or perhaps you have business owners among the parents who might be interested in supporting a patronage class.

When you find such a person or persons explain what the project is about. Ask to be put in touch with a decision-maker in the company and arrange an interview.

Come to the interview professionally prepared. Perhaps prepare a short presentation, where you present on a few slides the various possibilities for cooperation, the benefits of the parties. Remember, you, as a school representative, must play the role of a guide for the company in the specifics of vocational education, in the maze of educational legislation and the formal requirements imposed on the school by the curriculum and the learning outcomes it contains. When familiarising the company representative, it is the company representative who should "translate" the regulations into language that is easily understood by the entrepreneur, show him or her what options are legally permissible for his or her involvement and how to implement his or her individual needs into the educational process. This is particularly important at the stage of setting the curriculum in the classroom so that it allows not only the ministry's guidelines but also the specific needs of the patron company to be fully implemented.

Remember to always use arguments related to the benefits that your partner can derive from the cooperation during discussions. Base it on corporate social responsibility.

If you agree with the company's representative on the cooperation and its scope, then you can proceed to conclude the contract. However, this is best left to the lawyers.

Initially, we suggest that this scope should not be too broad to encourage the partner to start working together and over time it can be expanded. Maybe focus on 2-3 activities.

What resources are needed on the part of the school and the entrepreneur to set up a patronage class?

We find an answer to the question posed in this way in the guidance of J. Komorniczak²¹, which indicates that on the side:

- 1) schools are needed:
 - openness to cooperation to take into account the needs, expectations and ideas of the company. This is a key element, due to the entrepreneur's need to be deeply involved in the whole educational process;
 - training in a profession in line with the needs of the entrepreneur, or the possibility of opening a class to train in a profession that meets the partner's need;
 - resources needed for specific tasks - these depend on the specific tasks planned in the patron class agreement. Certainly the right staff is essential.

²¹ Komorniczak J.: *Patronage class. A tool used in the cooperation of vocational schools with entrepreneurs. Part IV. Kraków Technology Park 2019. <https://www.kpt.krakow.pl/wp-content/uploads/2020/06/klasa-patronacka.pdf> (accessed 20.12.2023).*

2) Companies are needed:

- the employee responsible for planning, evaluating and carrying out the various stages of cooperation under the signed agreement;
- staff open to working with the school and able to take into account the constant presence of pupils (in various forms) on the premises;
- technical and financial resources depending on the design of the sponsorship agreement (e.g. if the agreement provides for internships or paid work placements, resources will be needed to fund these, as will possible equipment or tools to be provided to the school, or training for teachers);
- company participation in as many different elements of the educational process as possible;
- linking the educational process in the patronage class to the company's recruitment plan, and including the pupils of the patronage class as the core group from which the entrepreneur selects employees;
- proper training of staff and consideration of cooperation with schools in all areas of its operation;
- systematic evaluation of cooperation and modification of learning activities in accordance with changes in the operation of the company.

How do you document the establishment of a partnership between a school and a company for a patronage class?

There are two possible forms of documenting cooperation:

- 1) a written agreement or
- 2) contract.

It is advisable to conclude an agreement at the outset and ultimately a contract through which the scope of cooperation will be clarified.

What should the cooperation agreement for the patronage of a class by a company contain?

1. The title of the agreement, the date and place of its conclusion.
2. Details of the parties concluding the contract, with an indication of the legal representatives.
3. Scope of cooperation.
4. Purpose and scope of the agreement.
5. Details of coordinating persons on the partners' side.
6. The date of entry into force, the rules for its revocation and other final provisions.

Below is an example of a contract:

Patronage Agreement²²

concluded on: at
 (date) (place)

between:

1)
 (company data)

represented by (name and function)

hereinafter referred to as the Patron,

a

2)
 (School data)

represented by the Head of School
 (name and surname)

hereinafter referred to as the School.

The Parties, jointly and in agreement, recognising the numerous opportunities for mutual cooperation in improving the quality of vocational training and ensuring its high efficiency, express their willingness to cooperate with each other to ensure the achievement of these objectives.

The cooperation will be implemented through the creation of **a patronage class** in accordance with the principles of this agreement.

§ 1 Scope and purpose of cooperation

1. Patronage is granted to the class(es) educating in the profession(s):

2. The aim of patronage is to improve the quality of practical vocational training, the acquisition of skills useful in the labour market and the preparation of graduates for employment, through joint activities that take into account the needs and capabilities of each party, in particular:

a)

b)

c).....

(specific cooperation formulas)

²² Developed with the use of: Komorniczak J.: Patronage class. A tool used in cooperation between vocational schools and entrepreneurs. Part IV. Kraków Technology Park 2019. <https://www.kpt.krakow.pl/wp-content/uploads/2020/06/klasa-patronacka.pdf> (accessed 20.12.2023).

The detailed forms and principles for carrying out the individual forms of cooperation referred to in paragraph 1 (2) will be agreed by the parties in the course of cooperation in the form of additional agreements.

§2 The parties' obligations

1. The Patron will make every effort to ensure good relations with the School, and to communicate mutual cooperation through the communication channels available.
2. The school will make every effort to ensure a good relationship with the Patron, undertakes to display the Patron's logo and name on the school's promotional materials, and to communicate mutual cooperation through its communication channels.

§3 Cooperation coordinators

The persons co-ordinating the co-operation, and the implementation of this agreement will be:

1) on behalf of the Patron:

.....

2) on behalf of the School

.....

§4 Final provisions

1. This agreement is concluded for an indefinite period of time and shall enter into force on the date of its signature.
2. The contract may be terminated by either party on one month's notice.
3. Any changes to the contract should be made in the form of a written annex.
4. The Agreement has been concluded in two counterparts, one for each of the Parties.
5. In matters not regulated by this agreement, the provisions of the Civil Code shall apply.

Parties signing the agreement:

On behalf of the Patron Company

On behalf of the School

.....

(signature, stamp)

.....

(signature, stamp)

.....

(place) (date of conclusion)

3.3.3. Exercises

Exercises recommended for the online version of the training:

Exercise 1.

Pin down the relevant pages with the given resources needed to set up a patronage class.

Resources needed on the school side to set up a patron class

Taking into account the needs of the

Training in a profession in line with the company's industry

Resources needed on the part of the entrepreneur to set up a patronage class

Technical and financial resources

Proper training of staff

Correct answer key:

Resources needed on the school side to set up a patron class

Taking into account the needs of the company

Training in a profession in line with the company's industry

Resources needed on the part of the entrepreneur to set up a patronage class

Technical and financial resources

Proper training of staff

For the person transferring the paper version to the online version, after each exercise:

If the answer is good, a message will appear:

Bravo!

You have mastered the material very well.

With the wrong answer:

Unfortunately, you have not been able to solve the task correctly.

Try again. Alternatively, repeat the topic again online or look at the student guide.

Exercise 2. Multiple choice

Tick all the correct answers that match the sentence. A cooperative agreement for a company to patronise a class may include...

Title of the agreement, date and place of its conclusion	<input type="checkbox"/>
List of pupils covered by the agreement	<input type="checkbox"/>
Details of the contracting parties and their legal representatives	<input type="checkbox"/>

Date of entry into force, rules for its revocation and other final provisions	<input type="checkbox"/>
---	--------------------------

Correct answer key:

Title of the agreement, date and place of its conclusion	X
Details of the contracting parties and their legal representatives	X
Date of entry into force, rules for its revocation and other final provisions	X

For the person transferring the paper version to the online version, after each exercise:

If the answer is good, a message will appear:

Bravo!

You have mastered the material very well.

With the wrong answer:

Unfortunately, you have not been able to solve the task correctly.

Try again. Alternatively, repeat the topic again online or look at the student guide.

Exercise 3.

Fill in the gaps in the following text by selecting the correct words from those underneath the text.

The parties, jointly and in agreement, recognising the numerous opportunities for mutual to improve vocational training and ensure its high, express their willingness to cooperate with each other to achieve these objectives.

2. aims to improve the quality of practical vocational training, the acquisition of skills in the labour market and the preparation of graduates for employment, through joint activities that take into account the needs and capabilities of each party, in particular:

cooperation	quality	effectiveness
assurances	patronage	useful

Correct answer key:

The Parties, jointly and in agreement, recognising the numerous opportunities for mutual **cooperation** in improving the **quality of** vocational training and ensuring its high **efficiency**, express their willingness to cooperate with each other to **ensure the** achievement of these objectives.

(2) The aim of **patronage** is to improve the quality of practical vocational training, the acquisition of skills **useful in the** labour market and the preparation of graduates for employment, through joint activities that take into account the needs and capabilities of each party, in particular:

For the person transferring the paper version to the online version, after each exercise:

If the answer is good, a message will appear:

Bravo!

You have mastered the material very well.

With the wrong answer:

Unfortunately, you have not been able to solve the task correctly.

Try again. Alternatively, repeat the topic again online or look at the student guide.

Exercises recommended for the classroom version of the training

Exercise 1.

The procedure for concluding a contract for a patron class.

The trainer divides the group into teams of 4-5 persons. The task for each team is to take on the role of an outreach coordinator and develop a procedure leading to an agreement between a school and an entrepreneur. In developing the procedure, the group members will exchange their experiences in this field and try to take into account the specificities of their schools.

The group will present the results of their work on a flipchart in the form of a mind map.

A representative of the group presents the results of the work in the forum.

Finally, participants try to work out a common procedure for setting up an umbrella class.

The activity leader summarises the activity.

Exercise 2.

Negotiation of parties entering into a contract for the benefit of the patron class.

The facilitator divides the group into an even number of sub-groups of 4-5 people. He assigns each sub-group a number from 1.

The odd groups will take on the role of school representatives negotiating a patron class contract.

Groups with even numbers will represent the employer side.

Stages of the groups' work:

- 1) groups representing schools will prepare for negotiations with employer representatives, including possible difficulties, concerns, pointing out benefits, perhaps preparing a presentation and other ideas to encourage the employer to conclude a contract;
- 2) the employers' representatives will try to make things as difficult as possible for the schools, in the course of demonstrating any difficulties their company may have;
- 3) the trainer forms negotiation pairs from employer-school groups;
- 4) groups are negotiating to conclude a partnership agreement for an umbrella class;
- 5) at the end of the negotiations, participants share their experiences and advice in a debriefing.

Exercise 3.

Cooperation agreement - patronage class.

The facilitator divides the group into teams of 3-4 persons. The task of the team is to prepare a cooperation agreement for the creation of a patronage class between the school and the company.

They record the results of their work on a flipchart and present them to the group.

As a conclusion, the participants work out a joint agreement.

3.3.4. Progress test (self-assessment)

Can you:	Yes	Not
1) explains how to set up a patron class?		
2) identifies the components of the agreement between the school and the enterprise to create a patronage class?		
3) describes the procedure for drawing up an agreement between the school and the company for the creation of a patronage class?		
4) develops a procedure for creating a patronage class?		
5) initiates the process of drawing up an agreement between the school and the company for the creation of a patron class?		
6) develops, in consultation with a lawyer, an agreement between the school and the company for the creation of a patronage class?		
7) presents and agrees with the company's party the content of the contract for the creation of a patronage class?		
8) recommends that the parties sign an agreement to create a patronage class?		

If you selected the answer "NO", we propose you returning to the teaching material and its repeated analysis in order to achieve intended learning outcomes (knowledge, skills).

If necessary, use additional source of information prepared to each topic.

3.3.5. Recommended sources of information

Recommended literature - you can find more information on the topic in:

1. *Patronage class - what is it and how can it help?* Edunet - Poland: <https://edunet-poland.pl/czym-jest-i-w-czym-moze-pomoc-klasa-patronacka/> (accessed 20.12.2023).
2. *Komorniczak J.: Patronage class. A tool used in the cooperation of vocational schools with entrepreneurs. Part IV.* Kraków Technology Park 2019. <https://www.kpt.krakow.pl/wp-content/uploads/2020/06/klasa-patronacka.pdf> (accessed 20.12.2023).
3. *How to start collaborating with vocational training centers?* <https://www.alianzafpdual.es/fpdual/empresas/como-empezar/> (accessed 20.12.2023).
4. *Vocational training development* <https://online.flippingbook.com/view/871307684/10/> (accessed 20.12.2023).
5. *The agreement used by Aalborg University with local businesses for technical training.* <https://www.aau.dk/> (accessed 20.12.2023).

3.4. Defining the term "dual education" and indicating the benefits of introducing practical classes for students in the form of dual education for various stakeholder groups

3.4.1. Detailed learning outcomes

As a result of learning within a topic, you will be able to:

- defines the term dual education,
- lists stakeholder groups directly and indirectly involved in the dual education process in companies,
- defines whether there is a benefit,
- explains to the employer the benefits of cooperation with the school in the field of dual education,
- explains to the other parties their benefits in connection with the introduction of dual education for pupils,
- recognises the term of dual education,
- recognises stakeholder groups directly and indirectly involved in the dual education process in companies,
- develops sets of benefits for equal groups of stakeholders resulting from the introduction of practical classes for students in the form of dual education have different groups of stakeholders.

3.4.2. Learning material

What does the term dual education mean?

The term 'dual education' is defined differently in the literature. Examples of definitions are given below.

According to UNESCO²³, dual education combines the possibilities of an apprenticeship in a company and vocational training in a vocational school into a single educational cycle, i.e. in a company the student/apprentice receives practical training that is complemented by theoretical knowledge in a vocational school.

According to Cedefop²⁴, dual education refers to education or training that combines periods of alternating training in an educational institution or training centre and in the workplace.

From a study (S. Chatzichristou, D. Ulicna, I. Murphy, A. Curth, 2013), the term 'dual education' refers to the fact that teaching and learning in VET is characterised by dualism in two respects:

- relating to the students' places of learning (school and company/enterprise), while sharing responsibility for ensuring the quality of theoretical and practical training;

²³ UNESCO (1984), Терминология технического и профессионального образования. Unesco, 1984, http://books.google.de/books/about/Terminology_of_Technical_and_Vocational.html?id=BT06nQEACAAJ&redir_esc=y. (accessed 20.12.2023).

²⁴ Cedefop (2014), On the way to 2020: data for VET policies, Luxembourg: Publications Office of the European Union.

- dualism of actors (public and private) sharing responsibility for VET policy and practice²⁵.

In Poland, issues of dual education are regulated by the Regulation of the Minister of National Education of 22 February 2019 on Practical Vocational Training (Journal of Laws 2019, item 391, as amended), which states that practical classes are organised for pupils and juveniles in order for them to master the professional skills necessary to take up employment in a given profession, and in the case of practical classes held at employers, including under the rules of the dual education system - also in order to apply and deepen the acquired knowledge and professional skills in real working conditions (§ 4, para. 2). The basis for conducting practical classes under the principles of the dual system of education at employers is the conclusion of:

- 1) a contract of employment for professional preparation concluded between the young person and the employer, or
- 2) the apprenticeship contract concluded between the head teacher and the employer taking on the apprentices (§ 4, para. 2).

In summary, dual training of students in companies is one of the forms of cooperation that can be undertaken between a school and an employer within the framework of covered patronage.

Example of good practice of dual training of students in companies

In 2011, at the initiative of the Chamber of Industry and Commerce of the Radom area, the Radom Metal Cluster was established under the Metal Industry Cooperative Linkage Agreement, which was set up by 13 companies.

The Radom Metal Cluster is, on the one hand, a response to the needs of the local (Radom) labour market and the needs of employers related to recruiting employees and, on the other hand, to the needs of schools providing education in the profession of machine tool operator, which are looking for places to hold practical classes by students.

Currently in the Cluster, the activities coordinated by the Chamber of Industry and Commerce of the Radom Area involve:

- 25 companies in the metal industry that are affiliated as members (see: <https://klastermetalowy.radom.pl/czlonkowie/>, (accessed 12.06.2023));
- 8 supporting partners, including Radom City Hall, Łukasiewicz Research Network - Institute for Sustainable Technologies in Radom, Radom University Faculty of Mechanical Engineering;
- 3 establishments providing education to pupils in the profession of machine tool operator (Zespół Szkół Zawodowych im. mjr H. Hubala in Radom, Zespół Szkół Technicznych im. T. Kościuszki in Radom, Centrum Kształcenia Zawodowego i Ustawicznego nr 2 in Radom).

The Radom model of dual education assumes that a student of a lower secondary vocational school studying the occupation of "cutting machine tool operator" in the first semester begins practical classes at the Centre for Vocational and Practical Education, where he/she learns the basics of making machine parts with the manual machining method and taking workshop measurements. Equipped with basic vocational competences, from the second to the fifth semester, the student continues practical classes in the company, where he or she expands his or her competences to include operation of conventional and numerically controlled machines. In the sixth semester, he or she returns to the Centre for Vocational and Practical Education and Training, where he or she prepares for the external examination confirming the vocational qualification.

²⁵ Chatzichristou S., Ulicna D., Murphy I., Curth A. (2013), Dual education: a bridge over troubled waters? Study. European Parliament's Committee on Culture and Education.

According to data from the Chamber of Industry and Commerce of the Radom area, around 530 students have taken advantage of the dual training offer, with 50 students starting practical classes in the 2022/2023 school year in enterprises that are part of the Radom Metal Cluster.

Funding comes mainly from voluntary annual contributions from companies affiliated to the Radom Metal Cluster. The amount of the annual contribution depends on the level of employment in the company. The funds collected are used, among others, to finance:

- lunches for pupils (each pupil receives: textbooks, work clothes before the start of practical classes in the company);
- prizes for the pupils with the highest average grade on their diploma;
- carrying out promotional and publicity activities (e.g. developing and printing information leaflets, maintaining a website, purchasing and placing banners near schools to promote dual training in companies in the occupation of machine tool operator).

The costs of remunerating employees - instructors of practical vocational training are partially reimbursed to companies by the Education Department of the City of Radom from funds allocated to the educational subvention.

Who is directly involved in the dual training of students in companies?

The actor playing the main role in the company's dual training process is the **student learning a specific profession**.

The contracting parties are the legal representatives of the **vocational school** where the student is studying and the **employer where the student is doing the practical training organised in the form of dual training**.

In the case of juvenile (underage) workers, legal decisions are made on behalf of the student by the **parent** or legal **guardian**.

What are the benefits for the company of cooperating with the school in the area of dual training of vocational students?

Dual training has the potential to offer many benefits to the parties involved. These benefits can be both tangible, related to new competences, increased chances of finding a 'good' job with a satisfactory level of remuneration, as well as intangible, e.g. improved self-esteem, greater professional awareness.

The following are selected examples of the **benefits for companies** participating in dual training of vocational students in different countries:

Poland:

1. Establishing cooperation with a school providing vocational training in the trades and thus implementing the idea of corporate social responsibility.
2. Advertising on the school premises and thus increasing the company's visibility in the local labour market.
3. Sourcing future potential staff as needed through graduate employment²⁶.
4. Further training for staff seconded to act as practical training instructors.
5. Reduction of the adaptation period for newly recruited employees who were participants in practical classes held at the company.

²⁶ Student internship - Ministry of Education and Science - Gov.co.uk portal: <https://www.gov.pl/web/edukacja/staz-uczniowski> (accessed 22.11.2023).

6. To be able to get an idea of the training of pupils in vocational training, the level of training of pupils in schools.
7. The opportunity to harness the potential and energy of young students to develop the company²⁷.

Spain²⁸:

1. Active participation in the training of future professionals.
2. Possibility of subsequent employment of well-prepared apprentices.
3. Apprentices bring value to the company from day one.
4. Increased professional and personal competences of trainees.
5. Apprentices are paid a salary and are registered with the social security system.

Greece²⁹:

1. Preparing students directly for the labour market.
2. Students gain practical experience in a real working environment.
3. The curricula are tailored to real market needs.
4. Students are better prepared to enter the labour market.
5. Students gain skills that are increasingly in demand in the global labour market.

Dishes³⁰:

1. Businesses play a key role in training the future workforce.
2. Apprentices bring value to the company from day one.
3. Trainees gain practical experience in a real working environment.
4. Apprentices are better prepared to enter the labour market.
5. Apprentices gain skills that are increasingly in demand in the global labour market.

²⁷ J. Strykowski: Organising student and professional placements: a guide for employers - Aplikuj.pl: <https://www.aplikuj.pl/porady-dla-pracodawcow/1450/organizowanie-praktyk-studenckich-i-zawodowych-przewodnik-dla-pracodawcow#:~:text=Dla%20pracodawc%C3%B3w%2C%20praktyki%20zawodowe%20to%20szansa%20na,wspieranie%20m%C5%82odych%20talent%C3%B3w%20i%20mo%C5%BCiwo%C5%9B%C4%87%20znalezienia%20potencjalnych%20pracownik%C3%B3w.> (accessed 22.11.2023).

²⁸ ¿QUÉ ES LA FP DUAL Y CÓMO FUNCIONA PARA UNA EMPRESA? 2021, <https://fundacionuniversidadempresa.es/es/blog-formacion-profesional-dual-empresas/> (accessed 20.12.2023); 10 ventajas que debes conocer de la Formación Profesional Dual | Cámara de España: <https://www.camara.es/blog/formacion-y-empleo/10-ventajas-que-debes-conocer-de-la-formacion-profesional-dual> (accessed 20.12.2023); Ventajas de la Formación Profesional Dual para las empresas - FEDA-Madrid, FP Dual Alemana con empresas internacionales: <https://www.feda-madrid.com/ventajas-formacion-profesional-dual-para-las-empresas/> (accessed 20.12.2023); Ventajas de la formación dual - CEEP: <https://www.grupoceep.com/ventajas-de-la-formacion-dual/> (accessed 20.12.2023).

²⁹ Η Επαγγελματική Εκπαίδευση & Κατάρτιση Στην Ελλάδα - Dianeosis: <https://www.dianeosis.org/2022/09/i-epaggelmatiki-ekpaidefsi-kai-katartisi-stin-ellada/> (accessed 20.12.2023).

³⁰ 13 erhvervsskoler er med i projekt for at fremme faglig stolthed hos landets erhvervsskoleelever: <https://www.via.dk/om-via/presse/nyheder-2020/13-erhvervsskoler-er-med-i-projekt-for-at-fremme-faglig-stolthed-hos-landets-erhvervsskoleelever> (accessed 20.12.2023); Erhvervsskoleelever bliver klar til arbejdslivet: <https://ufm.dk/uddannelse/tilskud-til-udveksling-og-internationale-projekter/erasmusplus/erhvervsrettet-grund-og-efteruddannelse/inspiration-og-projekteksempler-erhvervsrettet-grund-og-efteruddannelse/eud/erhvervsskoleelever-bliver-klar-til-arbejdslivet> (accessed 20.12.2023); Danske virksomheder løfter et kæmpe uddannelsesansvar på erhvervsuddannelserne: <https://www.da.dk/politik-og-analyser/uddannelse-og-kompetencer/2020/danske-virksomheder-loeffer-et-kaempe-uddannelsesansvar-paa-erhvervsuddannelserne/> (accessed 20.12.2023).

What are the benefits for the other parties involved in dual education?

Students - the benefits of participating in dual education:

- 1) One of the greatest benefits of work-based learning is certainly the learner's development of technical skills and knowledge acquisition³¹.
- 2) Work-based learning is more effective than in the school system because learners can familiarise themselves with production methods and work requirements in real-life conditions³².
- 3) The process of observational and action learning supports the development of tacit knowledge (know-how and procedural knowledge)³³.
- 4) Learning in the work environment fosters the participant's socialisation in the work environment and increases motivation to learn (the emotional dimension of learning) - a very important aspect of the learning process that is not often studied³⁴.
- 5) According to the SWOT analysis of dual education in Gizycko County³⁵ the student has the opportunity:
 - acquire practical skills related to the operation of tools, equipment and machinery, familiarise themselves with the production process, the technologies used, the services provided in the workplace;
 - develop personal competences through contact with employees (e.g. teamwork, cooperation with internal and external customers, problem solving in the workplace, working under stressful conditions);
 - come into contact with the real needs of employers, learn about the requirements for future job applicants and, through participation in practical activities, complete their professional competences;
 - getting to know the actual working environment, work organisation.
- 6) Getting to know the industry in which the student is studying³⁶;
- 7) Gaining first work experience³⁷;

³¹ Darche S., Nayar N., Bracco K. (2009), *Work-based learning in California: Opportunities and models for expansion*, Los Angeles: James Irvine Foundation; . Fuller A., Unwin L. (2008), *Towards expansive apprenticeships: A commentary by the Teaching and Learning Research Programme*, London: Teaching and Learning Research Programme; Field S., Hoeckel K., Kis V., Kuczera M. (2009), *Learning for jobs: OECD reviews of vocational education and training, Initial Report*, Organisation for Economic Cooperation and Development, Paris.

³² Ryan P. (2011), *The apprentice: Employee, student, both, neither? Evidence from four countries*, Paper presented at the ETF International Panel on Work-based Learning, 14-15 November 2011, Turin: European Training Foundation, p. 2-3.

³³ Raelin J.R. (1997), *A model of work-based learning*, *Organization Science*, Vol. 8, No 6, pp. 563-578.

³⁴ Poortman C., Illeris K., Nieuwenhuis L. (2011), *Apprenticeship: From learning theory to practice*, *Journal of Vocational Education and Training - Special issue on apprenticeship as an evolving model of learning*, Vol. 63, No 3. London: Routledge.

³⁵ *Analysis of dual education as a training method*. Powiatowy Zespół Obsługi Szkół i Placówek Oświatowych, Gizycko 2015, pp. 15-16, [https://ec.europa.eu/programmes/erasmus-plus/project-result-content/3094ae6c-ca24-4d2c-9156-a68689b76320/Apprenticision%20analize%20\(PL\).pdf](https://ec.europa.eu/programmes/erasmus-plus/project-result-content/3094ae6c-ca24-4d2c-9156-a68689b76320/Apprenticision%20analize%20(PL).pdf) (accessed 20.12.2023).

³⁶ J. Kopacz: *Apprenticeships - everything you should know about them - GoWork.pl Guide*: <https://www.gowork.pl/poradnik/22/rozwoj-osobisty/praktyki-zawodowe-wszystko-co-powinienes-o-nich-wiedziec/> (accessed 22.11.2023).

³⁷ M. Konczal: *Apprenticeships in a vocational school. Are they compulsory? How many hours per day of apprenticeships are required?* *Education Zone*, 23.10.2023: <https://strefaedukacji.pl/praktyki-zawodowe-w-szkole-branzowej-czy-sa-obowiazkowe-i-ile-sie-na-nich-zarobi-najwazniejsze-informacje-o-praktykach/ar/c5-17978785> (accessed 22.11.2023).

- 8) enabling students to participate in training under the guidance of experienced staff³⁸;
- 9) Increase awareness of the career choice being made;
- 10) Opportunity to acquire practical skills related to the operation of tools, equipment and machinery, familiarisation with the production process, technology used, services provided in the workplace;
- 11) Development of personal competences (e.g. teamwork, cooperation with internal and external customers, problem solving in the workplace, working under stressful conditions) through contact with employees and external people;
- 12) To learn about the requirements for future job applicants and, through participation in practical activities, to complement professional competences and to come into contact with the real needs of employers;
- 13) Familiarisation with the actual working environment, work organisation processes;
- 14) Increase the chances of achieving a higher grade in the examination for the vocational qualification as a machine tool operator.

School - benefits associated with students' participation in dual education:

- 1) Establishing direct contact with the company³⁹;
- 2) Making learning objectives realistic according to the needs of companies;
- 3) Cost reductions associated with the purchase of often very expensive machinery and equipment;
- 4) Reduce problems with the employment needs of specialist practical training instructors;
- 5) Improving the pass rate of students in the external vocational examination;
- 6) Raising the school's prestige and promoting it as a provider of practical vocational training in a real working environment;
- 7) Involving employers in improving the curriculum and, as a result, making it more relevant to the needs of the local labour market;
- 8) Obtaining financial or in-kind support from the school in the form of donated equipment, machinery and facilities;
- 9) Opportunities for the professional development of vocational training teachers, through the observation of practical activities in which their students participate;
- 10) A better understanding of the needs of the local labour market and thus the education of students in accordance with these needs and not just for the examination confirming a qualification in a trade school occupation;
- 11) Increasing the satisfaction of students and their parents.

However, it should be emphasised that the benefits listed will not always occur, as not all companies where students take practical classes are effective learning environments⁴⁰ (ETF, 2013, p. 14).

³⁸ KGHM. Apprenticeships: <https://kghm.com/pl/kariera/dla-uczniow/praktyki-uczniowskie> (accessed 22.11.2023).

³⁹ Example of vocational school-employer collaboration: <https://www.ore.edu.pl/wp-content/uploads/2018/03/przyklad-dobrej-wspolpracyszkoly-zawodowej-z-pracodawca-technikum-mechaniczne-nr-15.pdf> (accessed 22.11.2023).

⁴⁰ ETF (2013), Work-based learning: benefits and obstacles a literature review for policy makers and social partners in ETF partner countries, European Training Foundation.

3.4.3. Exercises

Exercises recommended for the online version of the training:

Exercise 1.

Pin down the respective parties given the benefits associated with their participation in dual education.

Students - benefits of participation in dual training



Getting to know the industry

Developing technical skills and acquiring knowledge

School - benefits of pupils' participation in dual education



Establishing direct contact with the company

Better understanding of local labour market needs and matching of learning outcomes

Correct answer key:

Students - benefits of participation in dual training

Getting to know the industry

Developing technical skills and acquiring knowledge

School - benefits of pupils' participation in dual education

Establishing direct contact with the company

Better understanding of local labour market needs and matching of learning outcomes

For the person transferring the paper version to the online version, after each exercise:

If the answer is good, a message will appear:

Bravo!

You have mastered the material very well.

With the wrong answer:

Unfortunately, you have not been able to solve the task correctly.

Try again. Alternatively, repeat the topic again online or look at the student guide.

Exercise 2.

Mark all the correct answers indicating the benefits for enterprises participating in the dual training of vocational students.

Establishment of cooperation with a school providing vocational education in the field of vocational training	<input type="checkbox"/>
Increasing the company's visibility on the local labour market	<input type="checkbox"/>
Implementing corporate social responsibility	<input type="checkbox"/>
Further training of seconded staff	<input type="checkbox"/>
Increasing the pass rate of students in vocational examinations	<input type="checkbox"/>
Employment opportunities for general education teachers	<input type="checkbox"/>

Correct answer key:

Establishment of cooperation with a school providing vocational education in the field of vocational training	<input type="checkbox"/>
Increasing the company's visibility on the local labour market	<input type="checkbox"/>
Implementing corporate social responsibility	<input type="checkbox"/>
Further training of seconded staff	<input type="checkbox"/>

Exercises recommended for the classroom version of the training**Exercise 1.****Benefits of employers organising dual education for students.**

The trainer divides the group into teams of 4-5 persons. The task for each team is to list the benefits for employers who organise dual education for students.

The group will present the results of their work on a flipchart in the form of a description or drawing.

A representative of the group presents the results of the work in the forum.

Finally, participants try to come up with a common list of benefits for employers organising dual education for students.

The class leader summarises the exercise.

3.4.4. Progress test (self-assessment)

Can you:	Yes	Not
1) defines the term dual education?		

2) lists stakeholder groups directly and indirectly involved in the dual education process in companies?		
3) defines whether there is a benefit?		
4) explains to the employer the benefits of cooperation with the school in the field of dual education?		
5) explains to the other parties their benefits in connection with the introduction of dual education for pupils?		
6) recognizes the term of dual education?		
7) recognises stakeholder groups directly and indirectly involved in the dual education process in companies?		
8) develops sets of benefits for equal groups of stakeholders resulting from the introduction of practical classes for students in the form of dual education have different groups of stakeholders?		

If you selected the answer "NO", we propose you returning to the teaching material and its repeated analysis in order to achieve intended learning outcomes (knowledge, skills).

If necessary, use additional source of information prepared to each topic.

3.4.5. Recommended sources of information

Recommended literature - you can find more information on the topic in:

1. *¿QUÉ ES LA FP DUAL Y CÓMO FUNCIONA PARA UNA EMPRESA? 2021*, <https://fundacionuniversidadempresa.es/es/blog-formacion-profesional-dual-empresas/> (accessed 20.12.2023).
2. *10 ventajas que debes conocer de la Formación Profesional Dual | Cámara de España:* <https://www.camara.es/blog/formacion-y-empleo/10-ventajas-que-debes-conocer-de-la-formacion-profesional-dual> (accessed 20.12.2023).
3. *13 erhvervsskoler er med i projekt for at fremme faglig stolthed hos landets erhvervsskoleelever:* <https://www.via.dk/om-via/presse/nyheder-2020/13-erhvervsskoler-er-med-i-projekt-for-at-fremme-faglig-stolthed-hos-landets-erhvervsskoleelever> (accessed 20.12.2023).
4. *Danske virksomheder løfter et kæmpe uddannelsesansvar på erhvervsuddannelserne:* <https://www.da.dk/politik-og-analyser/uddannelse-og-kompetencer/2020/danske-virksomheder-loeften-et-kaempe-uddannelsesansvar-paa-erhvervsuddannelserne/> (accessed 20.12.2023).
5. *Dual education: a solution for difficult times?* https://www.europarl.europa.eu/RegData/etudes/BRIE/2014/529082/IPOL_BRI%282014%29529082_PL.pdf (dostęp: 20.12.2023).
6. *Erhvervsskoleelever bliver klar til arbejdslivet:* <https://ufm.dk/uddannelse/tilskud-til-udveksling-og-internationale-projekter/erasmusplus/erhvervsrettet-grund-og-efteruddannelse/inspiration-og-projektseksempler-erhvervsrettet-grund-og-efteruddannelse/eud/erhvervsskoleelever-bliver-klar-til-arbejdslivet> (accessed 20.12.2023).
7. *ETF (2013), Work-based learning: benefits and obstacles a literature review for policy makers and social partners in ETF partner countries*, European Training Foundation.
8. *Promotion of vocational education by employers*, Polish Craft Association, Social Dialogue Council, Warsaw, 2018, https://zrp.pl/wp-content/uploads/2018/11/Informator_2018-3.pdf (accessed 20.12.2023).

9. *Example of good cooperation between a vocational school and an employer:*
<https://www.ore.edu.pl/wp-content/uploads/2018/03/przyklad-dobrej-wspolpracyszkozy-zawodowej-z-pracodawca-technikum-mechaniczne-nr-15.pdf> (accessed 22.11.2023).
10. *Vocational education in Poland - schools must educate for labour market needs.*
<https://fpg24.pl/szkolnictwo-zawodowe-w-polsce-szkoly-musza-ksztalcic-ludzi-na-potrzeby-rynku-pracy/> (accessed 20.12.2023).
11. *Ventajas de la Formación Profesional Dual para las empresas - FEDA-Madrid, FP Dual Alemana con empresas internacionales:* <https://www.feda-madrid.com/ventajas-formacion-profesional-dual-para-las-empresas/> (accessed 20.12.2023); *Ventajas de la formación dual - CEEP:*
<https://www.grupoceep.com/ventajas-de-la-formacion-dual/> (accessed 20.12.2023).
12. *Η Επαγγελματική Εκπαίδευση & Κατάρτιση Στην Ελλάδα - Dianeosis:*
<https://www.dianeosis.org/2022/09/i-epaggelmatiki-ekpaidefsi-kai-katartisi-stin-ellada/> (accessed 20.12.2023).

3.5. Verification of the company in terms of the possibility of conducting practical classes for students in the form of dual education

3.5.1. Detailed learning outcomes

As a result of learning within a topic, you will be able to:

- identifies and selects the company's verification criteria in terms of the possibility of conducting practical classes for students in the form of dual education?
- describes the procedure of consulting and verifying the company in terms of the possibility of conducting practical classes for students in the form of dual education?
- explains how to prepare a report on the verification of the company in terms of the possibility of conducting practical classes for students in the form of dual education?
- expresses an opinion orally and in writing on the possibility of conducting practical classes for students in the form of dual education by the company?
- draws up criteria for verifying the company in terms of the possibility of conducting practical classes for students in the form of dual education?
- consults with representatives of the school and employers the developed criteria of the company in terms of the possibility of conducting practical classes for students in the form of dual education?
- verifies the company in terms of the possibility of conducting practical classes for students in the form of dual education?
- prepares a report on the verification of the company in terms of the possibility of conducting practical classes for students in the form of dual education?
- presents the school and company representatives with a report on the verification of the company in terms of the possibility of conducting practical classes for students in the form of dual education?
- develop conclusions and recommendations from the verification of the company in terms of the possibility of conducting practical classes for students in the form of dual education?
- makes, in cooperation with the school management, the decision to organize dual education in the verified enterprise?

3.5.2. Learning material

Diagram of the implementation of dual training in a company

Below is a flow chart that can help external and internal stakeholders, primarily business owners and managers, interested students and their parents and the management of the educational establishment to prepare correctly for the organisation of practical classes on a dual education basis.

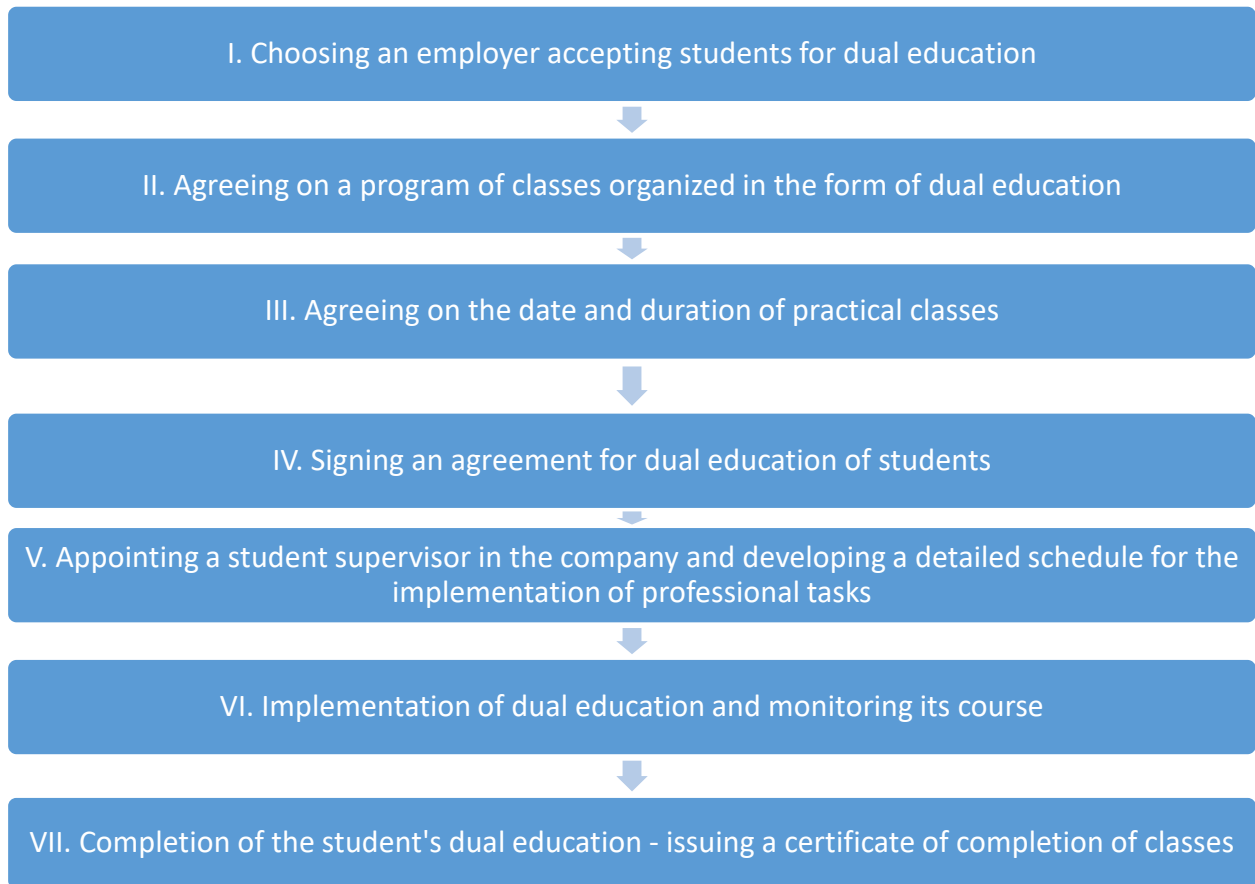


Fig. 4. Example scheme for the implementation of dual training in a company

Source: own study.

Criteria for verifying a company for its ability to provide practical classes for students in the form of dual training

Unfortunately, in spite of the desire, not all companies are able to provide practical classes for students organised in the form of dual training.

Therefore, before contacting company representatives, it would be useful to develop preliminary criteria that the company to which the school wants to send students for dual training must meet.

What is then worth looking out for when vetting a company? Below are some of our hints:

- 1) Let's start by verifying the company in the official company register, especially important if we do not know the company in question.
- 2) Check that the company is not listed as a debtor company.
- 3) Let's conduct an environmental interview about the company we are interested in.
- 4) Let's check whether the company has experience in providing practical classes for vocational students. If so, we may be tempted to gather opinions from the directors of schools whose students have taken practical classes.
- 5) Obtain information on who from the staff in the company will be seconded to teach the students.
- 6) Let's establish what qualifications the staff in the company delegated to teach the students have.
- 7) Let's find out what machines, equipment and tools will be at the students' disposal during the company's activities.

- 8) Let's check the list of learning outcomes that we would like students to master during the company's practical activities.
- 9) Let's verify that the social facilities and hygiene and sanitary facilities will be available to the student in the company.
- 10) Let's determine what range of professional activities the student could carry out during the company's practical classes.

When creating the checklist, attention should also be paid to the workstations where the student is to do the practical training. At these workstations, there should be instructions on how to use the machines and equipment that are part of the workstation, health and safety instructions and information on occupational risks. It is a good idea for the employer to provide the apprentice with workplace instruction before he/she starts work.

A prerequisite for practical classes is that the student is able to carry out activities and professional tasks at workstations that are compatible with the course of training in the profession being studied.

In order to take part in practical classes, a student should have an appropriate medical examination proving that there are no contraindications to work in the profession. The absence of contraindications to the practical classes should be confirmed by a certificate from an authorised occupational physician.

An interesting tool entitled. "Information sheet of an employer employing a young worker for vocational preparation" enabling self-assessment and supervision of the vocational preparation of young workers employed by craft employers is presented at: https://pomorskaizba.pl/files/page_files/48/dualne-kształcenie-zawodowe-ost.pdf (accessed 12.12.2023, see pages 134 to 139).

When creating a list of criteria, it is a good idea to invite other school staff to contribute.

Procedure for consultation and verification of the company with regard to the possibility of providing practical classes for students in the form of dual training

Proposal of a procedure for establishing cooperation and verification of the company where the student is to receive practical training:

- 1) Before starting the first conversation with a company representative on the dual education of students, it is a good idea to prepare for it. To this end, a list of questions can be compiled, so that an important issue is not overlooked. In compiling the list, you can use the hints formulated above.
- 2) Establish a contact for the company, preferably a representative of the management and the person responsible for coordinating the training of students in the company.
- 3) Arrange an initial working meeting with the person responsible for coordinating student training in the company.
- 4) During the working meeting, do a preliminary interview with the coordinator at the company to establish the possibility of conducting practical activities for the students. If necessary, a guided tour of the company can be requested. Establish what learning outcomes can be realised in the company.
- 5) Draw up a report on the working meeting and present the results to the school management.
- 6) If the company is accepted by the management, it would make sense to set a date for the first official meeting.
- 7) A formal meeting should be attended by the directors of the company and the school, the working contacts or the instructors of the company's classes.
- 8) During the first official conversation, the results of the first working meeting can be communicated.
- 9) It is worthwhile for the first official meeting to end with the signing of a cooperation agreement, or even the conclusion of a cooperation agreement between the school and the company for practical classes for students.

- 10) It is a good idea to identify working contacts in the cooperation agreement and to start working together.

Report on the verification of the company with regard to the possibility of providing practical classes for students in the form of dual training

A report on the company's verification of the possibility of providing practical classes for students in the form of dual training can be drawn up in the company's notes of the meeting, in which it is advisable to state:

- 1) Company details.
- 2) Meeting date.
- 3) Those attending the meeting.
- 4) Responses to predetermined verification criteria.
- 5) Company strengths and weaknesses (optional).
- 6) Final conclusion with a recommendation to the school management, the company in terms of the possibility of practical classes of students taking place there.

It is essential to refer to the law when planning the provision of practical vocational training in a company.

3.5.3. Exercises

Exercises recommended for the online version of the training:

Exercise 1.

Evaluate the truthfulness of the given sentences relating to the criteria for vetting a company to provide apprenticeship training. Tick 'True' if the sentence is true or 'False' if it is false.

Statement	Truth	False
It is essential to hire a professional intelligence service to check the credibility of the company		X
The professional qualifications of the staff seconded within the company to act as tutors for the student are not the most important thing		X
It is worth checking whether the company is on the list of companies with debts	X	
It is important that a minimum of one learning outcome can be achieved by the student in the company		X
Be sure to check with the company whether it is on the official company register	X	

Correct answer key:

Statement	Truth	False
It is essential to hire a professional intelligence service to check the credibility of the company		X
The professional qualifications of the staff seconded within the company to act as tutors for the student are not the most important thing		X

It is worth checking whether the company is on the list of companies with debts	X	
It is important that a minimum of one learning outcome can be achieved by the student in the company		X
Be sure to check the company to see if it is on the official company register	X	

For the person transferring the paper version to the online version, after each exercise:

If the answer is good, a message will appear:

Bravo!

You have mastered the material very well.

With the wrong answer:

Unfortunately, you have not been able to solve the task correctly.

Try again. Alternatively, repeat the topic again online or look at the student guide.

Exercises recommended for the classroom version of the training

Exercise 1.

What is then worth looking at when vetting a company, and the procedure for consulting and vetting a company for the possibility of providing practical classes for students in the form of dual education.

The facilitator divides the group into four teams.

The task for the two teams is to identify the elements that need to be taken into account when verifying a company for the implementation of practical classes for students in the form of dual training.

The task of the other two is to develop a procedure for consulting and carrying out a company verification for the possibility of providing practical classes for students in the form of dual training.

The groups will present the results of their work on a flipchart in the form of a description or drawing (mind map).

A representative of the group presents the results of the work in the forum.

Finally, participants share their experiences in a discussion and try to find a common solution.

The class leader summarises the exercise.

3.5.4. Progress test (self-assessment)

Can you:	Yes	Not
1) identify and select criteria for verifying a company for its ability to provide practical classes for students in the form of dual training?		
2) describe the procedure for consulting and vetting a company for the feasibility of providing practical classes for students in the form of dual training?		

3) explain how to draw up a report on the verification of a company for the possibility of providing practical classes for students in the form of dual training?		
4) give an oral and written opinion on the possibility of the company providing practical classes for students in the form of dual training?		
5) draw up criteria for verifying a company for the possibility of providing practical classes for students in the form of dual training?		
6) consult with school and employer representatives the company's criteria developed for the possibility of providing practical classes for students in the form of dual training?		
7) carry out a verification of the company with regard to the possibility of providing practical classes for students in the form of dual training?		
8) draw up a report on the verification of the company with regard to the possibility of providing practical classes for pupils in the form of dual training?		
9) report back to the school and company representatives on the company's verification of the feasibility of providing practical classes for students in the form of dual training?		
10) develop conclusions, recommendations from the verification of the company with regard to the possibility of providing practical classes for students in the form of dual training?		
11) decide, in cooperation with the school management, on the organisation of a dual training course in a verified enterprise?		

If you selected the answer "NO", we propose you returning to the teaching material and its repeated analysis in order to achieve intended learning outcomes (knowledge, skills).

If necessary, use additional source of information prepared to each topic.

3.5.5. Recommended sources of information

Recommended literature - you can find more information on the topic in:

1. Berkel G.: *Learning to Negotiate - Cambridge University Press & Assessment*: https://assets.cambridge.org/97811084/95912/frontmatter/9781108495912_frontmatter.pdf (accessed 12.12.2023).
2. Harasim A.: *Dual vocational training in crafts. Increasing the effectiveness of vocational preparation in crafts in the process of supervision by crafts organisations. Polish Craft Association*: https://pomorskaizba.pl/files/page_files/48/dualne-ksztalcenie-zawodowe-ost.pdf (accessed 12.12.2023).
3. Klotz, V.K., Billett, S. & Winther, E. *Promoting workforce excellence: formation and relevance of vocational identity for vocational educational training. Empirical Res Voc Ed Train* 6, 6 (2014). <https://doi.org/10.1186/s40461-014-0006-0>; <https://ervet-journal.springeropen.com/articles/10.1186/s40461-017-0053-4> (dostęp: 12.12.2023).
4. Mikkonen, S., Pylväs, L., Rintala, H. et al. *Guiding workplace learning in vocational education and training: a literature review. Empirical Res Voc Ed Train* 9, 9 (2017). <https://doi.org/10.1186/s40461-017-0053-4>; <https://ervet-journal.springeropen.com/articles/10.1186/s40461-017-0053-4> (dostęp: 12.12.2023).

5. Powell M.: *Developing negotiation skills - Cambridge University Press & Assessment*:
https://assets.cambridge.org/97805211/49921/excerpt/9780521149921_excerpt.pdf (accessed 12.12.2023).
6. *Students and Negotiating: Strategies That Work | Winds of Change - AISES*:
<https://woc.aises.org/content/students-and-negotiating-strategies-work> (accessed 12.12.2023).

3.6. Drawing up an agreement between the parties involved in the process of practical training of students for dual education in the company

3.6.1. Detailed learning outcomes

As a result of learning within a topic, you will be able to:

- identifies the components of the contract concluded between the parties involved in the process of practical training of students in the dual form for dual education in the company,
- describes the procedure for drawing up an agreement between the parties involved in the process of practical training of students in the dual form for dual education in the company,
- initiates the process of drawing up an agreement between the parties involved in the process of practical training of students in the dual form for dual education in the company,
- develops, in consultation with a lawyer, an agreement between the parties involved in the process of practical training of students in the dual form for dual education in the company,
- presents and agrees with the party of the enterprise the content of the contract,
- recommends signing the contract by the parties.

3.6.2. Learning material

Components of a contract between the parties involved in a company's dual training of students

Practical classes shall be organised for pupils and juveniles in order for them to master the professional skills necessary to take up employment in a given occupation and, in the case of practical classes held at employers under the principles of the dual training system, also in order to apply and deepen the acquired professional knowledge and skills in real working conditions.

The basis for dual training is the conclusion of a contract between the vocational school sending the student and the host enterprise.

Agreement advisable to include:

- 1) The title of the agreement indicating what it relates to.
- 2) Details of the parties entering into the agreement, indicating the legal representatives.
- 3) General information about the subject of the contract, including the name of the profession, the form of the practical classes, their duration, information about the number of students covered by the contract, information about the obligation to appoint a supervisor for the students in the company and the maximum number of students per supervisor.
- 4) Rights and responsibilities of the school.
- 5) Rights and obligations of the company hosting the students for practical training.
- 6) Information on the processing of personal data.
- 7) Additional provisions.
- 8) Annexes to the agreement.

M1.U2. Creating patronage classes and organising dual education



Fig. 5. Example of the structure of an apprenticeship agreement between a school and an employer in Poland

Source: *Niezbędnik pracodawcy - kształcenie dualne, czyli "pracownik szyty na miarę"*. Provincial Labour Office in Lublin. Department of Labour Market Policy, Lublin 2019: <https://tiny.pl/c3365> (accessed 20.12.2023).



Fig. 6. Example of the structure of a practical vocational training contract between an employer and a student-young worker in Poland

Source: *Niezbędnik pracodawcy - kształcenie dualne, czyli "pracownik szyty na miarę"*. Provincial Labour Office in Lublin. Department of Labour Market Policy, Lublin 2019: <https://tiny.pl/c3365> (accessed 20.12.2023).

In Poland, if a juvenile worker turns 18 during the period of apprenticeship, he is still treated as a juvenile worker until the end of the apprenticeship. However, if the juvenile is under 16 years of age, the contract with the employer is additionally signed by the juvenile's legal guardian.

Procedure for drawing up the contract between the parties involved in the company's dual training of students

- 1) Identify the legal acts governing dual training in the company and find in them guidelines for the scope of the contract.
- 2) Involvement of a lawyer representing the school in the preparation of the agreement between the parties.
- 3) Prepare a preliminary version of the contract and present it to the employer's side for approval.
- 4) Address any comments made by the employer side.
- 5) Working out a common version of the agreement.
- 6) Zawiercie practical training agreement by the head of the school with the legal representative of the entity receiving the students for dual training.

In Poland, an employer can consider two options in order to start dual training in their company:

- signing an apprenticeship agreement with the school or
- signing an employment contract with a young person for vocational preparation.

In Poland, the terms and conditions of the candidate's employment as part of practical vocational training:

- the candidate's 15th birthday,
- completed 8-year primary school,
- a state of health which makes it possible to take up an apprenticeship,
- medical examination confirmed by a certificate stating that there are no contraindications to work in the profession.

Agreement between the parties involved in the dual training of students in a company - example 1

**AGREEMENT
ON PRACTICAL VOCATIONAL TRAINING
IN THE FORM OF PRACTICAL CLASSES BASED ON THE PRINCIPLES OF DUAL TRAINING**

Agreement concluded on between:

..... represented by:

.....

a

..... hereinafter referred to as the "Company", represented by:

.....

1. Apprenticeship classes will be provided in a trade education occupation:
2. In the school year the school directs pupils to the above-mentioned Company. The list of pupils is attached as Annex 2 to this agreement.
3. Form of practical vocational training: apprenticeship.
4. Practical classes last

5. The apprenticeship will take place according to the school's apprenticeship framework programme attached as Annex 1 to this agreement.
6. The total number of hours allocated to dual training apprenticeships over the entire training cycle is clock hours
7. Daily practical hours shall not exceed 8 clock hours.
8. Practical classes carried out as part of professional practice are conducted in groups. In justified cases, they may be conducted individually. The number of pupils in a group should enable the realisation of the professional practice programme.
9. Practical classes carried out as part of the apprenticeship are conducted in workplaces under the guidance of practical training instructors, who are designated employees of the Company.
10. There can be no more than 5 students per apprenticeship instructor.
11. A school supervisor will be appointed on behalf of the school. The supervisor's responsibilities will include monitoring of the placement and the documentation of the placement.
12. On the basis of the activity log, the school activity supervisor will complete the school's electronic log.
13. The programme of classes is carried out in the Company in the form of practical tasks, exercises or services provided, in accordance with the programme and organisation of the studio classes.
14. Rights and responsibilities of the school:
 - (a) supervise the implementation of activities,
 - (b) liaise with the employer taking the students on,
 - (c) provide accident insurance for pupils,
 - (d) accepts designated instructors,
 - (e) organise training for students in the operation of electrical equipment, installations and networks prior to the start of their apprenticeship.
15. The enterprise hosting the students in the workshop classes organised on a dual training basis:
 - 1) provides the material conditions for the implementation of activities, in particular:
 - (a) workstations equipped with the necessary facilities, equipment, tools, materials and technical documentation, taking into account health and safety requirements,
 - (b) the working clothes, footwear and personal protective equipment and hygiene products to which employees are entitled for their position,
 - (c) storage facilities for work clothing and footwear and for personal protective equipment,
 - (d) access to hygiene and sanitary facilities and welfare facilities,
 - (e) cover the costs of the examination to verify the qualifications for the operation of electrical equipment, installations and networks for students undergoing an apprenticeship at the Company;
 - 2) appoints teachers, instructors and supervisors as appropriate;
 - 3) acquaints the pupils with the organisation of work, the work regulations, in particular with regard to the observance of work order and discipline, and the rules and principles of occupational health and safety. He shall perform these activities during the first classes;
 - 4) supervises the course of the classes;
 - 5) draws up, in the event of an accident during classes, post-accident documentation;
 - 6) cooperates with the school;
 - 7) notifies the school if a student violates the work rules.
16. The company hosting the apprentices undertakes to conduct a final examination. The grade of the final examination shall be entered and signed by the practical training instructor in the apprenticeship logbook.
17. Additional provisions may be given in the form of annexes to the contract.

Legal basis:

1. The Act of 7 September 1991 on the educational system. (Dz. U. 1991 Nr 95 poz. 425 with amendments).
2. Regulation of the Minister of National Education of 22 February 2019 on practical vocational training (Journal of Laws 2019, item 391, as amended).

.....
(signature of head teacher)

.....
(signature of the company)

.....
/place/ /D.MM.YEAR/

List of annexes:

- Annex 1. Apprenticeship programme for the profession
- Annex 2. List of pupils sent for work placement

Multilateral agreement for a student internship in a company - example 2

APPRENTICESHIP AGREEMENT⁴¹

No.

Concluded on between:

.....
(Project beneficiary)

Tax Identification Number, National Register of court,
which he represents:

.....
(name of person authorised to sign contracts - position)

a

.....
(name of school, address)

Tax Identification Number....., hereinafter referred to as the *Referral School*, which is represented by:

.....
(name, function)

a

.....
(name, address of the workplace accepting the trainee)

hereinafter referred to as *Host/Employer*,

which he represents: -
(name and surname) (position/function)

a

Mr/Mrs living

PESEL number no. - student

⁴¹ Contract for student internships at vocational schools - Łukasiewicz Research Network - Institute for Sustainable Technologies (Radom, Poland): <https://www.itee.lukasiewicz.gov.pl/materialy> (accessed 12.12.2023).

(name of school)

trainees

(name and occupation code)

hereinafter referred to as the student, with the consent of the parent⁴²

(legal guardian) PESEL number.....

with the following content:

§1

This Agreement is concluded on the basis of the Project Agreement

.....

(name of project)

agreement of between

(names of contracting authorities)

§2

SUBJECT MATTER AND PURPOSE OF THE AGREEMENT

1. The subject of this agreement is the implementation of student work placements with the Employer.
2. The internship is carried out on the basis of the Rules for Participation in the Internship (Appendix 1 to the contract).
3. The Rules of Procedure shall form an integral part of the Agreement and the Parties to the Agreement undertake to comply with their provisions.
4. The internship is organised as part of the practical vocational training of students

.....
Type of school: technical secondary school, lower secondary school or upper secondary school

5. The internship will be carried out in the profession:

Occupation name and code

In accordance with the developed student internship programme.

6. The aim of the internship is to gain work experience and acquire skills to function in a work environment, including skills and key competences and the right attitudes necessary in the labour market.
7. The internship will be carried out at The parties agree on the number of hours of the internship to be clock hours, carried out on consecutive days, in accordance with the adopted Internship Regulations (Annex 1).
8. The daily duration of a pupil's pupil placement for pupils under the age of 16 shall not exceed 6 hours and for pupils over the age of 16 shall not exceed 8 hours. The daily total hours of educational activities carried out by a pupil at school and during a pupil placement shall not exceed 8 hours and the weekly total hours of educational activities carried out by a pupil at school and during a pupil placement shall not exceed 40 hours.
9. The student will be exempted in whole or in part from the obligation to undertake practical vocational training by the Head of School after completing the internship.
10. It is not the intention of the Parties to this Agreement to employ the student under an employment contract. The conclusion of the agreement therefore does not constitute the establishment of an employment relationship between the student and the Employer for the internship. The Student declares that he/she is aware of the purpose for which this Agreement is concluded (paragraph 6) and accepts the foregoing.

§3

PERSONS APPOINTED TO PERFORM THE CONTRACT

1. The supervision of the proper realization and the course of the internship on behalf of the Project Promoter will be carried out by

(name and surname)

(position in the project)

⁴² This part of the agreement is not completed if the student is over 18 years of age.

2. The Student's Supervisor on behalf of the Employer, whose tasks include in particular:
 - Supervise the proper implementation and scheduling of the student internship.
 - Providing care and supervision of the student's activities at their assigned workstation,
 - Supervising the proper implementation and scheduling of the internship,

will be:

(name and surname)

3. The internship coordinator on behalf of the school will be:

(name and surname)

§4

HOST ENTITY/EMPLOYER

1. The host entity (Employer) is obliged to carry out the tasks in accordance with the provisions of the Regulations.
2. The entity hosting the student shall indicate the address as the place of the internship, placement:

.....

§5

STAFF

1. The student is obliged to carry out the tasks and fulfil the responsibilities under the provisions of the Internship Regulations.
2. The student after completing 100% of the hours of the work placement (i.e.hours) and submitting a set of documents, viz:
 - a) individual programme, internship schedule confirmed by the supervisor at the internship provider,
 - b) an internship logbook with confirmation from the host supervisor that the internship has been completed;will receive a one-off cash benefit under the terms of the Project, provided that the Project provides for such a benefit.
3. the one-off cash benefit for the internship will be paid within 30 days of the approval of the above documents to the indicated bank account number⁴³
4. Where a student has attended less than 100% of the hours of the placement, a one-off cash payment will be paid, reduced in proportion to the number of hours worked.

§6

RESPONSIBILITIES OF THE HOST EMPLOYER

1. An employer taking on a student intern undertakes:
 - Organise and implement the internship in accordance with the approved student internship programme, within the timeframe specified in the internship schedule.
 - Carry out the student placement in accordance with best practice for quality assurance of practical training, ensuring health and safety.
 - Provide, free of charge, job and health and safety training as well as fire safety training and familiarise the student with the organisation of work, the work regulations, in particular with regard to the observance of work order and discipline, and other regulations in force at the student's placement.
 - To familiarise the student trainee with his/her responsibilities and entitlements.
 - Provide the conditions necessary for the student to complete the student placement programme.
 - Inform the Traineeship Coordinator of each day the student leaves the workplace and of other events relevant to the programme.
 - To evaluate the student internship and the results obtained.
2. The employer shall undertake the supervision of the student, including the appointment of an internship supervisor whose task will be:
 - Supervising the proper implementation of the internship schedule,
 - to monitor the student's progress: the acquisition of new skills and the extent to which content and learning objectives are met,

⁴³ In the case of a minor, the bank account number of the parent or legal guardian must be provided.

M1.U2. Creating patronage classes and organising dual education

- to provide the pupil, on an ongoing basis, with information on how the pupil is carrying out his/her professional tasks and his/her progress in carrying out his/her professional tasks,
 - certify, on a daily basis, with his/her signature, the student's attendance and the type of tasks performed in the internship logbook.
3. In the event of a fortuitous event or accident at the workplace involving a student, the Employer:
- inform the school immediately of the situation,
 - ensure that pre-medical assistance is provided and, if necessary, call an ambulance,
 - will notify his/her parents (legal guardians),
 - draw up proper post-accident documentation.
4. The employer will take part in an evaluation survey on the implementation of the internship in the company.
5. The employer undertakes to apply the Data Protection Act of 10 May 2018 during and after the student internship.

§7

RESPONSIBILITIES AND RIGHTS OF THE STUDENT

1. The student's tasks within the internship include:
- To be familiar with the provisions of the internship policy contained in the internship regulations and the student internship programme.
 - Timely and active participation in student placement.
 - To comply with the instructions of the Employer and the internship supervisor acting on behalf of the Employer if they are not contrary to the law. To diligently and conscientiously perform the activities and tasks included in the internship programme.
 - Presentation to the Employer accepting the student internship of a certificate that there are no health contraindications to work in a specific position.
 - To receive training in health and safety and fire regulations and to familiarise themselves with and comply with the organisation of work, the work regulations, in particular with regard to the observance of work order and discipline, and other rules and regulations in force at the student internship site.
 - Adherence to the agreed duration of the internship as well as to the work regulations, the rules on health and safety at work and fire safety, the regulations on the protection and secrecy of the company, the protection of personal data and the rules of social coexistence.
 - Maintaining the confidentiality of information that constitutes a business secret. An internship host's business secret is understood as technical, technological, organisational information of the company or other information of economic value that has not been disclosed to the public.
 - Completion of internship logbook.
 - Participation in an evaluation study on the implementation of the internship.
 - In the event of illness or the need to take a day off for valid legitimate reasons, the pupil's internship shall be extended in order to achieve 100% of the internship hours.
2. The student's entitlement can be exercised upon completion of the pupil internship. Conditions for completion of the pupil internship (fulfilled cumulatively):
- Effective completion of 100% of the internship hours,
 - obtaining approval of the internship log by the student's supervisor,
 - receipt of a certificate of completion of the apprenticeship, signed by authorised persons in the company providing the apprenticeship.
3. The internship grant (if provided for in the project) may be applied for by a student who fulfils the conditions for completing the internship and presents the project Beneficiary with the following documents: a certificate of completion of the student internship and the internship logbook.
4. The scholarship shall not be granted if the student has not commenced the internship, has interrupted participation in the internship or has failed to justify at least one absence.

§8

CONTROL

1. The host entity (Employer) will ensure that entities entitled to inspection have full access to all documents related directly or indirectly to the implementation of the internship.

2. The right of inspection shall be vested in authorised entities both at the premises of the Host Entity and at the placement site, at any time during the course of the placements.
3. The Host/Employer undertakes to keep the documentation related to the internship in a way that ensures its availability, confidentiality and security.

§9

PROTECTION OF PERSONAL DATA

1. The contracting parties undertake, when processing personal data, to secure them by applying appropriate technical and organisational measures ensuring an adequate level of security corresponding to the risks involved in the processing of personal data, as referred to in Article 32 of the GDPR.
2. The contracting parties shall be liable for damages arising in connection with non-compliance with the Personal Data Protection Act, GDPR, the provisions of generally applicable law on the protection of personal data.
3. The Parties to the Agreement shall ensure that appropriate technical and organisational measures are implemented to ensure an adequate level of security appropriate to the risks involved in the processing of personal data, so that the processing meets the requirements of the GDPR and protects the rights of data subjects, and shall keep a register of all categories of processing activities as referred to in Article 30(2) of the GDPR and
4. The contracting parties are obliged to maintain the confidentiality of personal data and information on the methods used to secure them.
5. The contracting parties are obliged to inform the Executor immediately of:
 - 1) any breach of the secrecy of personal data or any misuse of personal data and any breach of obligations regarding the protection of personal data entrusted for processing, subject to paragraph 32;
 - 2) any action with his/her own participation in matters concerning personal data protection conducted, in particular, before the President of the Office for Personal Data Protection, the European Data Protection Supervisor, state offices, the police or before the court;
 - 3) the results of inspections carried out by authorised entities with regard to the processing of personal data together with the information on the compliance with the recommendations issued, as referred to in paragraph 13.
6. The contracting parties undertake to inform the Executor/Beneficiary immediately of any breach by them or persons authorised by them of their obligations concerning the protection of personal data.
7. Each Party shall, without undue delay but no later than within 24 hours after the discovery of the breach, notify the Executor and the Intermediate Body (.....) of any breach of personal data protection. The notification shall contain, in addition to the elements set out in Article 33(3) GDPR, information making it possible to determine whether the breach results in a high risk of violation of the rights or freedoms of natural persons. If the information referred to in Article 33(3) GDPR cannot be provided at the same time, the notifying entity may provide it successively without undue delay.
8. In the event of a personal data protection breach that may cause a high risk of infringement of the rights or freedoms of natural persons, the Executor shall, at the request of the Intermediate Body, notify the persons affected by the personal data protection breach without undue delay, if so requested by the Intermediate Body.
9. The Parties are obliged to assist the Executor and the Intermediate Body to comply with the obligations set out in Articles 32 to 36 of the GDPR.
10. The Parties are obliged to assist the Executor and the Intermediate Body to comply with their obligation to respond to the data subject's requests for the exercise of his/her rights set out in Chapter III of the GDPR.
11. The Parties shall make it possible for the Intermediate Body or entities authorised by them, in the places where the entrusted personal data are processed, to carry out a control or audit of the compliance of the processing of personal data with the Personal Data Protection Act, GDPR, provisions of generally applicable law concerning personal data protection and the Agreement. The notice of the intention to carry out the inspection or audit shall be provided to the controlled entity at least 5 working days prior to the commencement of the inspection.
12. In the event that the Intermediate Body becomes aware of a flagrant breach by the Parties of their obligations under the Personal Data Protection Act, the GDPR, the common law provisions on personal data protection or the Agreement, the Parties shall enable the Intermediate Body or entities authorised by it to carry out an unannounced inspection or audit for the purpose set out in paragraph 11.

13. The contracting party undertakes to apply the recommendations concerning the improvement of the quality of personal data protection and the manner of their processing made as a result of control or audit carried out by the Intermediate Body or by entities authorised by it or by other institutions authorised to control on the basis of separate regulations.

§10

1. Disputes that may arise in connection with the performance of the Agreement will be attempted to be resolved amicably by the Parties.
2. In the event of an inability to resolve a dispute in accordance with the procedure referred to in Paragraph 1, the Parties agree that the dispute shall be submitted for settlement to a common court having jurisdiction over the registered office of the Executor.
3. Any amendments to this Agreement shall require the consent of the Parties and shall be made in writing on pain of nullity.
4. In matters not governed by this Agreement, the relevant provisions of the Civil Code and other relevant regulations will apply.

§11

1. The annexes to the agreement form an integral part of the agreement.
2. The annexes to this agreement are:
 - Annex 1 - Rules of apprenticeship,
 - Annex 2 - Consent of parent/legal guardian to student's participation in pupil placement

The Agreement is drawn up in four copies of equal content, one for each of the Parties.

.....
(signature and stamp of project implementer/beneficiary)

(stamp and signature of the employer)

.....
(signature of school representative)

(signature of pupil or legal guardian)

Other examples of student practical training agreements:

- 1) Online agreement on the website of the German Chamber of Industry and Commerce in Neubrandenburg - <https://www.neubrandenburg.ihk.de/aus-und-weiterbildung/ausbildung/neu-der-elektronische-berufsausbildungsvertrag/> (accessed 12.12.2023).
- 2) Contract for student internships at vocational schools - Łukasiewicz Research Network - Institute for Sustainable Technologies (Radom, Poland): <https://www.itee.lukasiewicz.gov.pl/materialy> (accessed 12.12.2023).
- 3) Model contract for vocational training: https://pomorskaizba.pl/files/page_files/48/dualne-kształcenie-zawodowe-ost.pdf (accessed 12.12.2023).
- 4) Employer's essentials - dual education, or 'tailor-made employee'. Provincial Labour Office in Lublin. Department of Labour Market Policy, Lublin 2019: <https://tiny.pl/c3365> (accessed December 20, 2023).
- 5) CONVENIO DE COLABORACIÓN ENTRE EL CENTRO EDUCATIVO Y LA EMPRESA / ENTIDAD COLABORADORA PARA LA REALIZACIÓN DE LA FORMACIÓN EN CENTROS DE TRABAJO (FCT):

<https://www.educacionyfp.gob.es/dam/jcr:9c33580f-46ab-45c7-9ea5-f37b79a938b7/1-anexo0-conveniopdf.pdf> (accessed 12.12.2023).

- 6) CONVENI DE COL·LABORACIÓ PER AL DESENVOLUPAMENT DE PROJECTES DE FORMACIÓ PROFESSIONAL DUAL DEL SISTEMA EDUCATIU DE LA COMUNITAT VALENCIANA:
https://mestreacasa.gva.es/c/document_library/get_file?folderId=4603131668174&name=DLFE-2663283.pdf (accessed 12.12.2023).
- 7) Model contract for VET in Denmark. <https://evu.dk/wp-content/uploads/2019/01/uddannelsesaftale-eng.pdf> (accessed 12.12.2023).

3.6.3. Exercises

Exercises recommended for the online version of the training:

Exercise 1.

Indicate the information that should be included in the dual training agreement between the school and the company.

Determination of the parties to the contract	<input type="checkbox"/>
The name and address of the school attended by the student referred to the dual course of study	<input type="checkbox"/>
Rights and obligations of the parties	<input type="checkbox"/>
Costs of organising the dual training to be borne by the student	<input type="checkbox"/>
Penalties to be applied to the student	<input type="checkbox"/>

Correct answer key:

Determination of the parties to the contract	X
The name and address of the school attended by the student referred to the dual course of study	X
Rights and obligations of the parties	X

Exercise 2.

Fill in the gaps in the sentence by selecting the correct words from under the text.

The employer undertakes the care of, including the appointment of whose task will be:

- overseeing the correct implementation ofstage,
- monitoring the student's progress: the acquisition of new skills and the extent to whicheducation is achieved,

- to provide the pupil, on an ongoing basis, with information on how he/she is performing and on his/her progress in the professional tasks,
- to certify, on a daily basis, with his/her signature, the student's attendance and the type of tasks performed at

pupil

internship supervisor

schedule

professional tasks

content and objectives

internship logbook

Correct answer key:

The employer undertakes the supervision of **the student**, including the appointment of an **internship supervisor** whose task will be:

- Supervising the proper implementation of the internship **schedule**,
- to monitor the student's progress: the acquisition of new skills and the extent to which **content and learning objectives are met**,
- to provide the pupil, on an ongoing basis, with information on how the pupil is carrying out his/her **professional tasks** and his/her progress in carrying out his/her professional tasks,
- certify, on a daily basis, with his/her signature, the student's attendance and the type of tasks performed in the **internship logbook**.

Exercises recommended for the classroom version of the training

Exercise 1.

Contract for the organisation of dual training between a vocational school and an enterprise.

Running the exercise:

- 1) Discussion - topic: what components (chapters) should the vocational training contract between the vocational school and the company contain? The trainer writes the answers on a flipchart.
- 2) The facilitator divides the participants into teams of 3-4 people. Each team is given one of the chapters of the agreement to work on. Participants present the results of their work in the form of a description or a mind map on a flipchart.
- 3) When the work is completed, the team leaders present the results. The facilitator and the other participants complete the ideas of the presented group.
- 4) The trainer summarises the exercise and presents an example of a trainee agreement.

3.6.4. Progress test (self-assessment)

Can you:	Yes	Not
-----------------	------------	------------

1) identifies the components of the contract concluded between the parties involved in the process of practical training of students in the dual form for dual education in the company?		
2) describes the procedure for drawing up an agreement between the parties involved in the process of practical training of students in the dual form for dual education in the company?		
3) initiates the process of drawing up an agreement between the parties involved in the process of practical training of students in the dual form for dual education in the company?		
4) develops, in consultation with a lawyer, an agreement between the parties involved in the process of practical training of students in the dual form for dual education in the company?		
5) presents and agrees with the party of the enterprise the content of the contract?		
6) recommends signing the contract by the parties?		

If you selected the answer "NO", we propose you returning to the teaching material and its repeated analysis in order to achieve intended learning outcomes (knowledge, skills).

If necessary, use additional source of information prepared to each topic.

3.6.5. Recommended sources of information

Recommended literature - you can find more information on the topic in:

1. Harasim A.: *Dual vocational training in crafts. Increasing the effectiveness of vocational preparation in crafts in the process of supervision by crafts organisations.* Polish Craft Association: https://pomorskaizba.pl/files/page_files/48/dualne-ksztalcenie-zawodowe-ost.pdf (accessed 12.12.2023).
2. *Model student agreement with school and employer:* <https://www.itee.lukasiewicz.gov.pl/materialy> (accessed 12.12.2023).
3. *Contents of the contract:* <https://documentacion.eu/guias/guias-contratos/contrato-formacion-aprendizaje.pdf> (accessed 12.12.2023).
4. *Model contract for VET in Denmark.* <https://evu.dk/wp-content/uploads/2019/01/uddannelsesaftale-eng.pdf> (accessed 12.12.2023).
5. *Model contract for VET in Denmark.* <https://evu.dk/the-apprenticeship-agreement/> (accessed 12.12.2023).

3.7. Preparing a programme of practical classes organised in the dual education system

3.7.1. Detailed learning outcomes

As a result of learning within a topic, you will be able to:

- lists the principles of organisation of the team for developing a programme of practical classes in the dual education system with the participation of employers,
- indicates the benefits related to the participation of employers in the preparation of the programme of practical classes organised in the dual education system,
- identifies and applies the principles of developing the content of the programme of practical classes organised in the dual education system,
- appoints a team for developing a programme of practical classes organised in the dual education system, which includes a representative from the school and the company,
- determines within the team the structure of the programme of practical classes organised in the dual education system,
- participates in the development of the content of the programme of practical classes organised in the dual education system.

3.7.2. Learning material

Principles of organisation of a team for the development of a dual education programme for students in a company

The team for the development of the company's dual education programme for students is advisable to include:

- 1) representatives of the school, e.g. the head of practical classes, a teacher delegated to look after the students from the school, other teachers designated by the head teacher;
- 2) representatives of the employer(s) where the dual training of students takes place, including employees delegated to act as the student's mentor in the company.

Representatives of the employer's side should be familiar with the specifics of vocational training and the principles of drawing up and structuring the practical training programme.

Employees representing the employer's side of the business are advised to have knowledge of the company, including the processes carried out in the company, the machinery and equipment, the possible professional tasks to be performed by the students, etc.

It is recommended that the first version of the students' dual education programme is prepared by school representatives.

The employer side will verify the learning outcomes contained in the curriculum with a view to their achievability in the company.

Benefits related to the participation of employers in the preparation of the dual education curriculum:

- 1) The employer has a say in the content of the training programme.

- 2) Adaptation of the education programme to the needs of the labour market: employers have a direct influence in shaping the programme, which allows it to be adapted to current labour market requirements and trends.
- 3) Adaptation of the training programme to the technical possibilities and human resources available to the employer receiving the students.
- 4) Strengthen collaboration with staff representing the school.
- 5) Implementing the concept of corporate social responsibility by building relationships with vocational schools, which can contribute to the company's competitiveness.
- 6) Investment in the future: employers invest in the future of their industry by educating the next generation of workers according to their needs.

The above benefits can be used as arguments to encourage employer involvement in the preparation of the training programme.

Structure of the dual training programme

A curriculum is a comprehensive and organised educational plan that defines the objectives, content, teaching methods and assessment of students' progress within a subject or subject area⁴⁴. In our case, it concerns the dual education of students in a company.

Irrespective of the form of training, the specific training in the project partner country should be based on learning outcomes that are specific to the school profession.

Where to find these effects? In the case of Poland, each profession of vocational education has a curriculum basis for education in vocational education professions developed and published by the minister responsible for education, in which educational results are included. The core curriculum serves as a basis for the school to develop an educational programme, including its section on dual training.

Below is an example of the structure of a dual training programme for the school profession of automation technician:

Example: Dual training programme for students in a company

List of curricular sections for the dual training provided in an enterprise in the profession of automation technician

1. automation systems and installations workshop	75 lesson hours (56.25 clock hours) - 15 working days
2. design and programming workshop for automation equipment and systems	60 lessons (45 clock hours) - 15 working days
3 Apprenticeships	140 lesson hours

In 1 day/week, 5 lesson hours (3 hours and 45 clock minutes) of the automation systems and installations workshop and 4 lesson hours (3 clock hours) of the automation equipment and systems design and programming workshop will be implemented.

Curricula for specific subjects delivered in industrial plants:

1. Automation systems and installations workshop

1.1. PLC programming basics

⁴⁴ Budzianowska K., 2019, How to construct a curriculum - a short guide, <<https://edurada.pl/jak-skonstruowac-program-nauczania-krotki-poradnik-4/>> [accessed 07.12.2023].

Educational content:

- 1) Workplace organisation, health and safety.
- 2) Installation of PLC programming software.
- 3)
- 4) Creating documentation after the exercise.

Exercise proposal:

Within the framework of the practical dual training, the employer selects the tasks that the student will carry out in the company. However, it is possible for the apprentice to carry out tasks developed by the employer depending on the specifics of the enterprise, coinciding with the aforementioned training content.

1. Discussion of exercises, health and safety. Familiarisation with the software interface for PLC programming.
2.
3. Implementation of sequential switching and timing circuits on a PLC.
4. Control exercise.

1.2 Design of automation systems

Educational content:

- 1) Hazardous, harmful and strenuous factors at work in a computer workstation.
- 2)
- 3) Health and safety rules when working with a compressor and pneumatic components.

Exercise proposal:

Within the framework of the practical dual training, the employer selects the tasks that the student will carry out in the company. However, it is possible for the apprentice to carry out tasks developed by the employer depending on the specifics of the enterprise, coinciding with the aforementioned training content.

Pupils are given tasks to complete on:

1. Control of electromagnetic components by PLC.
.....
5. PLC control of the electro-hydraulic system.

2. design and programming workshop for automation equipment and systems

2.1. Digital components and circuits

Educational content:

- 1) Concepts related to health and safety, fire protection, anti-static protection, environmental protection and ergonomics.
- 2) Principles of health and safety at work, fire protection, anti-static protection and environmental protection.
- 3) Organise the workplace when performing occupational tasks in accordance with ergonomic requirements, occupational health and safety regulations, fire protection, anti-static protection and environmental protection.
- 4)
- 5) Checking the correct operation of industrial automation systems.

Exercise proposal:

Within the framework of the practical dual training, the employer selects the tasks that the student will carry out in the company. However, it is possible for the apprentice to carry out tasks developed by the employer depending on the specifics of the enterprise, coinciding with the aforementioned training content.

Pupils are given tasks to complete on:

1. Research on logic gates and combinational circuits.

.....

6. Digital circuit diagnostics.

2.2 Industrial process visualisation systems

Educational content:

- 1) Workplace organisation, health and safety.
- 2)
- 3) Configuring the system.

Exercise proposal:

Within the framework of the practical dual training, the employer selects the tasks that the student will carry out in the company. However, it is possible for the apprentice to carry out tasks developed by the employer depending on the specifics of the enterprise, coinciding with the aforementioned training content.

1. Introductory information. Laboratory regulations and health and safety regulations. Assessment criteria. Subject grading system. Educational requirements.
2.
3. Control exercise.

3. professional practice / 140 lesson hours (105 clock hours)

COMMENTS ON IMPLEMENTATION

During the 4-week placement, students, regardless of the specific workplace, should carry out the following range of work including:

- assembly and disassembly of automation components, subassemblies and assemblies,
-
- diagnosis and repair of automation equipment and installations.

During the implementation of the apprenticeship programme, the scope of work carried out by the students should be adapted to the specific characteristics of the company.

In the course of the apprenticeship programme, students should hone their skills in performing specific tasks at specific workstations.

It is advisable that the internship takes place in workplaces that use modern techniques and technologies and have an adequate technical base.

Examples of dual education programmes:

- 1) *Model Student Internship Programme for the occupation of mechatronics technician (311410). Łukasiewicz Research Network - Institute for Sustainable Technologies, Radom, 2022: https://www.itee.lukasiewicz.gov.pl/images/staze/Program_stau_Technik_Mechatronik.pdf (accessed 14.12.2023).*
- 2) *Harasim A.: Dual vocational training in crafts. Increasing the effectiveness of vocational preparation in crafts in the process of supervision by crafts organisations. Polish Craft Association: https://pomorskaizba.pl/files/page_files/48/dualne-ksztalcenie-zawodowe-ost.pdf (accessed 12.12.2023).*
- 3) *Dual education programme from Denmark <https://ju.dk/uddannelser/anlaegsgartner/>*
- 4) *STADLER https://mestreacasa.gva.es/web/fpdual/stadler_ (accessed 12.12.2023).*

STADLER Dual vocational training project arises from a collaboration between Stadler's Human Resources Department and a group of teachers from several vocational training centers, coordinated by the General Directorate of Vocational Training at Valencia's government.

Compared with the usual dual vocational training system that implies a relationship between a company and an educational center that has to agree the program to be developed by the students in the company and formalize all the corresponding documentation, in the STADLER model all this previous works has already been done.

A series of professional profiles have been defined by the company, the training program that will be followed in the company, the tasks that they will perform during training in the company... have been developed previously so the administrative work is completed in order to simplify the contract between company an training centers.

3.7.3. Exercises

Exercises recommended for the online version of the training:

Exercise 1.

Tick all the correct answers. It is recommended that the team for the development of the practical training programme in the dual education system should include....

Head of practical classes	<input type="checkbox"/>
Teacher delegated to look after students from the school side	<input type="checkbox"/>
Employees seconded to act as tutor for a student in the company	<input type="checkbox"/>
Teachers, particularly educators	<input type="checkbox"/>
Students	<input type="checkbox"/>

Correct answer key:

Head of practical classes	X
Teacher delegated to look after students from the school side	X
Employees seconded to act as tutor for a student in the company	X

Exercise 2.

Evaluate the truthfulness of the given sentences about the benefits associated with the participation of employers in the preparation of the dual education curriculum. Mark 'True' if the sentence is true as it represents an employer benefit or 'False' if it is false.

Statement	Truth	False
-----------	-------	-------

The employer has an influence on the content of the training programme	X	
Employer strengthens cooperation with employees representing the school	X	
Employer participation makes it possible to adapt the training programme to the technical possibilities and human resources available to the employer receiving the students	X	
Employer does not involve employees in dual education		X

Correct answer key:

Statement	Truth	False
The employer has an influence on the content of the training programme	X	
Employer strengthens cooperation with employees representing the school	x	
Employer participation makes it possible to adapt the training programme to the technical possibilities and human resources available to the employer receiving the students	X	
Employer does not involve employees in dual education		X

Exercises recommended for the classroom version of the training**Exercise 1.**

Student dual training programme.

Running the exercise:

- 1) Discussion - topic: what components (chapters) should the dual training programme for students contain? The facilitator writes the answers on a flipchart.
- 2) The trainer divides the participants into teams of 3-4 persons. Each team is given an example of a dual training programme, on the basis of which they will develop a structure recommended by the team. They will present the results of their work in the form of a description or a mind map.
- 3) Once completed, team leaders present the results.
- 4) The trainer summarises the exercise and presents an example of the dual training programme included in the handbook or another programme of his/her choice.

3.7.4. Progress test (self-assessment)

Can you:	Yes	Not
1) lists the principles of organization of the team for developing a program of practical classes in the dual education system with the participation of employers?		

2) indicates the benefits related to the participation of employers in the preparation of the programme of practical classes organised in the dual education system?		
3) identifies and applies the principles of developing the content of the programme of practical classes organised in the dual education system?		
4) appoints a team for developing a programme of practical classes organised in the dual education system, which includes a representative from the school and the company?		
5) determines within the team the structure of the programme of practical classes organised in the dual education system?		
6) participates in the development of the content of the programme of practical classes organised in the dual education system?		

If you selected the answer "NO", we propose you returning to the teaching material and its repeated analysis in order to achieve intended learning outcomes (knowledge, skills).

If necessary, use additional source of information prepared to each topic.

3.7.5. Recommended sources of information

Recommended literature - you can find more information on the topic in:

1. *Model Student Internship Programme for the occupation of mechatronics technician (311410). Łukasiewicz Research Network - Institute for Sustainable Technologies, Radom, 2022:*
https://www.itee.lukasiewicz.gov.pl/images/staze/Program_stau_Technik_Mechatronik.pdf (accessed 14.12.2023).
2. *Harasim A.: Dual vocational training in crafts. Increasing the effectiveness of vocational preparation in crafts in the process of supervision by crafts organisations. Polish Craft Association:*
https://pomorskaizba.pl/files/page_files/48/dualne-ksztalcenie-zawodowe-ost.pdf (accessed 12.12.2023).
3. *Dual education* <https://todofp.es/como-cuando-y-donde-estudiar/como-estudiar/formacion-profesional-dual.html> (accessed 12.12.2023).
4. *Grundfos, "Training and Apprenticeships," (2021). Available at: Grundfos Apprenticeships.*
<https://www.grundfos.com/> (accessed 12.12.2023).

3.8. Verifying the possibility of implementing the learning outcomes included in the program of practical classes organized in the form of dual education in the company

3.8.1. Detailed learning outcomes

As a result of learning within a topic, you will be able to:

- defines the criteria for verifying the implementation of the learning outcomes included in the programme of practical classes organised in the form of dual education in the company,
- identifies and selects methods and tools for verifying the implementation of learning outcomes in the company included in the programme of practical classes organised in the form of dual education,
- defines the components of the report on the verification of the possibility of implementing the learning outcomes included in the programme of practical classes organised in the form of dual education in the company,
- prepares a tool to verify the possibility of implementing the learning outcomes included in the programme of practical classes organised in the form of dual education in the company,
- consults the tool with a representative of the company,
- verifies the possibility of implementing the learning outcomes included in the programme of practical classes organised in the form of dual education in the company,
- prepares a report on the verification of the possibility of implementing the learning outcomes included in the programme of practical classes organised in the form of dual education in the company.

3.8.2. Learning material

Criteria for verification of the realisation in a company of the learning outcomes included in the programme of practical classes organised in the form of dual training

In Poland, a core curriculum is developed for each vocational education profession. The bases are published in the form of an ordinance of the Minister of National Education of 16 May 2019 on the programme bases of education in vocational education professions and additional professional skills for selected vocational education professions (Journal of Laws 2019, item 991, as amended).

In Poland, the vocational training basis for vocational education has specified:

- 1) occupation name and code;
- 2) names of the qualifications distinguishing the occupation;
- 3) learning objectives;
- 4) learning outcomes and verification criteria;
- 5) conditions for the implementation of training in the profession, including the school equipment necessary for the implementation of training in the qualification;
- 6) minimum number of hours of vocational training for a qualification specific to the profession;
- 7) opportunities for upskilling in the profession.

On the basis of the core curriculum for vocational education, a curriculum is drawn up in a school for vocational training in a trade-related occupation, in which a programme of practical vocational training is created from selected learning outcomes, including a dual training programme that takes place at employers.

In summary, the basis for the company's verification criteria is the learning outcomes included in the programme of practical classes organised in the form of dual training.

Methods and tools for the verification of the implementation in the company of the learning outcomes included in the programme of practical classes organised in the form of dual training

Prior to the interview, a representative of the school (external coordinator) with the employer on the possibility of realising the learning outcomes included in the practical programme in the company, it is necessary to prepare for it.

To this end, we propose that the external coordinator prepares a list of learning outcomes on the basis of the practical training programme, the most important conditions for the implementation of the training (required machines, equipment, tools, etc.). This list can be done in the form of a checklist. The list can be done on paper or electronically, e.g. using the Forms application.

During the interview with the employer's representative, the external coordinator will establish with the employer the learning outcomes that can be realised in the company, as well as other constraints related to this.

Report on the verification of the feasibility in the company of the learning outcomes included in the programme of practical classes organised in the form of dual training

Another task for the outreach coordinator is to draw up a report on the verification carried out with regard to the feasibility in the company of the learning outcomes included in the programme of practical classes organised in the form of dual training.

If an online survey is used, the coordinator's job is made easier as the data for the individual reports can be generated using the Forms application.

The data from the report will be used by the school management to decide how to organise the dual training of students with a particular employer.

On the basis of several reports from different employers, the coordinator can draw up a common list of learning outcomes that can be realised in practical classes organised as dual training.

3.8.3. Exercises

Exercises recommended for the online version of the training:

Exercise 1.

Among the following answers, indicate the ones that should be taken into account when the company management decides on the implementation of the dual training of students.

Ability to achieve the learning outcomes identified in the practical programme	<input type="checkbox"/>
Availability of staff who could act as tutors for students' practical activities in the company	<input type="checkbox"/>
Availability of machinery and equipment to pupils	<input type="checkbox"/>

The need for full reimbursement of pupils' education costs	<input type="checkbox"/>
Payment by the pupil's parent of the costs of organising activities at the company	<input type="checkbox"/>

Correct answer key:

Ability to achieve the learning outcomes identified in the practical programme	X
Availability of staff who could act as tutors for students' practical activities in the company	X
Availability of machinery and equipment to pupils	X

Exercises recommended for the classroom version of the training**Exercise 1.****Verification of company learning outcomes**

Running the exercise:

- 1) The trainer divides the participants into teams of 3-4 persons. Each team is given a draft tool to prepare for the verification of learning outcomes that can be implemented in the company. The teams will present the results of their work in the form of a description or a mind map.
- 2) Once completed, team leaders present the results.
- 3) Discussion on the tools presented.
- 4) The facilitator summarises the exercise.

3.8.4. Progress test (self-assessment)

Can you:	Yes	Not
1) defines the criteria for verifying the implementation of the learning outcomes included in the programme of practical classes organised in the form of dual education in the company?		
2) identifies and selects methods and tools for verifying the implementation of learning outcomes in the company included in the programme of practical classes organised in the form of dual education?		
3) defines the components of the report on the verification of the possibility of implementing the learning outcomes included in the program of practical classes organized in the form of dual education in the company?		
4) prepares a tool to verify the possibility of implementing the learning outcomes included in the programme of practical classes organised in the form of dual education in the company?		
5) consults the tool with a representative of the company?		

6) verifies the possibility of implementing the learning outcomes included in the programme of practical classes organised in the form of dual education in the company?		
7) prepares a report on the verification of the possibility of implementing the learning outcomes included in the programme of practical classes organised in the form of dual education in the company?		

If you selected the answer "NO", we propose you returning to the teaching material and its repeated analysis in order to achieve intended learning outcomes (knowledge, skills).

If necessary, use additional source of information prepared to each topic.

3.8.5. Recommended sources of information

Recommended literature - you can find more information on the topic in:

1. *Creating a form in Microsoft Forms*: <https://support.microsoft.com/pl-pl/topic/tworzenie-formularza-w-aplikacji-microsoft-forms-4ffb64cc-7d5d-402f-b82e-b1d49418fd9d> (accessed 20.12.2023).
2. *Microsoft Forms basics quick reference guide*, M. Grzegorzewska Academy of Special Education, <https://www.aps.edu.pl/media/2392730/microsoft-forms-instrukcja.pdf> (accessed 10.12.2023).
3. *Model programme of practical vocational education for the occupation Hotel Service Assistant 911205. I stopnia szkoły branżowa*. Centre for Education Development, Warsaw: <https://www.ore.edu.pl/wp-content/plugins/download-attachments/includes/download.php?id=40605> (accessed 10.12.2023).
4. *Dual vocational training on early childhood education* <https://www.educacionyfp.gob.es/dam/jcr:0c3a4e00-6994-4c74-9512-2d0510c7922b/proyectorfpdual-cfgs-educacion-infantial-2019-21.pdf> (accessed 12.12.2023).
5. Vestas, "Workplace Evaluation for Apprenticeships," (2020). Available at: *Vestas Apprenticeships*. <https://www.vestas.com/en> (accessed 12.12.2023).

3.9. Selection of instructors to conduct practical classes for students in the company

3.9.1. Detailed learning outcomes

As a result of learning within a topic, you will be able to:

- selects and sets the criteria that are the basis for formulating competency requirements for instructors conducting practical classes for students under the dual education system,
- explains to company representatives the competency requirements to be met by the company's staff (instructor) conducting practical classes for students as part of the dual education system,
- selects materials necessary for training instructors conducting practical classes for students within the dual education system,
- expresses an opinion on the level of preparation of instructors to conduct practical classes for students within the dual education system,
- develops competency requirements for instructors conducting practical classes for students within the dual education system,
- familiarises the company representative with the competency requirements for instructors conducting practical classes for students as part of the dual education system,
- assesses, in cooperation with the company's representative, the level of meeting the competence requirements for instructors conducting practical classes for students under the dual education system by employees delegated for this purpose,
- conducts training for instructors conducting practical classes for students as part of the dual education system by employees delegated for this purpose,
- evaluates instructors conducting practical classes for students as part of the dual education system by employees delegated for this purpose.

3.9.2. Learning material

The mentor of the student in the company can be:

- 1) employer,
- 2) the person running the company on behalf of the employer,
- 3) person employed by the employer.

In Poland, the legislation does not require the employer itself to have the relevant professional and pedagogical qualifications when taking on an apprentice for practical training. It is sufficient that his employees have such qualifications. It is precisely these special professional and pedagogical qualifications of the instructors of practical vocational training that are the condition for reimbursement of the costs of employing young workers.

Competence requirements for instructors in a company involved in the dual training of students

- 1) The guardian cannot be a person who has a criminal record.
- 2) The tutor should have a degree in the area covered by the training programme, professional experience.

- 3) Supervisor advisable to have professional experience in the field he/she teaches.
- 4) He had experience of working with and caring for students.
- 5) It is recommended that the tutor has the necessary pedagogical background to guide the student's learning process.

In addition, it is advisable that the guardian:

- 1) was familiar with the regulations concerning the education system and vocational teaching.
- 2) be able to plan and organise the learning process.
- 3) be able to assess and monitor pupils' progress.
- 4) be able to adapt teaching methods to the individual needs of students.
- 5) had skills in communication and relationship building with students.
- 6) able to solve problems and manage conflict.
- 7) able to work in a team with other colleagues, students.
- 8) be able to use information and communication technology in teaching.
- 9) have the ability to continuously learn and develop their skills.
- 10) know a foreign language, which may be required in certain fields.
- 11) had the ability to motivate and inspire students.
- 12) was characterised by patience and forbearance.
- 13) applied the principles of professional ethics and respect for school rules.
- 14) had the ability to manage stress and cope with pressure.
- 15) had the ability to work under pressure of time and deadlines.
- 16) had the ability to maintain discipline during practical classes.

In Poland, the competences of student tutors in companies are regulated by the provisions set out in the Education Law (consolidated text Dz.U. 2023, item 900, as amended) and the Regulation of the Minister of National Education of 22 February 2019 on practical vocational training (Dz.U. 2019, item 391).

In Poland, as required by law, practical training instructors should:

Version 1:

- hold a master's degree in the profession they will be teaching
- have a pedagogical background (course or preparation required for a teacher).

Option 2:

- have a pedagogical background (pedagogical course or pedagogical preparation required for teachers),
- have a secondary technical education with a high school diploma,
- have a minimum of 3 years' work experience in the profession they will be teaching.

Option 3:

- have a pedagogical background (completion of the relevant pedagogical course or the pedagogical preparation required for teachers),
- hold a vocational secondary school leaving certificate and a skilled worker's degree in the occupation they are to teach,
- have a minimum of four years' experience in the profession.

Option 4:

- have a pedagogical background (completion of the relevant pedagogical course or the pedagogical preparation required for teachers),

- have a secondary school leaving certificate from a general secondary school, a technical secondary school, a technical secondary school training in a profession other than the one they will be teaching, or a secondary vocational school and a degree of skilled worker or equivalent in the profession they will be teaching,
- have a minimum of six years' work experience in the profession they will be teaching.

Option 5:

- have a pedagogical background (course in pedagogy or pedagogical preparation required for teachers)
- hold a university degree in a subject (specialisation) appropriate to the profession they will be teaching
- have at least 3 years' experience in the profession, acquired after obtaining the diploma

Option 6:

- have a pedagogical background (pedagogical course or pedagogical preparation required for teachers),
- have a university degree in another subject,
- have at least six years' work experience in the profession they will be teaching.

Identification of training needs of instructors in the company involved in the dual training of students

A checklist based on the tasks to be carried out by the mentor of the dual education student in the company can be used as a basis for needs identification. Using this, we can ask the mentors of the students in the companies if they need further training in the area:

- preparation and use with the dual training programme,
- carry out a diagnosis of the student's knowledge/skills and aptitudes,
- organisation of workplaces for the dual training of students,
- assigning pupils to appropriate workstations in the company,
- adherence to the timetable of practical classes and supervision of its correct implementation,
- observing and assessing the student's work and providing feedback,
- supporting the student, providing assistance with professional tasks,
- methods and techniques for developing teaching materials and sharing their knowledge and experience with students,
- documenting the conduct of practical classes,
- the exchange of information between employer - school - student,
- providing feedback to the student, the host employer and the school on the skills the student has acquired,
- carry out pupil progress surveys,
- conducting the internal examination,
- preparing and issuing a certificate of practical training for the student.

3.9.3. Exercises

Exercises recommended for the online version of the training:

Exercise 1.

Assess the truthfulness of the given sentences. Mark 'True' if the sentence is true as it relates to the competence requirements for an instructor in a company involved in the dual education of students or 'False' if it is false.

Statement	Truth	False
The guardian may be a person with a criminal record		
The carer can have any tertiary education without seniority		
It is desirable for the tutor to have professional experience in the field they teach		
It is recommended that the tutor has the necessary pedagogical background to guide the student's learning process		
The mentor should have a degree in the field covered by the training programme, professional experience.		

Correct answer key:

Statement	Truth	False
The guardian may be a person with a criminal record		X
The carer can have any tertiary education without seniority		X
It is desirable for the tutor to have professional experience in the field they teach	X	
It is recommended that the tutor has the necessary pedagogical background to guide the student's learning process	X	
The mentor should have a degree in the field covered by the training programme, professional experience.	X	

For the person transferring the paper version to the online version, after each exercise:

If the answer is good, a message will appear:

Bravo!

You have mastered the material very well.

With the wrong answer:

Unfortunately, you have not been able to solve the task correctly.

Try again. Alternatively, repeat the topic again online or look at the student guide.

Exercise 2. Multiple choice

Tick all the correct answers. The tutor of a student undergoing dual training in a company can be: ...

Employer	<input type="checkbox"/>
----------	--------------------------

Person employed by the employer	<input type="checkbox"/>
Person running the company on behalf of the employer	<input type="checkbox"/>
Career counsellor	<input type="checkbox"/>
Teacher-mentor at school	

Correct answer key:

Employer	X
Person employed by the employer	X
Person running the company on behalf of the employer	X

Exercises recommended for the classroom version of the training

Exercise 1.

Dual training - the ideal student tutor - the company's practical training instructor.

Running the exercise:

- 1) The trainer divides the participants into teams of 3-4 persons. Each team is given the task of drawing up the requirements for the trainee practical training instructor in the company. It is recommended that the current legal requirements for practical training instructors in a company are taken into account as a starting point. Teams present the results of their work in the form of a description or a mind map.
- 3) Once completed, team leaders present the results.
- 4) The trainer summarises the exercise and presents the sample competence requirements in the handbook for instructors in the company involved in the dual training of students.

3.9.4. Progress test (self-assessment)

Can you:	Yes	Not
1) selects and sets the criteria that are the basis for formulating competency requirements for instructors conducting practical classes for students under the dual education system?		
2) explains to company representatives the competency requirements to be met by the company's staff (instructor) conducting practical classes for students as part of the dual education system?		
3) selects materials necessary for training instructors conducting practical classes for students within the dual education system?		
4) expresses an opinion on the level of preparation of instructors to conduct practical classes for students within the dual education system?		

5) develops competency requirements for instructors conducting practical classes for students within the dual education system?		
6) familiarises the company representative with the competency requirements for instructors conducting practical classes for students as part of the dual education system?		
7) assesses, in cooperation with the company's representative, the level of meeting the competence requirements for instructors conducting practical classes for students under the dual education system by employees delegated for this purpose?		
8) conducts training for instructors conducting practical classes for students as part of the dual education system by employees delegated for this purpose?		
9) evaluates instructors conducting practical classes for students as part of the dual education system by employees delegated for this purpose?		

If you selected the answer "NO", we propose you returning to the teaching material and its repeated analysis in order to achieve intended learning outcomes (knowledge, skills).

If necessary, use additional source of information prepared to each topic.

3.9.5. Recommended sources of information

Recommended literature - you can find more information on the topic in:

1. *Employer's essentials - dual education, or 'tailor-made employee'. Provincial Labour Office in Lublin. Department of Labour Market Policy, Lublin 2019: <https://tiny.pl/c3365> (accessed December 20, 2023).*
2. *Harasim A.: Dual vocational training in crafts. Increasing the effectiveness of vocational preparation in crafts in the process of supervision by crafts organisations. Polish Craft Association: https://pomorskaizba.pl/files/page_files/48/dualne-ksztalcenie-zawodowe-ost.pdf (accessed 12.12.2023).*
3. *Practical Guide for dual training instructors in companies https://www.dualvet.eu/docs/productos/4_Guia%20practica%20para%20instructores%20de%20empresas%20de%20formacion%20dual.pdf (accessed 12.12.2023).*
4. *Instructor's manual https://www.fpdual.cat/media/docs/Manual_Tutores_web_vf_.pdf (accessed 12.12.2023).*
5. *Novo Nordisk, "Apprenticeship Programs and Quality Training," (2020). <https://www.novonordisk.com/careers/early-career-programmes/apprenticeship.html> (accessed 12.12.2023).*

3.10. Preparing the student for practical classes organized in the form of dual education in the company and documenting the dual education process in the company

3.10.1. Detailed learning outcomes

As a result of learning within a topic, you will be able to:

- determines the scope of information provided to the student by the parties involved in the organisation of practical classes organised in the form of dual education in the company,
- explains why the student should be prepared for practical classes organised in the form of dual education in the company,
- identifies the components of the regulations for the organization of student education in the dual system,
- determines, in consultation with the employer's representative, who and what (scope of information) is to be provided to the student before the start of practical classes in the form of dual education,
- draws up the necessary regulations related to the organisation of students' education in the dual system,
- familiarises the student with the organisational aspects of education in the dual system of students at the school,
- identifies the documents used in the dual education process in the company,
- describes the components of the documentation used in the dual education process in the company,
- explains the rules of preparing documents,
- determines, in cooperation with the company's representative, the scope of documentation of the dual education process in the company,
- develops documents in cooperation with the representative (practice log, attendance list, etc.) documenting the course of students' practical classes organised in the form of dual education in companies.

3.10.2. Learning material

Why and to what extent should a student be prepared for dual training in an enterprise?

Our observations show that the student is often unaware of how he or she is supposed to prepare and behave during the practical activities in the company, what he or she is supposed to learn in these activities, how these activities take place, what his or her rights or responsibilities are, etc. It is therefore reasonable to properly prepare the student for the challenge ahead.

It is recommended that the supervisor of the practical training at the school or the outreach coordinator, in cooperation with the mentor practical training instructor in the company, provide the student with the necessary information to enable him/her to prepare for the training. It is recommended that the student learns:

- 1) As much as possible about the company where the dual training is to take place;
- 2) About the scope of the tasks and responsibilities he or she will perform in the company;
- 3) Who will be his supervisor - the company's apprenticeship instructor - got to know him;

- 4) How the cooperation with the activity supervisor at the company and the coordinator at the school will work;
- 5) What organisational rules will apply (e.g. What time work starts and finishes, what the consequences of absence from class will be);
- 6) What he is expected to learn in the company during the dual training (i.e. What learning outcomes he is expected to master);
- 7) Who will insure him against unfortunate events;
- 8) What the student will receive at the start of the dual training (e.g. Work clothes, textbooks, etc.);
- 9) What the student must purchase on his/her own in order to undertake the dual training;
- 10) Which can be funded by the employer;
- 11) How many pupils there are in the company per mentor/practical training instructor;
- 12) What machines and equipment he will be working on;
- 13) To whom he or she should raise comments and concerns;
- 14) How it will be assessed;
- 15) How the practical classes will be scored;
- 16) What documents the student will have to keep during the dual training;
- 17) What documents to present at school to pass the practical classes.

This is just a sample catalogue of the information a student should receive when starting a dual training course in an enterprise. Taking into account the specifics of training in the project partner countries, it can be modified.

Regulations for the organisation of students' dual training - example

The following is an example of organisational regulations for the provision of dual education to students attending a technical school in Poland.

Regulations for practical classes conducted on the basis of dual training

1. General provisions
 - 1) The aim of practical classes implemented on a dual training basis is for students to master the professional skills necessary for employment in a given profession and to apply and deepen the knowledge and professional skills acquired in real working conditions.
 - 2) The duration of practical classes is determined by the framework teaching plan for the profession.
 - 3) The skills a student should acquire in practical classes are defined by the core curriculum for the profession and the curriculum for the profession.
2. Rights and responsibilities of students undergoing practical training:
 - 1) The student takes practical classes in designated workplaces, according to an agreed schedule,
 - 2) the pupil may not arbitrarily change the designated establishment and the duration of the class,
 - 3) The student is familiarised with the following before the start of the practical classes implemented under the dual training arrangements:
 - a) regulations for practical classes conducted on a dual-education basis,
 - b) applicable health and safety regulations and is obliged to comply with them,
 - c) assessment criteria,
 - d) the subject assessment system for practical classes.
 - 4) Familiarisation with the above regulations shall be confirmed in writing by signing the practical training logbook or the cumulative list.
 - 5) The student reports to the practical classes with a current medical examination.

- 6) The pupil is required to wear the work attire established by the establishment.
 - 7) A student may not arbitrarily leave the premises.
 - 8) It is imperative that the student observe the rules of culture and tact.
 - 9) The student is bound by absolute ethics and professional confidentiality.
 - 10) The student takes practical classes under the guidance of the practical instructor at the designated workstations.
 - 11) A student absent from practical classes for excusable reasons shall make up the practical classes. The school supervisor of practical classes shall inform the student of the date on which the practical classes are to be worked off in agreement with the practical classes instructor.
 - 12) In the event of a prolonged excused absence of a pupil, the possibility of making up the class shall be agreed between the parties to the contract: headmaster - employer.
 - 13) Any absence should be excused on the first day of return to practical classes
 - 14) A pupil who is pregnant for reasons of protection of conceived life is obliged to inform the practical classes instructor and the school supervisor of the practical classes immediately and should present a certificate from a specialist doctor. At the request of the student, the Principal, in consultation with the employer, may agree to continue the practical classes where the implementation does not endanger the life and health of the pregnant woman upon presentation of a certificate from a doctor stating that there are no contraindications to the practical classes.
3. During the practical classes, the student is required to:
- a) to deepen and broaden their theoretical knowledge, confronted with practice,
 - b) the systematic improvement of professional skills,
 - c) optimal use of learning time and conditions,
 - d) master and pass the content and skills covered in the training programme in their entirety, before the end of the training at the facility,
 - e) concern for their own health and safety,
 - f) absolute observance of the rules of personal hygiene,
 - g) taking care of the aesthetics of their work attire and their physical appearance,
 - h) the acquisition and economical use of materials, resources, tools and equipment, i. the submission of an excuse to the teacher on the first day of return to class.
4. During the practical classes, the student may not:
- a) arbitrarily extend, shorten or change the on-call hours at the facility,
 - b) provide information to members of the public,
 - c) carry out, without the agreement of the instructors, any orders given by persons working in the plant,
 - d) remove any material, equipment from the factory and products of personal activity,
 - e) smoke cigarettes, drink alcoholic beverages and take intoxicants on the premises,
 - f) arbitrary use of medicines,
 - g) use of mobile phones.
5. In practical classes, the student shall be assessed in accordance with the assessment system for practical vocational training.
6. The student's parents (legal guardians) are obliged to make good any deliberate damage caused by the student.
7. In order for a student to be admitted to a practical session, his/her parents (legal guardians) must accept the content of these regulations.

Examples of regulations for dual education:

- 1) *Organisational assumptions of the student internship - number of hours, qualification requirements of internship supervisors in an enterprise, sample equipment of workstations Łukasiewicz Research*

Network - Institute for Sustainable Technologies, Radom, 2022:

<https://www.itee.lukasiewicz.gov.pl/materialy> (accessed 14.12.2023).

- 2) *Employer's essentials - dual education, or 'tailor-made employee'. Provincial Labour Office in Lublin. Department of Labour Market Policy, Lublin 2019: <https://tiny.pl/c3365> (accessed December 20, 2023).*
- 3) *Spanish regulations for dual education <https://todofp.es/como-cuando-y-donde-estudiar/como-estudiar/formacion-profesional-dual.html> (accessed 14.12.2023).*
- 4) *Maersk, "Apprenticeship and Internship Programs," (2021). <https://www.maersk.com/careers/our-teams/students-graduates> (accessed 14.12.2023).*

Documents used in the company's dual training of students

In the process of dual training of students in a company, the applicable documents should be given as appendices to the school-company dual training partnership agreement.

The type and structure of the required documents may vary from one project partner country to another. Therefore, it is advisable to look for sample documents and create your own on the basis of these.

The following is a sample list of documents used in the company where the student is doing the dual training:

- 1) A cooperation agreement between the school and the company for the dual training of students;
- 2) A curriculum indicating the learning outcomes to be acquired by students during their dual education;
- 3) Lesson plans that record the course of the activity, indicate the necessary teaching aids, the time needed, etc;
- 4) A paper or electronic class diary in which the subjects of each class and the attendance and behaviour of the pupils are recorded;
- 5) Organisational regulations for the provision of dual training to students in an enterprise;
- 6) Evaluation regulations during and after dual training;
- 7) Information on the processing of personal data;
- 8) Certificate of practical training;
- 9) Questionnaire for the evaluation of the quality of students' practical training.

Student's practical (dual training) logbook - example

The following is an example of a logbook for practical classes delivered in the form of dual training.

Logbook of the student's practical training (dual training)

1. Student's name:
2. The profession in which the apprenticeship is organised (name and code of the profession):
3. Sending school for practical activities (name, address details):
4. Practical training host (name, address):
6. Date of practical classes (from - to):
7. Supervisor of practical classes in the company (name, position, contact):
8. Internship supervisor on behalf of the school (name, position, contact):

Attendance list and proof of practice

Date of class dd/mm/yyyy	Legible Signature of the Participant	Venue for practical classes	Signature of the Guardian
1 day 00.00.00			

Notes:.....

Course of practical classes

Confirmation of health and safety training prior to the start of practical classes

(general instruction and information on occupational risks)

in the form of in the profession

Lp.	Training topics	Training date	Skills acquired
1.			
2.			

ltd.

.....
Trainee's signature

.....
Trainer's signature

A programme of practical classes in the company:

Lp.	Workstation	Type of tasks carried out	Date	Number of hours	Signature of the student's tutor*	Conclusions on student progress
1						
2						

* The supervisor's signature is tantamount to the student's presence at the work site.

.....
Seal of establishment

.....
Signature of student's supervisor

Report on practical activities in the company

(to be completed by the student after the practical sessions)

Problems with the implementation of practical activities:

- Organisational:
- Substantive:
- Other:

Remarks:

.....
signature of the pupil

.....
signature of the pupil's tutor

3.10.3. Exercises

Exercises recommended for the online version of the training:

Exercise 1.

Tick all the correct answers. It is recommended that the apprentice learns ... before starting dual training in the company.

about what range of tasks and responsibilities he or she will perform in the company.	<input type="checkbox"/>
about how it will be assessed.	<input type="checkbox"/>
as much as possible about the company where the dual training is to take place.	<input type="checkbox"/>
what he/she is expected to learn in the company during the dual training (i.e. what learning outcomes he/she is expected to master)	<input type="checkbox"/>
At what time after class he is to be collected by his parents.	<input type="checkbox"/>

Correct answer key:

about what range of tasks and responsibilities he or she will perform in the company.	X
about how it will be assessed.	X
as much as possible about the company where the dual training is to take place.	X
what he/she is expected to learn in the company during the dual training (i.e. what learning outcomes he/she is expected to master)	X

Exercise 2.

Which of the indicated documents is not used to document students' practical activities in the company? (tick one answer of your choice)

<input type="radio"/>	A cooperation agreement between the school and the company for the dual training of students.
<input type="radio"/>	a curriculum indicating the learning outcomes to be acquired by students during their dual education.
<input type="radio"/>	a paper or electronic class diary in which the subjects of each class and the attendance and behaviour of the pupils are recorded.
<input type="radio"/>	a certificate of the student's attendance at all practical classes.

Correct answer key:

X	a certificate of the student's attendance at all practical classes.
---	---

Exercise 3.

Fill in the gaps in the sentence by selecting the correct words from under the text.

The following is an example of a list of documents used in the company where the student is doing the dual training:

- 1) A cooperation between the school and the company for the dual training of students;
- 2) indicating the learning outcomes to be acquired by the students during the dual education;
- 3) that record the course of the activity, indicate the necessary teaching aids, the time needed, etc;
- 4) a paper or electronic in which the subjects of each class and the attendance and behaviour of the pupils are recorded.

agreement; a curriculum; lesson plans; class diary

Correct answer key:

The following is an example of a list of documents used in the company where the student is doing the dual training:

- 5) A cooperation agreement between the school and the company for the dual training of students;
- 6) a curriculum indicating the learning outcomes to be acquired by the students during the dual education;
- 7) lesson plans that record the course of the activity, indicate the necessary teaching aids, the time needed, etc;
- 8) a paper or electronic class diary in which the subjects of each class and the attendance and behaviour of the pupils are recorded.

Exercises recommended for the classroom version of the training

Exercise 1.

Extent of information provided to the student by the parties involved in the organisation of practical classes organised as dual education.

Running the exercise:

- 1) The facilitator divides participants into teams of 3-4. Each team is given the task of drawing up:
 - list who and what information is to be given to students who are to take part in practical classes organised in the form of dual training in an enterprise.
 - The teams present the results of their work in the form of a description or a mind map.
- 3) Once completed, team leaders present the results.
- 4) The trainer summarises the exercise and presents the handbook with an example of the range of information provided to the student by the parties involved in organising the practical activities organised in the form of dual training.

3.10.4. Progress test (self-assessment)

Can you:	Yes	Not
1) determines the scope of information provided to the student by the parties involved in the organization of practical classes organized in the form of dual education in the company?		
2) explains why the student should be prepared for practical classes organised in the form of dual education in the company?		
3) identifies the components of the regulations for the organization of student education in the dual system?		
4) determines, in consultation with the employer's representative, who and what (scope of information) is to be provided to the student before the start of practical classes in the form of dual education?		
5) draws up the necessary regulations related to the organization of students' education in the dual system?		
6) familiarises the student with the organisational aspects of education in the dual system of students at the school?		
7) identifies the documents used in the dual education process in the company?		
8) describes the components of the documentation used in the dual education process in the company?		
9) explains the rules of preparing documents?		
10) determines, in cooperation with the company's representative, the scope of documentation of the dual education process in the company?		
11) develops documents in cooperation with the representative (practice log, attendance list, etc.) documenting the course of students' practical classes organised in the form of dual education in companies?		

If you selected the answer "NO", we propose you returning to the teaching material and its repeated analysis in order to achieve intended learning outcomes (knowledge, skills).

If necessary, use additional source of information prepared to each topic.

3.10.5. Recommended sources of information

Recommended literature - you can find more information on the topic in:

- 1) *Organisational assumptions of the student internship - number of hours, qualification requirements of internship supervisors in an enterprise, sample equipment of workstations Łukasiewicz Research Network - Institute for Sustainable Technologies, Radom, 2022:*
<https://www.itee.lukasiewicz.gov.pl/materialy> (accessed 14.12.2023).
- 2) *Employer's essentials - dual education, or 'tailor-made employee'. Provincial Labour Office in Lublin. Department of Labour Market Policy, Lublin 2019:* <https://tiny.pl/c3365> (accessed December 20, 2023).
- 3) *Spanish regulations for dual education* <https://todofp.es/como-cuando-y-donde-estudiar/como-estudiar/formacion-profesional-dual.html> (accessed 14.12.2023).
- 4) *Danish Ministry of Education, "Legal Framework for Dual Education," (2019). Available at: Ministry of Education Legal Framework.* (accessed 14.12.2023).

3.11. Monitoring the process of practical education for students

3.11.1. Detailed learning outcomes

As a result of learning within a topic, you will be able to:

- defines what it means to monitor practical classes for students organised in the form of dual education in companies,
- distinguishes and selects methods of monitoring practical classes for students organised in the form of dual education in companies,
- explains the rules of cooperation with the company representative coordinating the organisation of practical classes for students organised in the form of dual education in companies,
- recognises tools for monitoring practical classes for students organised in the form of dual education in companies,
- describes the principles of preparing a report and formulating improvement actions,
- plans to monitor practical classes for students organised in the form of dual education in companies in cooperation with a representative of the company,
- designs, in cooperation with a company representative, tools for monitoring practical classes for students organised in the form of dual education in companies,
- Prepares reports on the monitoring of practical classes for students organised in the form of dual education in companies,
- proposes improvement actions based on conclusions and recommendations,
- introduces and tests the effectiveness of the implemented improvement actions.

3.11.2. Learning material

Monitoring of practical classes for students organised in the form of dual training in companies

Monitoring the learning process of practical classes in companies means continuously observing and collecting information on key processes relevant to the quality of student learning.

Monitoring is an element of quality management in education in the broadest sense, which, according to the Deming cycle (plan - act - investigate - execute), is intended to contribute to the improvement of the dual education processes of students in companies. Therefore, limiting monitoring solely to the acquisition and analysis of information does not capture the essence of this activity.

Good monitoring requires the use of the collected data to remove undesirable phenomena as soon as they are identified. That is, monitoring data can serve as a kind of notification to the party involved in the dual education process of a threatening danger. At the same time, the acquisition of such information should result in immediate corrective and improvement actions.

Monitoring is akin to watching the water level changes in a river. When the water level exceeds the red alarm line, people are immediately evacuated from areas at risk of flooding.

In summary, monitoring is⁴⁵:

⁴⁵ D. Grzonkowska, J. Misztal, J. Wilińska-Wieczorek, Z. Żuchowski, Monitoring the implementation of the core curriculum of general education at II, III, IV stage of education. Guidebook, ORE 2013 (electronic version): The essence and role of monitoring in the education system <https://tiny.pl/dhp8c> (accessed 20.01.2024).

- the regular observation or measurement of a specific phenomenon over a specified period of time;
- the systematic extraction of information for management and decision-making;
- a source of information on the basis of which managers can identify and solve problems related to the implementation of day-to-day operations, as well as assess progress in implementing plans and objectives;
- a process to face the problems that arise from the implementation of activities, diagnose their causes and identify ways to solve and counter them;
- a process during which the course of action is examined and analysed for its compliance with predetermined plans;
- the process of systematically collecting, compiling and disseminating information;
- a means of describing progress in the implementation of activities and aims to ensure that the execution of the activity, project, programme, core curriculum is in line with previous assumptions and plans.

Monitoring objectives may be:

- to ensure the quality of the school's joint activities with the company with regard to the implementation of the core curriculum in the areas covered by the curriculum of the students' practical activities implemented in the form of dual training;
- a focus on striving to achieve progress in the development of each student and continuously improving the quality of the work of the company and school representatives.

It follows from the above objectives that, in dual education, the implementation of the dual education programme and the achievement of the students are key subjects of the monitoring process.

In line with quality management in education, the aim of the education programme is the welfare and all-round professional development of the students. Achieving this goal requires appropriate management of the implementation of the dual education programme and monitoring of the results obtained. In this way, the implementation process of the dual education programme builds in quality assurance mechanisms at every stage, from the planning of the activities in this area to their execution, examination and improvement.

Therefore, when implementing a dual education programme, you should:

- well, plan programme activities,
- put them into practice,
- examine how the implementation process is going,
- introduce targeted and positive changes resulting from this research.

It is clear that, in order to guarantee a satisfactory level of performance, the conditions and course of the students' practical training process in the company must be taken care of. The good quality of the dual training processes taking place in the company guarantees high performance of the students' practical training. Therefore, tutors in practical classes in companies should focus on striving for progress in the development of each student and continuously improving the quality of their work with them.

In the context of the educational process, monitoring includes:

1. Investigating learning outcomes by analysing student performance.
2. Analyse the results of the work performed as a form of assessment of pupils' performance at practical group level.
3. Observation of pupils' attitudes and behaviour, including consideration of educational aspects and the formation of personal and social competences.
4. Improve the company's dual education processes by constantly striving to achieve progress in the development of each student and to raise the quality of the parties involved (school and company).

In practice, monitoring is a key tool that is part of the day-to-day reality of dual education delivered in companies, making it possible to ensure the quality of educational processes and student performance.

Thus, a supervisor from the school or a designated manager from the company, when monitoring the work of the mentors - practical training instructors in the company, not only checks that everyone is in their designated places and performing their function effectively, but in the case of absence of a mentor, determines the reason and takes immediate action to ensure the care of the students. Monitoring from the point of view of school and company management provides the parties with a lot of information necessary to organise the dual education processes taking place. It provides a targeted observation of the educational processes taking place and is used in situations requiring immediate decision-making.

On the other hand, the supervisor - the company's practical training instructor who monitors the educational achievements of the students during the dual classes, when he notices that one of the students is performing below his/her potential, does not wait until the end of the practical classes to give him/her a negative grade. He or she tries to motivate the student to work, gives him or her a chance to improve, and when this does not help, he or she contacts the mentor at school or the parents, who take action together with the teacher to develop the student.

Monitoring the implementation of the curriculum from the teachers' point of view is a source of feedback to students about their progress in learning and

Methods and tools for monitoring practical activities for students organised in the form of dual training in companies

Among the actors responsible for the monitoring process of the company's dual training programme, we should first mention the mentors - the practical training instructors, the teachers - the student mentors at school, the teaching teams and the school principal. The tasks of the above-mentioned actors can be defined in 4 areas of action. These are:

- Planning and organisation of educational and teaching processes in practical classes,
- implementation of educational processes in practical classes,
- examination and analysis of the effects of the implementation of educational and educational processes in practical classes,
- improving the educational processes taking place at the school in practical classes.

To monitor the company's dual training processes, we can use data from:

- 1) data from observations of the work of students working under the supervision of a supervisor of practical activities in the company;
- 2) observation of classes conducted by mentors - practical training instructors,
- 3) entries in the activity log;
- 4) monitoring sheet for the implementation of the dual training programme;
- 5) ad hoc and planned inspections by the principal or pupil supervisor of the school's logbook records,
- 6) semester checks on the number of hours of practical training completed in the form of dual training;
- 7) analysis of the periodic reports of the parties involved in the dual training.

We recommend that:

- Documentation of activities for monitoring the implementation of the core curriculum should be kept to a minimum.
- It is advisable to use monitoring tools on a semi-annual and annual basis.

The Regulation of the Ministry of Education on Supervision of 10 May 2013. (Journal of Laws of 14 May 2013, item 560) defines monitoring as an activity carried out in a school or an institution which includes the collection and analysis of information on the teaching, upbringing and caring activities and other

statutory activities of the school or institution. It follows from the above that monitoring is an activity of pedagogical supervision, next to evaluation, control or support. It should be emphasised, however, that there is no good evaluation or control without monitoring, although these activities are separate ways of pedagogical supervision.

The differences between monitoring and evaluation are shown in the table below.

Table 1. Differences between monitoring and evaluation

Element to be compared	Monitoring	Evaluation
The essence of	a continuous process of gathering information on the implementation of the action	systematic, planned and targeted examination of selected aspects of operations
Lead time	performed exclusively in the course of the tasks	conducted at the end of a phase of an activity (interim, phased, formative evaluation), at its conclusion (summative, final evaluation) or after its completion (deferred evaluation)
Objective	assess the progress of ongoing activities, the degree and regularity with which plans and objectives are being implemented, as well as the speed with which they are being carried out, with a view to mitigating possible disruptions	provides the information necessary to make decisions, plan subsequent actions and assess the extent to which objectives are being met

Source: D. Grzonkowska, J. Misztal, J. Wilińska-Wieczorek, Z. Żuchowski, *Monitorowanie wdrażania podstawy programowej kształcenia ogólnego na II, III, IV etapie edukacyjnym. Guidebook, ORE 2013 (electronic version): The essence and role of monitoring in the education system*<https://tiny.pl/dhp8c> (accessed 20.01.2024).

Below are links to the educational quality monitoring reports:

- Monitoring the fate of university graduates using administrative data of the Social Insurance Institution. Final report, Institute for Educational Research. Warsaw, January 2014: <https://produkty.ibe.edu.pl/docs/raporty/ibe-raport-monitorowanie-losow-absolwentow.pdf> (accessed 21.12.2023).
- Annual report on the review of the education programme: Faculty of Pharmacy Jagiellonian University Collegium Medicum, Kraków: <https://farmacja.cm.uj.edu.pl/cm/uploads/2019/05/2-Raport-ksza%C5%82cenia-kierunek-Analzyka-2016-2017.pdf> (accessed 21.12.2023).
- Model report on pro-quality activities. Faculty of Pharmacy Jagiellonian University Collegium Medicum, Kraków: <https://wnz.cm.uj.edu.pl/cm/uploads/2022/01/WZOR-RAPORTU-Z-DZIALAN-PROJAKOSCIOWYCH.docx> (accessed 21.12.2023).

The materials presented have been developed for the needs of universities, but can be modified and adapted for vocational education.

3.11.3. Exercises

Exercises recommended for the online version of the training:

Exercise 1.

Assess the truthfulness of the given sentences. Tick 'True' if the sentence is true or 'False' if it is false.

Statement	Truth	False
In the context of the educational process, monitoring includes the analysis of the results of the work performed as a form of assessment of pupils' performance at the practical group level	X	
In the context of the educational process, monitoring includes the analysis of the results of the work performed as a form of assessment of pupils' performance at the practical group level	X	
In the context of the learning process, monitoring includes checking the amount of work completed by the student.		X

Correct answer key:

Statement	Truth	False
In the context of the educational process, monitoring includes the analysis of the results of the work performed as a form of assessment of pupils' performance at the practical group level	X	
In the context of the educational process, monitoring includes the analysis of the results of the work performed as a form of assessment of pupils' performance at the practical group level	X	
In the context of the learning process, monitoring includes checking the amount of work completed by the student.		X

Exercise 2.

Assign the given characteristics or objects to the appropriate boxes

Monitoring

a continuous process of gathering information on the implementation of the action

carried out only in the course of tasks

Evaluation

assess the progress of ongoing activities, the degree and regularity with which plans and objectives are being implemented, as well as the speed with which they are being carried out, with a view to mitigating possible

systematic, planned and targeted examination of selected

provides the information necessary to make decisions,

Correct answer key:

Monitoring

a continuous process of gathering information on the implementation of the action performed exclusively in the course of the tasks

assess the progress of ongoing activities, the degree and regularity with which plans and objectives are being implemented, as well as the speed with which they are being carried out, with a view to mitigating possible disruptions

Evaluation:

systematic, planned and targeted examination of selected aspects of operations

provides the information necessary to make decisions, plan subsequent actions and assess the extent to which objectives are being met

Exercise 3.

Tick the statements that correspond to the definition of monitoring.

<input type="checkbox"/>	occasional information gathering for management and decision-making purposes.
<input type="checkbox"/>	the regular observation or measurement of a specific phenomenon over a specified period of time.
<input type="checkbox"/>	the process of systematically collecting, compiling and disseminating information
<input type="checkbox"/>	a process during which the course of action is examined and analysed in terms of its compliance with predetermined plans

Correct answer key:

<input checked="" type="checkbox"/>	the regular observation or measurement of a specific phenomenon over a specified period of time.
<input checked="" type="checkbox"/>	the process of systematically collecting, compiling and disseminating information
<input type="checkbox"/>	a process during which the course of action is examined and analysed in terms of its compliance with predetermined plans

Exercises recommended for the classroom version of the training

Exercise 1.

Monitoring tools for practical activities for students organised in the form of dual training in companies.

Running the exercise:

- 1) The facilitator divides the participants into teams of 3-4 people. Each team is given a task:
 - selecting the area related to dual education that will be subject to the monitoring process;
 - development of monitoring criteria;
 - developing a tool to monitor the designated area;

- identification of potential problems that may arise in the designated area;
- identification of improvement actions;
- presenting the results of the group's work in the form of.

2) The facilitator summarises the exercise.

3.11.4. Progress test (self-assessment)

Can you:	Yes	Not
1) defines what it means to monitor practical classes for students organised in the form of dual education in companies?		
2) distinguishes and selects methods of monitoring practical classes for students organised in the form of dual education in companies?		
3) explains the rules of cooperation with the company representative coordinating the organization of practical classes for students organized in the form of dual education in companies?		
4) recognises tools for monitoring practical classes for students organised in the form of dual education in companies?		
5) describes the principles of preparing a report and formulating improvement actions?		
6) plans to monitor practical classes for students organised in the form of dual education in companies in cooperation with a representative of the company?		
7) designs, in cooperation with a company representative, tools for monitoring practical classes for students organised in the form of dual education in companies?		
8) Prepares reports on the monitoring of practical classes for students organised in the form of dual education in companies?		
9) proposes improvement actions based on conclusions and recommendations?		
10) introduces and tests the effectiveness of the implemented improvement actions?		

If you selected the answer "NO", we propose you returning to the teaching material and its repeated analysis in order to achieve intended learning outcomes (knowledge, skills).

If necessary, use additional source of information prepared to each topic.

3.11.5. Recommended sources of information

Recommended literature - you can find more information on the topic in:

1. Grzonkowska D., Misztal J., Wilińska-Wieczorek J., Żuchowski Z., *Monitorowanie wdrażania podstawy programowej kształcenia ogólnego na II, III, IV etapie edukacyjnym. Guidebook, ORE 2013 (electronic version): Essence and role of monitoring in the education system*<https://tiny.pl/dhp8c> (accessed 20.01.2024).

2. *Monitoring the fate of university graduates using administrative data of the Social Insurance Institution. Final report, Institute for Educational Research. Warsaw, January 2014:* <https://produkty.ibe.edu.pl/docs/raporty/ibe-raport-monitorowanie-losow-absolwentow.pdf> (accessed 21.12.2023).
3. *Annual report on the review of the education programme. Faculty of Pharmacy Jagiellonian University Collegium Medicum, Kraków:* <https://farmacja.cm.uj.edu.pl/cm/uploads/2019/05/2-Raport-kszt%C5%82cenia-kierunek-Analytyka-2016-2017.pdf> (accessed 21.12.2023).
4. *Model report on pro-quality activities. Faculty of Pharmacy Jagiellonian University Collegium Medicum, Kraków:* <https://wnz.cm.uj.edu.pl/cm/uploads/2022/01/WZOR-RAPORTU-Z-DZIALAN-PROJAKOSCIOWYCH.docx> (accessed 21.12.2023).
5. *Diagnosis of the evaluation of the dual system* <https://www.ivie.es/wp-content/uploads/2017/06/FP-Dual-Bankia-2016.pdf> (accessed 21.12.2023).
6. *Lego, "Dual Education and Apprenticeships," (2021). Available at: [Lego Apprenticeships](#).*

3.12. Diagnosing the knowledge and skills of students participating in practical classes organized in the form of dual education at the employer

3.12.1. Specific learning outcomes

As a result of learning within a topic, you will be able to:

- distinguishes between the methods and tools for evaluating students participating in practical classes organised in the form of dual education at the employer's,
- describes the rules for drawing up regulations for evaluating students participating in practical classes organised in the form of dual education at employers,
- selects, in cooperation with a company representative, tools for evaluating students participating in practical classes organised in the form of dual education at the employer,
- explains to the employer's representatives the principles of drawing up assessment regulations and the use of selected tools for assessing students participating in practical classes organised in the form of dual education at employers,
- establishes and prepares, in consultation with a representative from the company, the rules, methods and tools for assessing students participating in practical classes organised in the form of dual education at the employer,
- prepares, in cooperation with the company's representative, regulations for evaluating students participating in practical classes organised in the form of dual education at the employer's,
- prepares, in cooperation with a company representative, tools for evaluating students participating in practical classes organised in the form of dual education at the employer,
- checks the process of evaluating students participating in practical classes organised in the form of dual education at the employer's by the company's employees.

3.12.2. Learning material

Methods and tools for assessing students participating in practical classes organised in the form of dual training with an employer

Student assessment using a specific scale is the most common way of checking the effectiveness of teaching. When the teacher gives a school grade, he or she will refer to the pupil's achievements, the competences he or she possesses.

The person who conducts the assessment of students participating in practical classes in companies is their supervisor, the practical training instructor. Therefore, the student's mentor should have the knowledge and skills to carry out a sound assessment of the student's progress.

When assessing students, instructors in a company should keep in mind that assessment influences how a student learns and develops. In Poland, the dominant model of assessment is the traditional one, which increasingly causes dissatisfaction among students, parents, teachers and employers. In the traditional model, there is no assessment:

- many important personal competences;
- teams (team work) versus individual students (individual work);
- the ability to plan and implement activities;

- practically knowledge and skills in an interdisciplinary perspective (usually refers to an assessment for a specific subject);
- the student's problem-solving is not assessed.

In assessing students, the company's activity supervisor may use:

- 1) Direct observation, during which the tutor observes and evaluates the student's work on an ongoing basis. The scope of assessment may include evaluation of technical skills, safety, focus, cooperation with others, etc.
- 2) Practical tests where students have to complete specific tasks or projects.
- 3) Simulations that a tutor can use to assess students' skills in a safe and controlled environment.
- 4) Self and peer assessment, i.e. students can evaluate their own work and the work of their peers. This can help develop critical thinking and evaluation skills.
- 5) Productions of the student's work which the teacher can assess according to predetermined criteria.
- 6) A logbook of the practical that the student keeps. In the diary, he or she describes what he or she has learned and how the practical is going. This allows for an assessment of understanding and reflection.
- 7) Aptitude tests, during which specific practical skills are assessed, such as machine operation, programming, cooking, etc.
- 8) Group projects to assess collaboration, communication and project management skills.
- 9) Oral examinations to assess communication skills and understanding of the topic.
- 10) Online quizzes that can be used to quickly check understanding and progress.
- 11) Progress assessment carried out on a regular basis over a set period of time.
- 12) Assessment of the student's attitudes and engagement in class and cooperation with others.
- 13) Self-efficacy assessment, as an evaluation of the student's ability to solve problems and make decisions independently.
- 14) Assessment of creativity, i.e. the student's ability to think creatively and approach tasks innovatively.

As an instructor of practical learning in the form, you can give an assessment:

- 1) formative, i.e. continuously assessing the student's progress by providing feedback.
- 2) summative - you are assessing the student's final achievement at the end of the teaching unit.
- 3) Criterion-based - you assess a student's work against certain criteria.
- 4) Normative - you compare the student's achievement with that of other students.
- 5) holistic - you assess a student's overall performance, taking into account all aspects of their work.
- 6) analytical - you assess individual elements of the student's work.

The assessment criteria should address the reliability of the student's performance of all tasks arising from the practical training delivery programme and tasks assigned by the mentor.

The following pupil responsibilities may be the subject of a tutor's assessment:

- 1) Adherence to the company's working regulations.
- 2) Comply with the health and safety, fire and environmental regulations in force at the workplace.
- 3) Conscientious and diligent performance of professional activities and tasks specified in the practical programme.
- 4) To comply with the instructions of the supervisor if they do not conflict with the law.
- 5) Adherence to the established daily and weekly times for student placement.
- 6) Possession and on-going maintenance of a logbook of practical sessions,
- 7) Report to the supervisor/trainee supervisor any incident at the workplace that may have affected the safe performance of work activities and tasks.
- 8) Improve professional skills in the profession indicated in the programme.

In addition, the mentor's assessment may be subject to:

- 1) the student's observance of work discipline,
- 2) good conduct and personal culture and punctuality,
- 3) the degree of mastery of the professional competences and skills indicated in the practical training programme,
- 4) organisation of work,
- 5) independence in carrying out tasks,
- 6) the student's involvement in the work,
- 7) ability to combine theory and practice,
- 8) the quality of the work carried out,
- 9) respect for equipment and facilities,
- 10) compliance with health and safety, fire safety and environmental protection regulations,
- 11) personal culture,
- 12) ability to work as part of a team.

The selection of criteria is to be agreed between the school and the employer side.

The assessment of the practical training shall be issued and signed by the supervisor on the employer's side, in accordance with the assessment criteria adopted and presented to the student.

Checking and assessment of the student's performance should take place throughout the placement with the employer on the basis of the criteria presented at the beginning of the course. The applicable grading system and grading scale should be used.

Regulations for the assessment of students participating in practical classes organised as dual training with employers

Below is an example of the regulations for assessing participants in dual education in Poland:

Regulations for the system of evaluating students in practical classes conducted under the principles of dual training

1. The student's educational achievements in practical vocational training classes are assessed.
2. Assessment of a student's educational achievements in practical vocational training classes is based on the practical training instructors' recognition of the level and progress of the student's mastery of knowledge and skills in relation to the learning outcomes set out in the curriculum.
3. Assessment principles:
 - The interim (semester or annual) grade shall be determined by the instructor of practical classes in the company on the basis of the current grades; at the request of the student or his/her parents (legal guardians), the instructor of practical classes shall justify it.
 - assessments are open to the student and his/her parents (legal guardians).
 - an interim evaluation cannot be given from only one evaluation and does not have to be the arithmetic mean of all the evaluations.
 - The school supervisor of practical classes enters the predicted mid-year and annual grades for practical training into the electronic logbook in accordance with the School Statutes.
 - The form tutor informs the students and their parents of the predicted interim apprenticeship grades.
 - the company's practical training instructor, in consultation with the school's practical training supervisor, determines the conditions under which the predicted interim grade can be improved.

- on the basis of a written opinion of a psychologist, the instructor of practical classes in a company is obliged to adapt the educational requirements to the individual psychophysical and educational needs of a student who has been diagnosed with: specific learning difficulties that make it impossible to meet the requirements, the need for special or individual education.
 - if it is established as a result of a periodic classification that the level of a pupil's educational achievements will make it impossible or difficult for the pupil to continue his/her education in a higher class, the establishment shall provide the pupil with an opportunity to make up for the shortcomings.
4. Assessment of performance in practical classes delivered on a dual education basis:
- 1) The following scale of ongoing, interim assessments is adopted:
 - Exemplary (6) - the student meets the requirements of the grade for "very good" and is proficient in the use of acquired knowledge and practical skills from the educational programme that go beyond the level of requirements, independently carries out instructions, tasks issued by the instructor of practical classes in the company;
 - Very good (5) - means that the student has fully mastered the knowledge and skills covered by the educational programme at a given level, is able to perform tasks, practical exercises under the supervision of the instructor of practical classes in the company, is able to apply them in typical situations;
 - Good (4) - means that the student has mastered the range of material taught and has no difficulty in performing typical tasks, exercises or instructions correctly applies knowledge and skills in typical situations of average difficulty;
 - Sufficient (3) - means that the pupil is able to carry out instructions and exercises of a low degree of difficulty, which are needed at higher stages of education and are necessary at a given stage of education, when performing a task he/she does not manage independently;
 - Passing (2) - means that the student has mastered the knowledge and skills necessary at a given stage of education, necessary at higher stages of education, but is not able to solve practical tasks, exercises requiring complex thinking, is not able to draw conclusions, solves only very simple exercises, instructions of the instructor of practical classes;
 - Inadequate (1) - means that the student does not meet the expectations and necessary requirements set by the instructor of practical classes in accordance with the syllabus of the necessary requirements, is not able to solve even simple exercises, does not know basic principles and formulas.
 - 2) Company practical instructors allow the use of '+' and '-' for running marks and the abbreviations nb - absent, np - unprepared, bz - missing an assignment are allowed.
5. School-wide toolkit to assess educational attainment and skills:
- 1) Methods for checking the learning outcomes of students in practical classes implemented under the principles of dual training are: practical tasks, practical exercises, laboratory exercises, production exercises.
 - 2) The following conversion scale is recommended when assessing the results of the methods for checking learning outcomes:
 - 91% - 100% very good,
 - 76% - 90% good,
 - 60% - 75% sufficient,
 - 40% - 59% acceptable,
 - 0% - 39% inadequate,The mark of 'excellent' is awarded to a student who has achieved more than 91% and has completed the additional task(s).
 - 3) A student who has missed a practical task or exercise due to an excused absence has the opportunity to take it at a later date agreed with the practical instructor.

- 4) A student who has missed a practical task or exercise due to an unexcused absence shall take it at a date set by the practical instructor.
 - 5) A pupil's absence from a practical task or exercise is marked in the logbook with the notation "nb".
 - 6) Each student has a one-off opportunity to correct a practical task or exercise at a date set by the company's practical instructor.
6. Rules for conducting classification examinations.
- 1) A pupil may not be classified in practical classes if there are no grounds for establishing a periodic classification grade due to absence from classes exceeding half of the time allocated to these classes in the school timetable.
 - 2) A pupil who is unclassified due to an excused absence may take an examination.
 - 3) At the request of a pupil who is not classified due to an unexcused absence or at the request of his/her parents (legal guardians), the Pedagogical Council, in agreement with the employer, may agree to a classification examination.
 - 4) The classification examination for practical classes shall take the form of practical tasks.
 - 5) The date of the classification examination shall be agreed with the pupil and his/her parents (legal guardians).
 - 6) The classification examination shall be conducted by the company's practical training instructor in the presence of another teacher of a related or the same subject or the school's practical training supervisor.
 - 7) The student's parents (legal guardians) may be present as observers during the classification examination.
 - 8) Minutes of a grading examination shall be drawn up, including in particular: the name of the classes in which the examination was conducted, the names and surnames of the members of the board, the date of the grading examination, the name and surname of the pupil, the tasks of the examination, the grade awarded.
 - 9) The minutes shall be accompanied by concise information on the student's performance of the practical task. The minutes shall be annexed to the student's evaluation sheet.
 - 10) For a pupil of a school providing vocational training who is not classified in practical classes due to an excused absence, the employer, in agreement with the headmaster, shall organise classes enabling the completion of the curriculum and the determination of the mid-year or annual classification grade in practical classes.
 - 11) If a pupil is unclassified in an educational activity, "unclassified" shall be written in the teaching records instead of the grade.
7. Rules for the conduct of revision examinations.
- 1) In a vocational training school, the revision examination for practical classes takes the form of practical tasks.
 - 2) The resit examination shall be held in the last week of the summer holidays.
 - 3) The date of the corrective examination is set by the headmaster by the end of the annual teaching and learning activities.
 - 4) The corrective examination is conducted by a committee consisting of: the headmaster or a teacher appointed by the headmaster - as chairman of the committee; an instructor of practical classes at the company or a teacher conducting the same or related educational classes or a school supervisor of practical classes at the school.
 - 5) The instructor of practical classes at the company may be excused from the committee at his/her own request or in other particularly justified cases. In such a case, the head of the school shall appoint another practical classes instructor teaching the same classes to the committee, but the appointment of an instructor from another company shall be made in agreement with the head of the company.
 - 6) Minutes of the resit examination shall be drawn up, including in particular: the name of the classes in which the examination was conducted; the names and surnames of the members of the board;

the date of the resit examination; the name and surname of the pupil; the examination tasks; the grade awarded.

- 7) The minutes shall be accompanied by concise information on the student's performance of the practical task. The minutes shall be annexed to the student's evaluation sheet.
- 8) The Board of Pedagogy may, once in a given educational stage, promote to a higher programme class a pupil who has failed to pass a corrective examination in one of the compulsory educational classes (practical classes) on condition that the compulsory educational classes (practical classes) are carried out in a higher programme class.
- 9) A pupil who, for reasons of chance, did not take the resit examination on the date set, may take it on an additional date set by the Headmaster, no later than the end of September;
- 10) A pupil repeats a class if he or she has received a failing grade as a result of a revision examination and is not subject to Item 8.
- 11) The annual grade for extra-curricular activities does not affect promotion to the next grade or graduation from the school.

Legal basis:

1. Act of 7 September 1991 on the educational system (Dz. U. of 2019, no. 1481)
2. Regulation of the Minister of National Education of 22 February 2019 on the detailed conditions and manner of assessing, classifying and promoting pupils and students in public schools (Journal of Laws 2019., item 373, as amended).

3.12.3. Exercises

Exercises recommended for the online version of the training:

Exercise 1.

Pair the terms with their definitions.

Formative assessment	the student's progress is assessed on an ongoing basis by providing feedback
Holistic assessment	The student's overall performance is assessed, taking into account all aspects of the student's work
Normative assessment	Assessment compares a pupil's achievements with those of other pupils.

Correct answer key:

Formative assessment	the student's progress is assessed on an ongoing basis by providing feedback
Holistic assessment	The student's overall performance is assessed, taking into account all aspects of the student's work
Normative assessment	Assessment compares a pupil's achievements with those of other pupils.

Exercise 2.

Tick all the correct answers. The following responsibilities of the student may be the subject of a tutor's assessment:

Improve professional skills in the profession indicated in the programme.	<input type="checkbox"/>
Adherence to the company's working regulations.	<input type="checkbox"/>
Conscientious and diligent performance of professional activities and tasks specified in the practical programme.	<input type="checkbox"/>
Using breaks for learning.	<input type="checkbox"/>

Correct answer key:

Improve professional skills in the profession indicated in the programme.	X
Adherence to the company's working regulations.	X
Conscientious and diligent performance of professional activities and tasks specified in the practical programme.	X

Exercise 3.

Evaluate the truth of the given sentences in terms of what is not evaluated in the traditional model. Tick 'True' if the sentence is true or 'False' if it is false.

Statement	Truth	False
Many important personal competences are not assessed in the traditional model	X	
In the traditional model, the student's problem solving is not assessed	X	
In the traditional model, instructor-student collaboration is not assessed.		X

Correct answer key:

Statement	Truth	False
Many important personal competences are not assessed in the traditional model	X	
In the traditional model, the student's problem solving is not assessed	X	
In the traditional model, instructor-student collaboration is not assessed.		X

Exercises recommended for the classroom version of the training

Exercise 1.

Assessment of student-participants in practical classes organised as dual education.

Running the exercise:

1) The facilitator divides participants into teams of 3-4. Each team is given the task of drawing up:

- tools with associated assessment criteria.
- The teams present the results of their work in the form of a description or a mind map.

3) Once completed, team leaders present the results.

4) The trainer summarises the exercise and presents the sample regulations for the system of grading students in practical classes conducted under the principles of dual training, which is included in the handbook.

3.12.4. Progress test (self-assessment)

Can you:	Yes	Not
1) distinguishes between the methods and tools for evaluating students participating in practical classes organised in the form of dual education at the employer's?		
2) describes the rules for drawing up regulations for evaluating students participating in practical classes organised in the form of dual education at employers?		
3) selects, in cooperation with a company representative, tools for evaluating students participating in practical classes organised in the form of dual education at the employer?		
4) explains to the employer's representatives the principles of drawing up assessment regulations and the use of selected tools for assessing students participating in practical classes organised in the form of dual education at employers?		
5) establishes and prepares, in consultation with a representative from the company, the rules, methods and tools for assessing students participating in practical classes organized in the form of dual education at the employer?		
6) prepares, in cooperation with the company's representative, regulations for evaluating students participating in practical classes organised in the form of dual education at the employer's?		
7) prepares, in cooperation with a company representative, tools for evaluating students participating in practical classes organised in the form of dual education at the employer?		
8) checks the process of evaluating students participating in practical classes organised in the form of dual education at the employer's by the company's employees?		

If you selected the answer "NO", we propose you returning to the teaching material and its repeated analysis in order to achieve intended learning outcomes (knowledge, skills).

If necessary, use additional source of information prepared to each topic.

3.12.5. Recommended sources of information

Recommended literature - you can find more information on the topic in:

1. Żmijewska-Kwiręg S.: *What is the problem with grading?* <https://ceo.org.pl/na-czym-polega-problem-z-ocenianiem/> (accessed 10.01.2024).
2. Lucas B.: *A new look at assessment in education:* <https://biblioteka.ceo.org.pl/nowe-spojrzenie-na-ocenianie-w-edukacji/> (accessed 10.01.2024).
3. Lucas B.: *Rethinking assessment in education: The case for change:* https://www.researchgate.net/publication/350887830_Rethinking_assessment_in_education_The_case_for_change_CSE_LEADING_EDUCATION_SERIES (accessed 10.01.2024).
4. Flasz-Gębarowska A.: *Psychological aspects of grading.* [In:] Konopka I. (ed.), 2015: *Assessment in grades I-III.* ORE, Warsaw 2015.
5. Dix P.: *How to assess students' progress.* PWN, Warsaw 2014.
6. *Evaluation tools* https://iesturariana.org/ASIR-FPDual/EvaluacinFPDual-ABR-2017/2_cmo_evaluar_en_la_fp_dual.html (accessed 10.01.2024).
7. Vestas, "Instructor Requirements and Competency Development," (2020). https://www.vestas.com/content/dam/vestas-com/global/en/sustainability/reports-and-ratings/sustainability-reports/2020_Sustainability_Report_2020.pdf.coredownload.inline.pdf (accessed 10.01.2024).

3.13. Evaluation of practical classes for students organised in the company's dual education system

3.13.1. Detailed learning outcomes

As a result of learning within a topic, you will be able to:

- defines the term evaluation,
- distinguishes and selects methods for evaluating practical classes for students organised in the form of dual education in companies,
- identifies tools for evaluating practical classes for students organised in the form of dual education in companies,
- explains the functionalities of remote evaluation tools,
- explains how to prepare a report on the evaluation of practical classes for students organised in the form of dual education in companies,
- characterises how to draw conclusions and recommendations from the evaluation of practical classes for students organised in the form of dual education in companies,
- characterises the process of improving practical classes for students organised in the form of dual education in companies,
- uses various methods of evaluating practical classes for students organised in the form of dual education in companies,
- project of a tool for evaluating practical classes for students organised in the form of dual education in companies (forms, google surveys),
- prepares a report in the evaluation of practical classes for students organised in the form of dual education in companies,
- proposes, on the basis of conclusions and recommendations, actions improving the organisation of practical classes for students organised in the form of dual education in companies,
- introduces and tests the effectiveness of the introduced improvement activities in the area organised in the form of dual education in companies.

3.13.2. Learning material

Evaluation

The term **evaluation** is defined variously in the literature⁴⁶ :

- a process to ascertain the extent to which the stated educational objectives are actually being met (Tyler),
- providing the information needed to make decisions (Cronbach),
- estimation of advantages or values (e.g. House),
- a systematic study of the value and merits of an object⁴⁷ .

⁴⁶ After: Nevo D., Conceptualising educational evaluation. An analytical review of the literature, [in:] Evaluation in education, ed. L. Korporowicz, Warsaw 1, Warsaw 1997, p. 5.

⁴⁷ Glossary of more important concepts. Evaluation in education, ed. L. Korporowicz, Warsaw 1997, p. 279.

Anna Panek⁴⁸ stated that evaluation is a systematic and explicit process of collecting and analysing information on the nature, character and values of phenomena of interest. It is intended to provide data to facilitate decision-making on the basis of explicit, precisely formulated criteria and values.

The purpose of evaluation is to establish public confidence in a school, especially when its political climate is uncertain and it is subject to reform and change⁴⁹.

It is important to remember that evaluation is not restrictive, controlling and supervisory in nature, its function is to assist in the process of change of a developmental nature⁵⁰.

Methods and evaluation tools for practical classes for students organised in the form of dual training in companies

Before proposing methods, techniques and tools for evaluating students' practical activities in the form of dual training in companies, it is important to consider what can be evaluated.

In the evaluation research of the functioning of the dual training of students in the profession of machine tool operator carried out with the involvement of the Radom Metal Cluster and conducted by the Chamber of Commerce and Industry of the Radom Area in the year 2021, carried out within the framework of the public task "PROFESSIONALS - the future of the Radom Metal Cluster" financed from the funds of the Board of the Mazovian Voivodeship, the subject of the evaluation was:

- organisational aspects of practical classes organised in the form of dual training;
- students' mastery of selected learning outcomes acquired in the course of their practical training in the dual system;
- students' mastery of learning outcomes related to personal competences;
- The satisfaction and usefulness of practical classes in a company organised in the form of dual training.

Using a particular study as an example, we will describe the methods, techniques and tools used and present the structure of the report with recommendations.

Three complementary research methods were used in the evaluation study of the functioning of the dual training of students in the profession of machine tool operator:

- examination of documentation;
- diagnostic survey;
- structured interview.

The desk research was used to carry out a search of foundational data, including already conducted research, of the documentation used in the dual training of students in the profession of machine tool operator.

Within the diagnostic survey method, a questionnaire was used as the research technique and a survey questionnaire as the research tool. In order to obtain a more objective picture of dual education, three survey questionnaires were drawn up to obtain opinions from three groups of respondents:

(a) students;

⁴⁸ Panek A., Evaluation, control and assessment in the educational process of students at the University of Pedagogy: https://rep.up.krakow.pl/xmlui/bitstream/handle/11716/2920/06_ewaluacja_kontrola_i_ocena_a_panek.pdf?sequence=1 (accessed 24.01.2024).

⁴⁹ Simons H., The evaluation process in schools, [in:] Evaluation at school, ed. H. Mizerek, Olsztyn 1997, p. 59.

⁵⁰ Panek A., Evaluation, control and assessment in the educational process of students at the University of Pedagogy: https://rep.up.krakow.pl/xmlui/bitstream/handle/11716/2920/06_ewaluacja_kontrola_i_ocena_a_panek.pdf?sequence=1 (accessed 24.01.2024).

- (b) school representatives;
- (c) company representatives.

The interview was conducted in the form of a group discussion to which 29 expert representatives were invited:

- entrepreneurs, including the Chamber of Commerce and Industry of the Radom Area (12 people),
- town hall (4 persons),
- Technical secondary school principals and practice supervisors from the schools (4 persons),
- career counsellors (1 person),
- university and research institute (3 persons).

During the group discussion, the quantitative results and conclusions were presented to the respondents and they were asked to identify improvement actions to achieve the 'ideal state', including maximum satisfaction in the various areas assessed. As a result of the meetings held, a short summary with recommendations was prepared.

As mentioned above, as part of the diagnostic survey, 3 research tools were prepared - survey questionnaires for: 1) students, 2) representatives of trade schools and 3) companies participating in dual training in the school occupation "Operator of cutting machine tools" in Radom, which have a similar structure and thematic range of issues covered.

The introduction of the prepared survey questionnaires outlines in general terms the purpose of the survey, who is doing the survey, the rules for responding, the deadline by which a response must be given and the time to be set aside to complete the survey questionnaire.

In the second part of the survey questionnaire, a metric was included to identify the respondents, as well as to verify their connection to the dual education. The verification consisted of the respondent answering "No" to the question concerning his/her direct connection to the organised practical classes in the form of dual education in the school occupation "Machine tool operator", ending the participation in the survey.

In the next section of the questionnaire, each group of respondents gave their point of view in the form of an assessment of their level of satisfaction with aspects related to the organisation of practical classes within the framework of dual training, as well as suggestions for changes aimed at increasing this level.

Another important issue addressed in the surveys was to find out respondents' opinions on the level of students' mastery of selected learning outcomes included in the practical programme. These outcomes related to:

- workstation organisation,
- health and safety regulations,
- manual and machine processing,
- programming and operation of CNC machine tools,

and respondents were also given the opportunity to indicate the main reasons for the student's failure to master some of the learning outcomes.

Respondents also assessed the level of students' mastery of the learning outcomes related to the personal and social competences highlighted in the practical programme.

In conclusion, respondents were asked to carry out an evaluation:

- overall satisfaction with participation in dual education;

- the usefulness in the vocational examination of the vocational competences acquired by the students during the practical classes;
- the impact of practical classes on the student and tying their future to the mechanical industry.

The first version of the survey questionnaires was developed in the traditional paper version. The project partners added their comments and corrections to it, which were then taken into account in the preparation of the online version.

The survey questionnaires used in the target study were developed in the Forms application. Research tools - survey questionnaires in Polish are available at:

- Student survey: analysis of the functioning of the dual education model in Radom: <https://forms.office.com/r/TQPhbAeF6e> (accessed 30.01.2024);
- School survey: analysis of the functioning of the dual education model in Radom: <https://forms.office.com/r/3UirZrvqK0> (accessed 30.01.2024);
- Business survey: analysis of the functioning of the dual education model in Radom: <https://forms.office.com/r/kbZhtufN8t> (accessed 30.01.2024).

The use of the Forms application accelerated data collection and the development of the evaluation survey report

You can learn about how to prepare a survey questionnaire using the Forms application *from* Microsoft's educational material (<https://support.microsoft.com/pl-pl/topic/tworzenie-formularza-w-aplikacji-microsoft-forms-4ffb64cc-7d5d-402f-b82e-b1d49418fd9d>) or from other sources, such as the videos posted on YouTube⁵¹.

Below is an example of a survey questionnaire through which opinions on the functioning of the dual training model in Radom were obtained from company representatives.

Business survey: analysis of the functioning of the dual training model in Radom

Dear Sirs,

in connection with the fact that your COMPANY is one of the organisers of practical classes carried out within the framework of the dual training system, we would like to ask you to provide us with information that will help us analyse the functioning of the dual training model in Radom and improve it.

The survey is carried out by the Chamber of Industry and Commerce of the Radom Area, which is the coordinator of the Radom Metal Cluster.

Please complete the survey questionnaire by:

- 1) A **management** representative who is responsible for organising internships at the COMPANY,
- 2) And **staff** - tutors, **practical training instructors** supervising the apprentice from the school.

The survey is **anonymous** and the results obtained will be used to prepare a summary report of the survey. **The name of your company will be coded in the report** ("Company 1", "Company 2", etc.). **On your request**, it will be possible to **prepare an individual report** concerning your company only.

Your opinion is important to us, as it will contribute to improving the quality of the practical training you co-organise. We therefore ask you to make sincere and thoughtful contributions.

Please complete the survey by 08 October 2021.

Allocate approximately 20 minutes to complete the survey as, due to technical limitations, you cannot interrupt the survey and return again in some time.

⁵¹ How to create a survey FAST, share it online and collect the results into Excel - Microsoft FORMS: <https://www.youtube.com/watch?v=eXxpvtWxqQ> (accessed 25.01.2024).

Completion involves selecting from a list the evaluation option chosen or entering a comment.

I. Metrics

1. Was your COMPANY the organiser of the practical classes for students within the framework of dual training in Radom?

(a) YES (*goes to question 2*)

b) NO (*end of survey - a message is displayed: Thank you! Unfortunately, you are not able to participate in our survey because you were not the organiser of the practical classes for students carried out as part of the dual training in Radom.*)

2. I am

(a) a management representative

(b) The employee - tutor, practical training instructor supervising the apprentice from the school

3. Please indicate your gender

(a) a woman

(b) male

4. I am employed by a company (*NOTE: the name of the company in the report will be coded (Company 1, Company 2, etc.), however, a customised report will be available upon request from the Company. Please choose your answer from the list below*)

5. What is the level of employment in your company?

(a) up to 9 employees

(b) between 10 and 25 employees

(c) between 26 and 50 employees

(d) between 51 and 100 employees

(e) 101 to 200 employees

(f) more than 201 employees

6. For how many years has your company participated in the organisation of practical classes for students of vocational schools within the framework of dual training in the Radom Metal Cluster?

a) 1

b) 2

c) 3

d) 4

e) 5

(f) more than 5

7. Has your company employed students who have completed practical classes organised in your company as part of dual training?

a) YES - *Go to question 23*

b) No

8. How many graduate trainees did your company employ? (*please provide number in comments*)

In which other school occupations, apart from machine tool operator, would you as a company be interested in participating in the organisation of dual training for apprentices? *Please select a maximum of 4 school occupations from the following list*

School profession
Automation specialist
Electromechanic
Electronician

10. If the above list does not include all school occupations in which, in your opinion, it would be worthwhile to engage in the development of dual training, please indicate others. The list of school occupations is available at: <https://www.ore.edu.pl/2019/08/podstawa-programowa-ksztalcenia-w-zawodach-2019/> (please provide your answer in the form of a written comment)

II. Evaluation of the functioning of the current model of dual education in Radom

11. Please rate on a scale of 1 to 5, your LEVEL OF SATISFACTION with the following aspects related to the organisation of practical classes within the dual education (where: 1 - strongly dissatisfied, 2 - rather dissatisfied, 3 - no opinion, 4 - rather satisfied, 5 - strongly satisfied)

Areas assessed	Scale				
	1	2	3	4	5
Student recruitment process for practical classes					
Involvement of a Company representative in the development of the practical training programme					
The introduction of the student to the practical training programme by a company representative					
Number of students per apprenticeship instructor in the company					
Completeness of the layette given to students (work clothes, textbook) before the practical classes					
Number of hours per day of practical classes (6 lessons)					
Pupil involvement during practical activities in the company					
Involvement of the company's practical training instructor in working with the student					
Students' access to machinery and equipment during practical classes in the company					
Approaches of other employees in the company to students during practical activities					
The level of the company's technical equipment made available to students					
Access for pupils to hygiene, sanitary and welfare facilities (toilet, cloakroom, shower, canteen, etc.) during practical activities					
Familiarise the apprentice with the company's work organisation and working regulations before the practical sessions begin					
Professional competence of the instructor					
Maintenance of a logbook of practical activities by the instructor					
Level of additional remuneration for the instructor					

12. What do you think could be changed to improve your evaluation of your level of COMPLIANCE in the above areas? (Please give your suggestions for change in the comments)

.....

III. Assessment of students' mastery of the learning outcomes highlighted in the programme of activities

Please rate on a scale of 1 to 5 the **LEVEL OF LEARNING** of the following learning outcomes acquired during the practical dual system classes (where: 1 - definitely **not mastered**, 2 - rather not mastered, 3 - no opinion, 4 - rather mastered, 5 - definitely mastered)

Areas assessed - learning outcomes	Scale				
	1	2	3	4	5
9.1 Organise the workplace and observe safety rules when manufacturing machine parts					
9.2 Carry out workshop measurements (caliper, micrometer, protractor, etc.) using control and measuring tools.					
9.3 Make machine parts by manual machining (planar scribing, shearing, cutting, sawing, bending, straightening material, polishing, lapping, threading)					
Reading technical drawings and planning work					

14 Please rate on a scale of 1 to 5 the **LEVEL OF LEARNING** of the following learning outcomes acquired during practical classes in a company under the dual system (where: 1 - definitely **not mastered**, 2 - rather not mastered, 3 - no opinion, 4 - rather mastered, 5 - definitely mastered)

Areas assessed - learning outcomes	Scale				
	1	2	3	4	5
9.4. Make machine parts by machining (e.g. turning, milling, planing, grinding, etc.).					
Commissioning of the machine tool in accordance with the machine tool's technical documentation					
Reading machining parameters from technological documentation					
Selection of the processing parameters for the treatment from catalogues					
Performing an inter-operational check					
Assessing the condition of tools and replacing them					

Please rate on a scale of 1 to 5 the **LEVEL OF LEARNING** of the following learning outcomes acquired during the practical dual system (where: 1 - definitely **not mastered**, 2 - rather not mastered, 3 - no opinion, 4 - rather mastered, 5 - definitely mastered)

Areas assessed - learning outcomes	Scale				
	1	2	3	4	5
9.5. Fundamentals of numerically controlled machine tool programming					
9.6. Use of numerically controlled machine tools					
Determining and clamping the workpiece to be machined					
Start-up of numerically controlled machine tools in manual and automatic mode					
Performing machining operations on numerically controlled machine tools					
Supervise machining operations and respond to messages from the CNC machine control system					

M1.U2. Creating patronage classes and organising dual education

Assessing the degree of wear of the tool cutting edge					
Replacing blades in the event of excessive wear or damage					
Performing correction of processing results					
Maintenance of numerically controlled machine tools					

16. What, in your opinion, are the MAIN reasons, the reasons why Pupils have not mastered the learning outcomes listed above? (Please give a brief justification in the form of a written comment)

.....

IV. Assessment of students' mastery of outcomes related to personal competences

17. Please rate on a scale of 1 to 5 the LEVEL OF LEARNING of the following personal and social competences acquired during the practical dual system (where: 1 - definitely **not mastered**, 2 - rather not mastered, 3 - no opinion, 4 - rather mastered, 5 - definitely **mastered**)

Areas assessed - competences	Scale				
	1	2	3	4	5
Demonstrate perseverance in the performance of professional tasks					
Rationalise and improve the way in which assigned professional tasks are carried out					
Observance of cultural and ethical principles					
Being creative and consistent in the execution of tasks					
Activity planning and time management					
Being open to change					
Teamwork					

V. Overall evaluation of satisfaction and usefulness of practical classes in the dual system

18. Please rate on a scale of 1 to 10 the COMPANY'S TOTAL LEVEL OF SATISFACTION with the possibility of organising practical classes in the dual system (where: 1 - we are **totally disappointed** and 10 - we are 100% satisfied)

Grading scale									
1	2	3	4	5	6	7	8	9	10

19. Please rate on a scale of 1 to 10 the LEVEL OF DIFFICULTNESS of organising the practical activities for students at your Company (where: 1 - we had no problems with the organisation and 10 - it is a very engaging event with the highest level of difficulty)

Grading scale									
1	2	3	4	5	6	7	8	9	10

20. According to you, what posed the greatest difficulties for you in organising practical activities and how did you deal with this? (please give a brief justification in the form of a written comment)

.....

21. According to you, to what extent can participation in practical classes contribute to a student's intention to associate his/her professional future with the mechanical industry? (where: 1 - participation in practical activities does not translate into the fact that the student will associate his/her professional future with the mechanical industry, 10 - participation in practical activities determined that the student will associate his/her future with the mechanical industry)

Grading scale									
1	2	3	4	5	6	7	8	9	10

22. Please complete the sentence:

Our COMPANY's contribution to the organisation of practical classes for students in the form of dual training

Thank you for your time. Your feedback will be helpful in the process of improving the model of dual education in Radom.

We wish you SUCCESS and look forward to further fruitful cooperation in the field of dual system vocational training of students of Radom vocational schools!!!

A report on the research carried out as part of the public task "PROFESSIONALS - the future of the Radom Metal Cluster", financed from the funds of the Board of the Mazovian Voivodeship, including the methodology, research tools as well as results and recommendations is presented on the Radom Metal Cluster website⁵². The structure of the research report is presented below.

Example of the structure of an evaluation research report

Summary of the report

1. Research methodology

2. Analysis of the functioning of the dual education model in Radom - results and conclusions of the quantitative survey

- 2.1. Characteristics of the groups of respondents to the diagnostic survey
- 2.2. Evaluation of the level of satisfaction with selected organisational aspects of practical classes for students conducted in the form of dual training in Radom
Conclusions of quantitative research in the area of organisation of practical classes organised in the dual training system in metalworking companies
- 2.3. Assessing students' mastery of the learning outcomes highlighted in the course syllabus
Findings from quantitative research in the area of assessing students' mastery of learning outcomes in practical classes
- 2.4. Overall assessment of the level of satisfaction, usefulness and difficulties associated with the implementation of practical classes in the form of dual training in companies
Conclusions of the overall evaluation of satisfaction, usefulness and difficulties of the implementation of practical classes in the form of dual training in companies
- 2.5. Employability of graduates and interest of metalworking companies in organising dual training in other school occupations

⁵² Żurek M. (ed.), Conducting an analysis of the functioning of the current model of dual education in Radom. Report from surveys conducted and meetings held Radom 2021 https://klastermetalowy.radom.pl/wp-content/uploads/2022/01/Raport_analiza-funkcjonalna_ZPRKM.pdf (accessed 25.01.2024).

Findings from quantitative research in the area of assessing students' mastery of learning outcomes in practical classes

2.6. Evaluation of the parties' contribution to the development of dual education

Conclusions of the final statements of each group of respondents

3. analysis of the functioning of the dual education model in Radom - short report from the group interviews (recommendations)

4. Annexes

4.1. Student survey questionnaire

4.2. Survey questionnaire for vocational schools

4.3. Questionnaire for companies

3.13.3. Exercises

Exercises recommended for the online version of the training:

Exercise 1.

Tick the statements that correspond to the definition of the term evaluation.

<input type="checkbox"/>	the process of ascertaining to what extent the stated educational objectives are actually being met.
<input type="checkbox"/>	providing the information needed to make decisions.
<input type="checkbox"/>	a systematic and explicit process of gathering and analysing information on the nature, character and value of the phenomena of interest.
<input type="checkbox"/>	has a restrictive, controlling and supervisory character.

Correct answer key:

<input type="checkbox"/>	the process of ascertaining to what extent the stated learning objectives are actually being met
<input type="checkbox"/>	providing the information necessary for decision-making
<input type="checkbox"/>	a systematic and explicit process of gathering and analysing information on the nature, character and value of the phenomena of interest

Exercise 2.

Indicate what is the purpose of the evaluation? (tick one answer of your choice)

<input type="radio"/>	Establish public confidence in the school, especially when its political climate is uncertain and it is subject to reform and change
<input type="radio"/>	Issue a grade for practical activities to students.

<input type="checkbox"/>	Justification for the payment of awards to company practical training tutors.
<input type="checkbox"/>	Determining the amount of bonuses for teachers - pupil supervisors at the school.

Correct answer key:

X	Establish public confidence in the school, especially when its political climate is uncertain and it is subject to reform and change.
---	---

Exercise 3.

Tick all the correct answers. In the process of evaluating students' dual education in a company, it is recommended to obtain feedback from

Students participating in dual training	<input type="checkbox"/>
Tutors - instructors of practical vocational training in companies	<input type="checkbox"/>
Tutors - teachers at the school	<input type="checkbox"/>
Representatives of the school management and the company	<input type="checkbox"/>

Correct answer key:

Students participating in dual training	X
Tutors - instructors of practical vocational training in companies	X
Tutors - teachers at the school	X
Representatives of the school management and the company	X

Exercise 4.

Indicate which of the following aspects you would classify as organisational aspects of the company's dual education of students.

The process of recruiting a student for theory classes.	<input type="checkbox"/>
Number of students per apprenticeship instructor in the company.	<input type="checkbox"/>
Involvement of the company's practical training instructor in working with the student.	<input type="checkbox"/>
Maintenance of the apprentice's apprenticeship logbooks by the instructor in the company.	<input type="checkbox"/>

Correct answer key:

Number of students per apprenticeship instructor in the company.	<input type="checkbox"/>
--	--------------------------

Involvement of the company's practical training instructor in working with the student.	<input type="checkbox"/>
---	--------------------------

Exercises recommended for the classroom version of the training

Exercise 1.

Evaluation of students' dual education in the company.

Running the exercise:

- 1) The facilitator divides the participants into teams of 3-4 people. Each team is given a task:
 - select the area of dual education to be evaluated.
 - the choice of research methodology.
 - the development of a research tool.
- 3) Once completed, team leaders present the results.
- 4) The trainer summarises the exercise and presents an example from the handbook of an evaluation study of the functioning of the dual training model or another example of his/her choice.

3.13.4. Progress test (self-assessment)

Can you:	Yes	Not
1) defines the term evaluation?		
2) distinguishes and selects methods for evaluating practical classes for students organised in the form of dual education in companies?		
3) identifies tools for evaluating practical classes for students organised in the form of dual education in companies?		
4) explains the functionalities of remote evaluation tools?		
5) explains how to prepare a report on the evaluation of practical classes for students organised in the form of dual education in companies?		
6) characterizes how to draw conclusions and recommendations from the evaluation of practical classes for students organized in the form of dual education in companies?		
7) characterises the process of improving practical classes for students organised in the form of dual education in companies?		
8) uses various methods of evaluating practical classes for students organised in the form of dual education in companies?		
9) project of a tool for evaluating practical classes for students organised in the form of dual education in companies (forms, google surveys)?		
10) prepares a report in the evaluation of practical classes for students organised in the form of dual education in companies?		
11) proposes, on the basis of conclusions and recommendations, actions improving the organization of practical classes for students organized in the form of dual education in companies?		

12) introduces and tests the effectiveness of the introduced improvement activities in the area organised in the form of dual education in companies?		
---	--	--

If you selected the answer "NO", we propose you returning to the teaching material and its repeated analysis in order to achieve intended learning outcomes (knowledge, skills).

If necessary, use additional source of information prepared to each topic.

3.13.5. Recommended sources of information

Recommended literature - you can find more information on the topic in:

1. *Evaluation - evaluation methods and tools:*
https://www.oswiata.slask.pl/media_files/material_4_ocena_dzialan_i_wykorzystywanie_danych_do_podejmowania_decyzji,228.pdf (accessed 20.01.2024).
2. Żurek M. (ed.), *Conducting an analysis of the functioning of the current model of dual education in Radom. Report from surveys conducted and meetings held Radom 2021*
https://klastermetalowy.radom.pl/wp-content/uploads/2022/01/Raport_analiza_funkcjonalna_ZPRKM.pdf (accessed 25.01.2024).
3. *Creating a form in Microsoft Forms:* <https://support.microsoft.com/pl-pl/topic/tworzenie-formularza-w-aplikacji-microsoft-forms-4ffb64cc-7d5d-402f-b82e-b1d49418fd9d> (accessed 25.01.2024).
4. *Cómo crear una encuesta en Microsoft Forms:* <https://support.microsoft.com/es-es/office/crear-un-formulario-o-crear-un-cuestionario-3c39c220-e30e-401d-bb6f-c1861d5aea01> (accessed 30.01.2024).
5. *Πώς να δημιουργήσετε μια έρευνα στο Microsoft Forms:* <https://support.microsoft.com/el-gr/office/%CE%B4%CE%B7%CE%BC%CE%B9%CE%BF%CF%85%CF%81%CE%B3%CE%AF%CE%B1%CE%BD%CE%AD%CE%B1%CF%82-%CF%86%CF%8C%CF%81%CE%BC%CE%B1%CF%82-%CE%AE-%CE%BA%CE%BF%CF%85%CE%AF%CE%B6-3c39c220-e30e-401d-bb6f-c1861d5aea01> (dostęp: 30.01.2024).
6. *Opret en formular med Microsoft Forms:* <https://support.microsoft.com/da-dk/topic/opret-en-formular-med-microsoft-forms-4ffb64cc-7d5d-402f-b82e-b1d49418fd9d> (accessed 30.01.2024).
7. *Evaluation tools* https://iesturiana.org/ASIR-FPDual/EvaluacinFPDual-ABR-2017/3_metodologa_de_trabajo_segn_cada_participante.html (accessed 30.01.2024).
8. Grundfos, "Developing Real-World Skills through Apprenticeships," (2021). Available at: Grundfos Apprenticeships.

4. GLOSSARY

<i>English</i>	<i>Polish</i>
school management	dyrekcja szkoły
internship diary	dzienniczek stażu
learning outcomes	efekty uczenia się
exams	egzamin
evaluation	ewaluacji
schedule	harmonogram
patronage class	klasa patronacka
personal competences	kompetencji personalnych
monitoring	monitoring
monitoring	monitorowanie
negotiations	negocjacje
direct observation	obserwację bezpośrednią
observations	obserwacji
peer assessment	ocenę rówieśniczą
assessment	ocenia
tutor - instructor of practical vocational training	opiekun - instruktor praktycznej nauki zawodu
employer	pracodawca
employee	pracownik
professional practice	praktyka zawodowa
curriculum	programu nauczania
pedagogical preparation	przygotowanie pedagogiczne
parent	rodzic
labour market	rynek pracy
self-esteem	samoocena
diagnostic survey	sondaż diagnostyczny
simulations	symulacje
Vocational school	szkoła zawodowa
practice tests	testy praktyczne
skill tests	testy umiejętności
student	uczeń
agreement	umowa
resources	zasoby

5. LITERATURE

Poland:

- Analysis of dual education as a training method. Powiatowy Zespół Obsługi Szkół i Placówek Oświatowych, Giżycko 2015, pp. 15-16, [https://ec.europa.eu/programmes/erasmus-plus/project-result-content/3094ae6c-ca24-4d2c-9156-a68689b76320/Apprenticion%20analyse%20\(PL\).pdf](https://ec.europa.eu/programmes/erasmus-plus/project-result-content/3094ae6c-ca24-4d2c-9156-a68689b76320/Apprenticion%20analyse%20(PL).pdf) (accessed 20.12.2023).
- Baldysz B.: Patronage class of the Opel plant in Gliwice: <http://radasektorowa-motoryzacja.pl/wp-content/uploads/2018/09/Klasa-Patronacka-Zak%C5%82adu-Opla-w-Gliwicach.pdf> (accessed 20.12.2023).
- Budzianowska K., 2019, How to construct a curriculum - a short guide, <<https://edurada.pl/jak-skonstruowac-program-nauczania-krotki-poradnik-4/>> [accessed 07.12.2023].
- Cedefop (2014), On the way to 2020: data for VET policies, Luxembourg: Publications Office of the European Union.
- Chatzichristou S., Ulicna D., Murphy I., Curth A. (2013), Dual education: a bridge over troubled waters? Study. European Parliament's Committee on Culture and Education.
- What is a patronage class and what are its advantages? ABCrozwoju.pl: <https://abcrozwoju.pl/czym-jest-klasa-patronacka-i-jakie-sa-jej-zalety/>
- Darche S., Nayar N., Bracco K. (2009), Work-based learning in California: Opportunities and models for expansion, Los Angeles: James Irvine Foundation.
- Dix P.: How to assess students' progress. PWN, Warsaw 2014.
- Dual education: a solution for difficult times? https://www.europarl.europa.eu/RegData/etudes/BRIE/2014/529082/IPOL_BRI%282014%29529082_PL.pdf (dostęp: 20.12.2023).
- Evaluation - evaluation methods and tools: https://www.oswiata.slask.pl/media_files/material_4_ocena_dzialan_i_wykorzystywanie_danych_do_podejmowania_decyzji,228.pdf (accessed 20.01.2024).
- Field S., Hoeckel K., Kis V., Kuczera M. (2009), Learning for jobs: OECD reviews of vocational education and training, Initial Report, Organisation for Economic Cooperation and Development, Paris.
- Fłasz-Gębarowska A.: Psychological aspects of grading. [In:] Konopka I. (ed.), 2015: Assessment in grades I-III. ORE, Warsaw 2015.
- Fuller A., Unwin L. (2008), Towards expansive apprenticeships: A commentary by the Teaching and Learning Research Programme, London: Teaching and Learning Research Programme;
- Grzonkowska D., Misztal J., Wilińska-Wieczorek J., Żuchowski Z., Monitorowanie wdrażania podstawy programowej kształcenia ogólnego na II, III, IV etapie edukacyjnym. Guidebook, ORE 2013 (electronic version): The essence and role of monitoring in the education system <https://tiny.pl/dhp8c> (accessed 20.01.2024).
- Harasim A.: Dual vocational training in crafts. Increasing the effectiveness of vocational preparation in crafts in the process of supervision by crafts organisations. Polish Craft Association: https://pomorskaizba.pl/files/page_files/48/dualne-kształcenie-zawodowe-ost.pdf (accessed 12.12.2023).
- How to create a survey FAST, share it online and collect the results into Excel - Microsoft FORMS: <https://www.youtube.com/watch?v=eXxpvtWxqQ> (accessed 25.01.2024). Panek A., Evaluation, control and assessment in the educational process of students of the University of Pedagogy: https://rep.up.krakow.pl/xmlui/bitstream/handle/11716/2920/06_ewaluacja_kontrola_i_ocena_a_pane.pdf?sequence=1 (accessed: 24.01.2024).
- KGHM. Apprenticeships: <https://kghm.com/pl/kariera/dla-uczniow/praktyki-uczniowskie> (accessed 22.11.2023).

- Patronage class - what is it and how can it help? Edunet - Poland: <https://edunet-poland.pl/czym-jest-i-w-czym-moze-pomoc-klasa-patronacka/> (accessed 20.12.2023).
- Gestamp Poland patronage class, http://zspwzresnia.pl/pliki/pliki_2019-2020/gestamp_2020.pdf (accessed 20.12.2023).
- Patronage classes the future of vocational education. ORE, Warsaw: doradztwo.ore.edu.pl/klasy-patronackie-przyszloscia-edukacji-zawodowej/ (accessed 20.12.2023).
- Komorniczak J.: Patronage class. A tool used in the cooperation of vocational schools with entrepreneurs. Part IV. Kraków Technology Park 2019. <https://www.kpt.krakow.pl/wp-content/uploads/2020/06/klasa-patronacka.pdf> (accessed 20.12.2023).
- Konczal M.: Apprenticeships in a vocational school. Are they compulsory? How many hours per day of apprenticeships are required? Education Zone, 23.10.2023: <https://strefaedukacji.pl/praktyki-zawodowe-w-szkole-branzowej-czy-sa-obowiazkowe-i-ile-sie-na-nich-zarobi-najwazniejsze-informacje-o-praktykach/ar/c5-17978785> (accessed 22.11.2023).
- Kopacz J.: Apprenticeships - everything you should know about them - GoWork.pl Guide: <https://www.gowork.pl/poradnik/22/rozwoj-osobisty/praktyki-zawodowe-wszystko-co-powinienes-onich-wiedziec/> (accessed 22.11.2023).
- Vocational training at Volkswagen Polska: https://www.uczesiewvwp.pl/_files/ugd/fa8364_14c4c59703184de9b33caa8f1599eda6.pdf, (accessed 12.09.2023).
- Lucas B.: A new look at assessment in education: <https://biblioteka.ceo.org.pl/nowe-spojrzenie-na-ocenie-w-edukacji/> (accessed 10.01.2024).
- Lucas B.: Rethinking assessment in education: The case for change: https://www.researchgate.net/publication/350887830_Rethinking_assessment_in_education_The_case_for_change_CSE_LEADING_EDUCATION_SERIES (accessed 10.01.2024).
- Microsoft Forms basics quick reference guide, M. Grzegorzewska Academy of Special Education, <https://www.aps.edu.pl/media/2392730/microsoft-forms-instrukcja.pdf> (accessed 10.12.2023).
- Ministry of National Education in Poland: Obligation of schools to cooperate with employers. <https://www.gov.pl/web/edukacja/obowiazek-wspolpracy-szkol-z-pracodawcami> (accessed 17.01.2024).
- Model programme of practical vocational education for the occupation Hotel Service Assistant 911205. I stopnia szkoły branżowa. Centre for Education Development, Warsaw: <https://www.ore.edu.pl/wp-content/plugins/download-attachments/includes/download.php?id=40605> (accessed 10.12.2023).
- Model Student Internship Programme for the occupation of mechatronics technician (311410). Łukasiewicz Research Network - Institute for Sustainable Technologies, Radom, 2022: https://www.itee.lukasiewicz.gov.pl/images/staze/Program_stau_Technik_Mechatronik.pdf (accessed 14.12.2023).
- Monitoring the fate of university graduates using administrative data of the Social Insurance Institution. Final report, Institute for Educational Research. Warsaw, January 2014: <https://produkty.ibe.edu.pl/docs/raporty/ibe-raport-monitorowanie-losow-absolwentow.pdf> (accessed 21.12.2023).
- Nevo D., Conceptualising educational evaluation. An analytical review of the literature, [in:] Evaluation in education, ed. L. Korporowicz, Warsaw 1, Warsaw 1997, p. 5.
- Developed from: Patronage classes as a form of cooperation between employers and schools. Łódź experience: <http://obserwatoriumedukacji.pl/klasy-patronackie-w-szkolach-zawodowych/>, (accessed 12.09.2023).
- Opret en formular med Microsoft Forms: <https://support.microsoft.com/da-dk/topic/opret-en-formular-med-microsoft-forms-4ffb64cc-7d5d-402f-b82e-b1d49418fd9d> (accessed 30.01.2024).

- Poortman C., Illeris K., Nieuwenhuis L. (2011), Apprenticeship: From learning theory to practice, *Journal of Vocational Education and Training - Special issue on apprenticeship as an evolving model of learning*, Vol. 63, No 3. London: Routledge.
- Promotion of vocational education by employers, Polish Craft Association, Social Dialogue Council, Warsaw, 2018, https://zrp.pl/wp-content/uploads/2018/11/Informator_2018-3.pdf (accessed 20.12.2023).
- Legal guide for a Polish family abroad - Greece: <https://dziecizagranica.gov.pl/grecja/> (accessed 20.12.2023).
- Legal guide for the Polish family abroad - Spain: <https://dziecizagranica.gov.pl/hispania/> (accessed 20.12.2023).
- Example of good cooperation between a vocational school and an employer: <https://www.ore.edu.pl/wp-content/uploads/2018/03/przyklad-dobrej-wspolpracyszkoly-zawodowej-z-pracodawca-technikum-mechaniczne-nr-15.pdf> (accessed 22.11.2023).
- Example of vocational school-employer collaboration: <https://www.ore.edu.pl/wp-content/uploads/2018/03/przyklad-dobrej-wspolpracyszkoly-zawodowej-z-pracodawca-technikum-mechaniczne-nr-15.pdf> (accessed 22.11.2023).
- Raelin J.R. (1997), A model of work-based learning, *Organization Science*, Vol. 8, No 6, pp. 563-578.
- Annual report of the educational programme review. Faculty of Pharmacy Jagiellonian University Collegium Medicum, Kraków: <https://farmacja.cm.uj.edu.pl/cm/uploads/2019/05/2-Raport-kszt%C5%82cenia-kierunek-Analzyka-2016-2017.pdf> (accessed 21.12.2023).
- Ryan P. (2011), The apprentice: Employee, student, both, neither? Evidence from four countries, Paper presented at the ETF International Panel on Work-based Learning, 14-15 November 2011, Turin: European Training Foundation, p. 2-3.
- Simons H., The evaluation process in schools, [in:] *Evaluation at school*, ed. H. Mizerek, Olsztyn 1997, p. 59.
- Glossary of more important concepts. *Evaluation in education*, ed. L. Korporowicz, Warsaw 1997, p. 279.
- Student internship - Ministry of Education and Science - Gov.co.uk portal: <https://www.gov.pl/web/edukacja/staz-uczniowski> (accessed 22.11.2023).
- City of Opole website, project "Vocational training for the labour market - 3": <https://www.opole.pl/dla-mieszkanca/ksztalcenie-zawodowe-dla-ryнку-pracy-3> (accessed 12.09.2023).
- AutomationB2B industry portal website, article: "Celsa's new mechatronics patronage class": <https://automatykab2b.pl/gospodarka/45897-nowa-mechatroniczna-klasa-patronacka-celsy>, (accessed 12.09.2023).
- Website of the dokariery.pl portal, article "Patronage classes as a ticket to the labour market": <https://dokariery.pl/-/klasy-patronackie-przepustka-na-ryнку-pracy> (accessed 12.09.2023).
- Kielce City Hall website, article "Another patronage class in Kielce's "Elektrek": <https://www.kielce.eu/pl/aktualnosci/kolejna-klasa-patronacka-w-kieleckim-elektryku.html>, (accessed 12.09.2023).
- Website of the Vocational School Complex No. 3 in Starachowice: <http://zsz3.net/uczniowie-klasy-patronackiej-man-zdali-egzamin/>, (accessed 12.09.2023).
- Strykowski J.: Organising student and professional practices: a guide for employers - Aplikuj.pl: <https://www.aplikuj.pl/porady-dla-pracodawcow/1450/organizowanie-praktyk-studenckich-i-zawodowych-przewodnik-dla-pracodawcow#:~:text=Dla%20pracodawc%C3%B3w%2C%20praktyki%20zawodowe%20to%20szansa%20na,wspieranie%20m%C5%82odych%20talent%C3%B3w%20i%20mo%C5%BCliwo%C5%9B%C4%87%20znalezienia%20potencjalnych%20pracownik%C3%B3w.> (accessed 22.11.2023).

- Vocational education in Poland - schools must educate for labour market needs. <https://fpg24.pl/szkolnictwo-zawodowe-w-polsce-szkoly-musza-ksztalcic-ludzi-na-potrzeby-ryнку-pracy/> (accessed 20.12.2023).
- Creating a form in Microsoft Forms: <https://support.microsoft.com/pl-pl/topic/tworzenie-formularza-w-aplikacji-microsoft-forms-4ffb64cc-7d5d-402f-b82e-b1d49418fd9d> (accessed 25.01.2024).
- UNESCO (1984), Терминология технического и профессионального образования. Unesco, 1984, http://books.google.de/books/about/Terminology_of_Technical_and_Vocational.html?id=BTo6nQEACAAJ&redir_esc=y. (accessed 20.12.2023).
- Model report on pro-quality activities. Faculty of Pharmacy Jagiellonian University Collegium Medicum, Kraków: <https://wnz.cm.uj.edu.pl/cm/uploads/2022/01/WZOR-RAPORTU-Z-DZIALAN-PROJAKOSCIOWYCH.docx> (accessed 21.12.2023).
- Advantages of collaboration between businesses and vocational schools - Asystent4You.co.uk: <https://www.asystent4you.pl/zalety-wspolpracy-przedsiębiorstw-ze-szkolami-zawodowymi/>;
- Żmijewska-Kwiręg S.: What is the problem with grading? <https://ceo.org.pl/na-czym-polega-problem-z-ocenianiem/> (accessed 10.01.2024).
- Żurek M. (ed.), Conducting an analysis of the functioning of the current model of dual education in Radom. Report from surveys conducted and meetings held Radom 2021 https://klastermetalowy.radom.pl/wp-content/uploads/2022/01/Raport_analiza-funkcjonalna_ZPRKM.pdf (accessed 25.01.2024).

Spain:

- *¿QUÉ ES LA FP DUAL Y CÓMO FUNCIONA PARA UNA EMPRESA? 2021*, <https://fundacionuniversidadempresa.es/es/blog-formacion-profesional-dual-empresas/> (accessed 20.12.2023).
- *10 ventajas que debes conocer de la Formación Profesional Dual | Cámara de España*: <https://www.camara.es/blog/formacion-y-empleo/10-ventajas-que-debes-conocer-de-la-formacion-profesional-dual> (accessed 20.12.2023).
- Buenas prácticas en Formación Profesional dual en España. 14 indicadores europeos de calidad, 102 ejemplos autonómicos: <https://www.fundacionbertelsmann.org/wp-content/uploads/2021/12/14-BBPPP-FP-ES-OL.pdf> (accessed: December 20, 2023).
- CEDEFOP Una Mirada a la Formación Profesional España: https://www.cedefop.europa.eu/files/8035_es.pdf (accessed: December 20, 2023).
- Chana Kasipar, Mac Van Tien, Se-Yung LIM, Pham Le Phuong, Phung Quang Huy, Alexander Schnarr, Wu Quanquan, Xu Ying, Frank Bünning (2002): Linking Vocational Training with the Enterprises - Asian Perspectives: https://unevoc.unesco.org/up/Link_Voc_End.pdf (accessed: June 20, 2023).
- *Cómo crear una encuesta en Microsoft Forms*: <https://support.microsoft.com/es-es/office/crear-un-formulario-o-crear-un-cuestionario-3c39c220-e30e-401d-bb6f-c1861d5aea01> (accessed 30.01.2024).
- DECRETO 166/2018, de 18 de septiembre, del Gobierno de Aragón, por el que se regula la formación del profesorado de enseñanzas no universitarias que presta sus servicios en centros docentes sostenidos con fondos públicos en la Comunidad Autónoma de Aragón: <http://www.boa.aragon.es/cgi-bin/EBOA/BRSCGI?CMD=VEROBJ&MLKOB=1040620063232&type=pdf> (accessed: June 20, 2023).
- Estudiantes matriculados en FP Dual en España: <https://www.observatoriofp.com/indicadores-destacados/espana/estudiantes-matriculados-en-fp-dual> (accessed: June 20, 2023).

- Ley Orgánica 3/2022, de 31 de marzo, de ordenación e integración de la Formación Profesional. https://www.boe.es/diario_boe/txt.php?id=BOE-A-2022-5139 (accessed: June 20, 2023).
- LEY ORGÁNICA DE ORDENACIÓN E INTEGRACIÓN DE LA FORMACIÓN PROFESIONAL. Agenda 2030: <https://www.educacionyfp.gob.es/dam/jcr:eeee54c0-c2fc-41a8-8451-e62599154d50/doc-ley-fp.pdf> (accessed: June 20, 2023).
- Observatorio sobre la FP en España. Informe 2021. la FP como clave de desarrollo y sostenibilidad: <https://www.observatoriofp.com/fp-analisis/anual> (accessed: June 20, 2023).
- Pérez Manzano, Ángela, El aprendizaje basado en el trabajo en España desde la perspectiva europea (Work-based learning in Spain in relation to the European Union): <https://uvadoc.uva.es/bitstream/handle/10324/32841/TFM-G891.pdf?sequence=1> (accessed: June 20, 2023).
- ReferNet: <https://www.sepe.es/HomeSepe/Personas/formacion/cedefop/ReferNET.html> (accessed: June 20, 2023).
- Varietats de l'FP Dual: <https://mestreacasa.gva.es/web/fpdual/variedades> (accessed 20.06.2023).
- Ventajas de la formación dual - CEEP: <https://www.grupoceep.com/ventajas-de-la-formacion-dual/> (accessed 20.12.2023).
- Ventajas de la Formación Profesional Dual para las empresas - FEDA-Madrid, FP Dual Alemana con empresas internacionales: <https://www.feda-madrid.com/ventajas-formacion-profesional-dual-para-las-empresas/> (accessed 20.12.2023); Ventajas de la formación dual - CEEP: <https://www.grupoceep.com/ventajas-de-la-formacion-dual/> (accessed 20.12.2023).

Denmark:

- 13 erhvervsskoler er med i projekt for at fremme faglig stolthed hos landets erhvervsskoleelever: <https://www.via.dk/om-via/presse/nyheder-2020/13-erhvervsskoler-er-med-i-projekt-for-at-fremme-faglig-stolthed-hos-landets-erhvervsskoleelever> (accessed 20.12.2023).
- Bekendtgørelse om erhvervsuddannelser (Executive Order on vocational training): <https://www.retsinformation.dk/eli/lta/2021/2499#ide48d875b-c441-4602-b021-232c0dd542ab> (accessed: December 20, 2023).
- Danmarks Statistiks Fagklassifikation (DISCO-08), v1:2010: <https://www.dst.dk/da/Statistik/dokumentation/nomenklaturer/disco> (accessed: December 20, 2023).
- Danmarks Statistiks Fagklassifikation (DISCO-88), v1:1996: <https://www.dst.dk/da/Statistik/dokumentation/nomenklaturer/disco?id=ec4f3246-ea1a-4e8b-b229-f03c0dc680c6> (accessed: December 20, 2023).
- Danske virksomheder løfter et kæmpe uddannelsesansvar på erhvervsuddannelserne: <https://www.da.dk/politik-og-analyser/uddannelse-og-kompetencer/2020/danske-virksomheder-loeffer-et-kaempe-uddannelsesansvar-paa-erhvervsuddannelserne/> (accessed 20.12.2023).
- Erhvervsskoleelever bliver klar til arbejdslivet: <https://ufm.dk/uddannelse/tilskud-til-udveksling-og-internationale-projekter/erasmusplus/erhvervsrettet-grund-og-efteruddannelse/inspiration-og-projektseksempler-erhvervsrettet-grund-og-efteruddannelse/eud/erhvervsskoleelever-bliver-klar-til-arbejdslivet> (accessed 20.12.2023).
- ETF (2013), *Work-based learning: benefits and obstacles a literature review for policy makers and social partners in ETF partner countries*, European Training Foundation.
- Levels in the Danish Qualifications Framework: https://ufm.dk/en/education/recognition-and-transparency/transparency-tools/qualifications-frameworks/levels/niveaubeskrivelser_en.pdf (accessed: December 20, 2023).

- Løn for lærere ansat på tjenestemandslignende vilkår ved institutioner for erhvervsrettet uddannelse (Remuneration for teachers employed under civil service-like conditions in vocational training institutions), 2019: <https://www.uddannelsesforbundet.dk/media/4883/aftaler-for-tjenestemandslignende-paa-erhvervsuddannelser-mm-2019.pdf> (accessed: December 20, 2023).
- Ministry of Higher Education and Science. Degrees and qualifications: <https://ufm.dk/en/education/higher-education/degrees-and-qualifications>

Greece:

- Cedefop, & EOPPEP. 2019. vocational education and training in Europe: Greece. <https://www.cedefop.europa.eu/el/printpdf/tools/vet-in-europe/systems/greece> (accessed: June 20, 2023).
- Cedefop, 2018. apprenticeship review: Greece: modernising and expanding apprenticeships in Greece
- Common Ministerial Decision 26381/2017 (Φ.Ε.Κ. 490B/20.2.2017) which regulates the apprenticeships
- Common Ministerial Decision 26385 (Φ.Ε.Κ. 491 B 20.2.2017) on the content of the VET programmes
- Law 3848/2010 which establishes standards for the evaluation and meritocracy in education
- Law 3879/2010 which shaped national priorities in the field of VET and regulated issues governing actions for lifelong learning, such as the definition of the basic concepts and the distinction between administrative bodies and service providers. In addition, it established the National Qualifications Framework and the National Lifelong Learning Network.
- Law 4009/2011 related with in the structure, the operation, quality assurance and internationalisation of VET institution.
- Law 4763/2020 on the establishment on the National System for Vocational Education, Training and Lifelong Learning
- Opendgov.gr. 2015. Πλαίσιο για τη Διασφάλιση της Ποιότητας στη Δια Βίου Μάθηση (Framework for the Quality Assurance in Lifelong Learning). <http://www.opengov.gr/ypeth/wpcontent/uploads/downloads/2015/12/PLAISIODIASFALISIS.pdf>
- Research from the Foundation for Economic & Industrial Research (2021), 'Vocational Education & Training in Greece', http://iobe.gr/docs/research/RES_05_F_27042021_REP_GR.pdf (accessed: June 20, 2023).
- The Hellenic Qualifications Framework: <https://nqf.gov.gr/index.php/ta-8-epipeda> (accessed: June 20, 2023).
- Η Επαγγελματική Εκπαίδευση & Κατάρτιση Στην Ελλάδα - Dianeosis: <https://www.dianeosis.org/2022/09/i-epaggelmatiki-ekpaidefsi-kai-katartisi-stin-ellada/> (accessed 20.12.2023).
- ως να δημιουργήσετε μια έρευνα στο Microsoft Forms: <https://support.microsoft.com/el-gr/office/%CE%B4%CE%B7%CE%BC%CE%B9%CE%BF%CF%85%CF%81%CE%B3%CE%AF%CE%B1-%CE%BD%CE%AD%CE%B1%CF%82-%CF%86%CF%8C%CF%81%CE%BC%CE%B1%CF%82-%CE%AE-%CE%BA%CE%BF%CF%85%CE%AF%CE%B6-3c39c220-e30e-401d-bb6f-c1861d5aea01> (dostę: 30.01.2024).