# DISSEMINATION REPORT

**UNDER THE PROJECT** 

"INNOVATIVE EDUCATION – NEW CAREER OPPORTUNITIES"

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co-financed by the European Union from the European Social Fund under the Knowledge Education Development Operational Program, Priority Axis IV. Social innovations and transnational cooperation, Measure 4.1 Social innovations









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## **Dictionary**





DICTIONARY 7

CAWI	Computer Assisted Web Interview					
СКЕ	Central Examination Commission					
CSR	Corporate Social Responsibility					
Vocational Training Center (CKZ)	A network of educational institutions providing vocational labouratories and qualified staff, both for young people and adults, for the purposes of vocational education.  On September 1, 2019, Practical Training Centers (CKP) became, by rule of law, Vocational Training Centers¹					
<b>Educational results</b>	Resources of knowledge, skills, and social competencies gained in learning processes <sup>2</sup>					
Grant	Financial resources under the Operational Programme Knowledge Education Development, entrusted by the Grantor to the Grantee, on the basis of the Grant Agreement <sup>3</sup>					
Grantee	Participant of the grant project who, after passing all stages of recruitment and signing the grant agreement, received funding for the implementation of the grant. The Grantees under the grant project can be vocational and technical schools, Practical Training Centers, Vocational and Continuing Education Centers, local government units as school governing authorities, non-governmental organizations, employers' organizations, business agencies/centers, business environment institutions. Grantees cannot be entities subordinate to the Grantor without independent legal status <sup>4</sup>					
Grantor – project Leader	Świętokrzyskie Voivodeship – Marshall Office of the Świętokrzyskie Voivodeship in Kielce, Department of Regional Policy, Innovation and Knowledge Transfer Unit, implementing the project "Innovative Education – New Career Opportunities" under the Operational Program Knowledge Education Development 2014-2020 co-financed by the European Social Fund under the co-financing agreement of July 26, 2017 <sup>5</sup>					
Substantive and financial schedule	Annex to the IMKP, specifying the tasks along with the planned implementation time and the amount of planned costs					

The Act of November 22, 2018 amending the Education Law, the Act on the Educational System, and some other acts.

<sup>2</sup> Regulation of the Minister of National Education of May 16, 2019 on the core curricula for vocational education arranged by sector and additional vocational skills for selected occupations identified within vocational education.

<sup>3</sup> The selection process for awarding grants under the project "Innovative Education – New Career Opportunities" under the Operational Program Knowledge Education Development 2014-2020 co-financed by the European Social Fund

The selection process for awarding grants under the project "Innovative Education – New Career Opportunities" under the Operational Program Knowledge Education Development 2014-2020 co-financed by the European Social Fund.

The selection process for awarding grants under the project "Innovative Education – New Career Opportunities" under the Operational Program Knowledge Education Development 2014-2020 co-financed by the European Social Fund.

Innovative Model of Practical Training (IMKP)	An innovative model of practical training, as innovative on the national level, that does not duplicate the standard forms of support planned in ROP, POWER as well as in projects implemented in the financial perspective 2007-2013, 2004-2006. The key innovative aspect of the project will be to increase the frequency, length, and quality of workplace learning as an integral part of formal vocational education <sup>6</sup>				
Business Environment Institutions (BEI)	Any entity, irrespective of the legal form, operating for the development of entrepreneurship and innovation, not operating for profit or allocating profit for statutory purposes in accordance with the provisions in the statute or other equivalent document, with resources and a technology base, as well as possessing human resources and competencies necessary to provide services for the SME sector <sup>7</sup>				
Practical training tutor/Apprenticeship tutor	A person designated by the employer and approved by the school for vocational training of students in the company, and with the necessary qualifications (including educational) <sup>8</sup>				
MEN	Ministry of Science and Higher Education				
Vocational education teachers	Vocational education is provided by teachers of theoretical vocational subjects and teachers of practical vocational training. Pursuant to the contents of the <i>Teachers' Charter</i> , the number of obligatory teaching hours in vocational education is 20 <sup>9</sup>				
PARP	Polish Agency for Enterprise Development				
project Partner (BFI)	Vocational Training Institute – Berufsförderungsinstitut Burgenland in Oberwart (Austria)				
Core curriculum	The primary national document (ministerial), legally binding, defining the goals of education at specific stages of learning, a set of teaching content and skills that must be included in the curricula. It contains a detailed description of the requirements. It specifies what a student with average abilities should learn in different subjects at each stage of education, what skills he should acquire, and what will be assessed and what are the exam requirements <sup>10</sup>				

The selection process for awarding grants under the project "Innovative Education – New Career Opportunities" under the Operational Program Knowledge Education Development 2014-2020 co-financed by the European Social Fund

<sup>7</sup> Regulation of the Minister of Regional Development of 20 May 2009 on assistance to strengthen the potential of business environment institutions under the regional operational program.

<sup>8</sup> Regulation of the Minister of National Education of February 22, 2019 on practical vocational education.

<sup>9</sup> Act of 26 January 1982, The Teachers' Charter (consolidated text: Journal of Laws of 2019, item 2215).

<sup>10</sup> Regulation of the Minister of National Education of May 16, 2019 on the core curricula for vocational education arranged by sector and additional vocational skills for selected occupations identified within vocational education.

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Curriculum	A document describing how the teaching content indicated in the General Education Core Curriculum (vocational education) will be implemented, authorized in a given school by its headmaster at the teacher's request, after consulting the pedagogical Board. The curriculum for the subject must take into account the needs and capabilities of the students for whom it is intended <sup>11</sup>				
project	project "Innovative Education – New Career Opportunities" under the Operational Program Knowledge, Education and Development 2014-2020 co-financed by the European Social Fund <sup>12</sup>				
Employer	An entity that has concluded a contract with the school for the provision of practical training for students of a given school at the workplace. The agreement presupposed achieving specified learning outcomes				
Framework curriculum	The number of hours established in the school at a given educational stage for the implementation of individual compulsory educational activities <sup>13</sup>				
Final IMKP implementation report	The report that the Grantees were required to submit within 14 calendar days following the implementation of IMKP to confirm the implementation of planned tasks and incurring expenses in accordance with the substantive and financial schedule <sup>14</sup>				
IMKP Specifications	A detailed description of IMKP, subject to substantive evaluation during the grants recruitment, notifying at least about: the type of entities involved (at least schools and employers); transferring to the enterprise at least 40% of the hours of practical training of students from the number of hours allocated to practical training; target group that will take part in practical training organized in enterprises (students from classes II-IV of vocational education and training schools aged 17-19); expected educational results and the option of implementing the model in accordance with the law <sup>15</sup>				
School Cooperation Animator (SAW)	A person who, as part of the <i>Model</i> , will among other things be responsible for establishing and maintaining cooperation between the school and employers				

<sup>11</sup> Act of 7 September 1991 on the Educational System (Journal of Laws of 2020, item 1327 and of 2021, item 4).

The selection process for awarding grants under the project "Innovative Education – New Career Opportunities" under the Operational Program Knowledge Education Development 2014-2020 co-financed by the European Social Fund.

 $Regulation\ of\ the\ Minister\ of\ National\ Education\ of\ 3\ April\ 2019\ on\ framework\ curricula\ for\ public\ schools.$ 

The selection process for awarding grants under the project "Innovative Education – New Career Opportunities" under the Operational Program Knowledge Education Development 2014-2020 co-financed by the European Social Fund.

The selection process for awarding grants under the project "Innovative Education – New Career Opportunities" under the Operational Program Knowledge Education Development 2014-2020 co-financed by the European Social Fund.

Non-public school	An educational institution run by legal entities or natural persons on the basis of an entry into the register of non-public institutions and schools, made in the relevant local government unit, which may obtain rights of a public school (which is proven, for example, by the right to award state certificates and diplomas), if it implements the requirements set out in the Act on the Educational System <sup>16</sup>			
Grant agreement	An agreement signed between the Grantor and the Grantee, who prepared the Specification of Innovation and obtained the approval of the selection board <sup>17</sup>			
UMWŚ	Marshall Office of the Świętokrzyskie Voivodeship			
Intra-school career counseling system	Purposeful, structured, and interrelated career counseling activities undertaken by a given school or institution <sup>18</sup> A model developed on the basis of best available solutions applied by individual Grantees and agreed with a wide group of stakeholders within the performed research			
Reference Model for Practical Training (Model)				

<sup>16</sup> The selection process for awarding grants under the project "Innovative Education – New Career Opportunities" under the Operational Program Knowledge Education Development 2014-2020 co-financed by the European Social Fund.

<sup>17</sup> The selection process for awarding grants under the project "Innovative Education – New Career Opportunities" under the Operational Program Knowledge Education Development 2014-2020 co-financed by the European Social Fund.

<sup>18</sup> Regulation of the Minister of National Education of February 12, 2019 on career counseling.

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## Legend





LEGEND 13

In the *Dissemination Report*, each grant was assigned a sequential number, and the Grantee – an acronym, which will be used later in the study. Detailed information on grants is presented below.

Grant no.	Acronym	Grantee	Grant title			
I	CKP Starachowice	Practical Training Center in Starachowice	Education in the workplace. School – CKP – Employer.			
II	ŚZPP Lewiatan	Swietokrzyski Union of Private Employers Lewiatan	Corps of Professionals – cooperation of experts for effective practical training in the catering and hotel industry			
Ш	ZS in Ożarów	Maria Skłodowska-Curie Complex of Schools in Ożarów	Innovative dual vocational education in Opatów County			
IV	ZS in Opatów	School Complex No. 1 in Opatów	Innovative dual vocational education in Opatów County ver. 2.0.			
V	ZSP in Końskie	No. 2 Cluster of the Upper Secondary Schools in Końskie	Model of dual education in No. 2 Cluster of the Upper Secondary Schools in Końskie			
VI	ZDZ Kielce	Vocational Training Center in Kielce	Innovative Model of Practical Training JPD for IT technician specialty			
VII	NTZ Kielce	Military Training Center for UN Peacekeeping in Kielce (ZDZ Consortium in Kielce)	Dual 3D model – Consulting, Improvement, Experience			
VIII	SP Kielce County Office in Kielce		Innovative Model of Education – a path to professional success in the Kielce County			
IX	SFP Kielce	Employers' Forum Association in Kielce	Student – professional			
X	ARR Starachowice	Regional Development Agency in Starachowice	Innovative Model of Education for students of technical schools from the Kielce County			

## Introduction





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The presented Dissemination Report concerns the project called "Innovative Education – New Career Opportunities" led by the Marshall Office of the Świętokrzyskie Voivodeship (UMWŚ), and a partner of the Berufsförderungsinstitut Burgenland – a vocational training institute (BFI) from Austria. The project, the implementation of which is envisioned for the time from August 1, 2017 to June 30, 2021, is co-financed by the European Union from the European Social Fund under the Knowledge Education Development Operational Program, Priority Axis IV. Social innovations and transnational cooperation, Measure 4.1 Social innovations.

The main objective of the projects is to enhance the quality of vocational education with the use of different models for implementation of practical training in the working environment and to establish a 'reference' model for the implementation of the developed concept in Poland, also on the basis of the experience of a foreign partner. The project selects 10 Grantees who have developed and tested 10 various proposals for Innovative Models of Practical Training (IMKP).

This Report presents the Reference Model for Practical Training (WMKP), developed on the basis of the best solutions applied by individual Grantees implementing IMKP and agreed with a wide group of stakeholders within the performed research.

# The methodology applied





In order to perform an evaluation of the project, conduct a comparative analysis of 10 grants, and develop the Reference Model for Practical Training, hereinafter referred to as the *Model*, the study uses research methods and techniques employing various sources of information, including primary and secondary data.

The analysis of secondary data (desk research) included analysis of the following documents:

- Application for co-financing of the project "Innovative Education New Career Opportunities"
- Grant process from the 1st and 2nd recruitment with attachments
- Specification of Innovative Models of Practical Training with Substantive and Financial Schedules of each Grantee
- Grantees' final reports
- Final report on the mid-term evaluation study under the project "Innovative Education New Career Opportunities"
- Reports developed by the project partner from Austria
- Regulations of the Ministry of National Education concerning: the core curricula<sup>19</sup>; subject-based curricula<sup>20</sup>; hands-on vocational training<sup>21</sup>; classification of higher education staff occupations<sup>22</sup>; detailed organization of schools<sup>23</sup>; on the detailed conditions and procedure for conducting a vocational examination and an examination confirming qualifications for an occupation<sup>24</sup>

Regulations by the Minister of National Education: ... Regulation of the Minister of National Education of 16 May 2019 on the core curricula for vocational education arranged by sector and additional vocational skills for selected occupations identified within vocational education

<sup>20</sup> Regulation of the Minister of National Education of 3 April 2019 on the outline timetables in public schools

Regulation of the Ministry of National Education of February 22, 2019 on practical vocational education

Regulation of the Minister of National Education of 13 March 2017 on the classification of occupations for vocational education

<sup>23</sup> Regulation of the Minister of National Education of 28 February 2019 on the detailed organizational arrangements for public schools and nursery schools

<sup>24</sup> Minister of National Education of 28 August 2019 on the detailed conditions and procedure for conducting a vocational examination and an examination confirming qualifications for an occupation

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- Education Act<sup>25</sup>, The Act on the Educational System<sup>26</sup>
- Polish Quality Framework for Apprenticeships and Traineeships a set of norms and standards for the implementation of high-quality internship and apprenticeship programs in enterprises, developed with the participation of several dozen organizations associated in the Polish Association of Human Resources Management
- Other publications and articles such as: "Methods of testing the effectiveness of various forms of practical vocational training" (PARP)<sup>27</sup>; "Dual education system in Poland and in the *Świętokrzyskie* Voivodeship compared to highly developed countries in the European Union"<sup>28</sup>

The analysis also covered the project website http://innowacyjnaedukacja.spinno.pl/

As part of **qualitative research, individual in-depth interviews** were conducted with people directly involved in project implementation, i.e. the project Leader (N=1), project **Partner** (N=1), and **Grantees** (N=10).

**Qualitative research** was based on a **web survey** (CAWI) and was carried out among the participants of all 10 grants, i.e., **school representatives** (N=24), **students** (N=219), and **entrepreneurs** (N=30). The structure of individual groups of respondents and the sample size are presented in the table below.

<sup>25</sup> Act of 14 December 2016 - Education Law (Journal of Laws 2020, item 910 and 1378 and of 2021, item 4)

The Act Of 7 September 1991 On the Education System (Journal of Laws, item 1327 and of 2021, item 4)

<sup>27 &</sup>quot;Methods of testing the effectiveness of various forms of practical vocational training", Instytut Analiz Rynku Pracy Sp. z o. o, available at: https://www.parp.gov.pl/storage/publications/pdf/Raport-badanie-praktycznej-nauki-zawodu\_200911.pdf

Koziar, Monika. "Dual education system in Poland and in the Świętokrzyskie Voivodeship compared to highly developed countries in the European Union", available at: http://innowacyjnaedukacja.spinno.pl/wp-content/uploads/2019/08/Dualny-system-ksztalcenia-w-Polsce-i-w-wojewodztwie-swietokrzyskim-na-tle-europejskich-krajow-wysokorozwinietych.pdf

TABLE 1.
STRUCTURE OF THE COMPLETED SAMPLE IN THE CAWI SURVEY

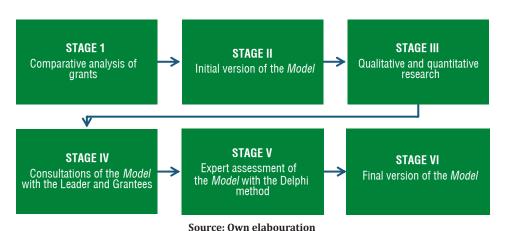
Grant participants	I	II	III	IV	V	VI	VII	VIII	IX	X	Total
Schools	1	6	2	2	1	1	3	4	2	2	24
Entrepreneurs	1	2	5	3	2	4	3	5	1	4	30
Students	19	20	17	10	12	6	46	45	27	17	219
Total	21	28	24	15	15	11	52	54	30	23	273

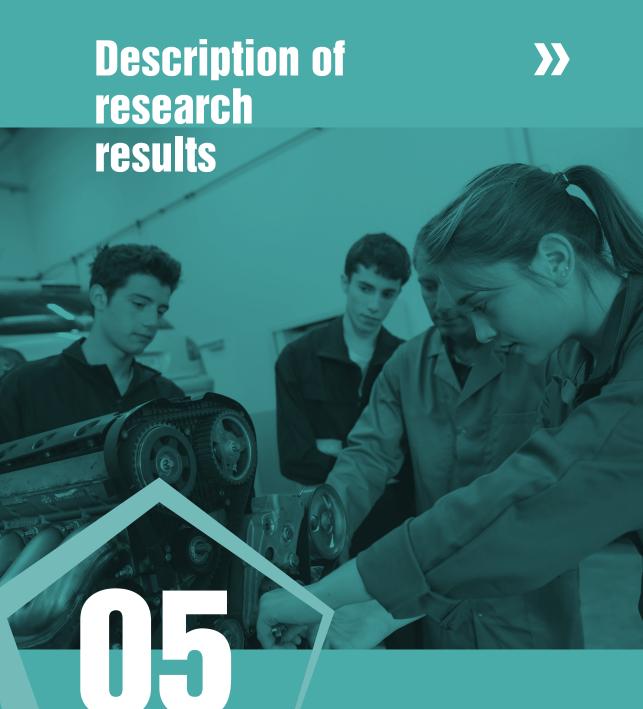
Source: Own elabouration

In order to optimize the shape of the *Model*, two online meetings were held: with the project Leader and with the Grantees.

The last stage of developing the final version of the *Model* was a study using the Delphi method, participated by external experts representing education and labour market institutions, non-governmental organizations, and business environment institutions. Based on the research results and the Research Team's own conceptual work, the final *Model* was developed and presented in this report.

FIGURE 1.
THE DESIGN PROCESS OF THE MODEL





### 5.1 EVALUATION OF THE PROJECT "INNOVATIVE EDUCATION – NEW CAREER OPPORTUNITIES"

The main purpose of the project assumed in the application for co-financing, i.e., "improving the quality of vocational education using a set of at least 5 models of implementation of practical training in the workplace and preparation of a model of implementation of education in the workplace in Poland, also based on the experience of a foreign partner" to be achieved through the implementation of the following tasks:

- Task 1 Preparation of the grant process and activities supporting the development of innovative forms of vocational education
- Task 2 Grants implementation testing and implementation of innovative vocational training in enterprises
- Task 3 Partnership exchange of knowledge and experience in the field of innovative approaches to vocational education
- Task 4 Monitoring the effects and disseminating in order to implement innovative forms of support for vocational education

At the moment of conducting the research described in this report, the implementation of tasks: 1 (besides the actions: meeting of the Platform for Cooperation of Grantees and the Steering Committee), 2 and 3 has been completed and the implementation of task 4 has begun. Details are presented in Table 2.

In order to assess the compliance of the project with the assumed objectives, the implementation status of the indicators specified in the application for funding was analyzed. The analysis demonstrated that the target values of all indicators have already been achieved, with the exception of the output indicator "Number of reports prepared", which is in progress and will be achieved by the end of the project (by 30/06/2021). The list of analyzed indicators is presented in Table 3.

TABLE 2.
PROGRESS IN IMPLEMENTING TASKS IN THE PROJECT

Task no.	Name of action	Current state
1.	1.1 Meetings of the Steering Committee for the development of practical training	in progress
	1.2 Practical training forum with the participation of a partner from Austria	completed
	1.3 Organization and conducting grant meetings in counties	completed
	1.3 Organization and conduct of grant meetings in counties	completed
	1.5 Industry reports on practical training	completed
	1.6 Trade fairs	completed
	1.7 Grantee cooperation platform	in progress
2.	2.1 Conclusion of contracts with Grantees who will carry out tasks aimed at increasing the number of hours of practical training at the employer's to min. $40\%$	completed
	2.2 Educational guidance in the field of education, formal and legal advice	completed
	2.3 Career guidance for students	completed
	2.4 Pedagogical courses for entrepreneurs	completed
3.	3.1 Organization of the visit for 10 people in order to exchange knowledge and experience in the field of innovative approaches to education	completed
	3.2 Organization of workshop consultations with Grantees and experts	completed
4.	4.1 Conducting evaluation research	in progress
	4.2 Substantive, graphic development and printing of the Dissemination Report	in progress
	4.3 Organization of a competition with prizes for the best solution developed by the students during the practical training provided by the employer	in progress
	4.4 Organization of visits, including from other poviats, regions to Grantees	to be realized
	4.5 Selection and award for outstanding entrepreneurs implementing practical training in cooperation with schools – Education Ambassador	in progress
	4.6 Instructional video on innovative forms of vocational education	in progress

4	4.7 Actions promoting innovative forms of vocational education at the employer's and the results of the implemented grants	in progress
	4.8 Organization and conduct of the Forum disseminating the developed Innovative Model of Practical Training	to be realized

Source: Own elabouration based on the analysis of existing data

**TABLE 3.**STATUS OF IMPLEMENTATION OF THE PROJECT INDICATORS.

Name of indicator	Target value	Current state
Result indicator: Number of tested social innovations on a micro scale	5	completed
Result indicator: Number of people who increased their competencies by participating in pedagogical courses for entrepreneurs	48	completed
Product indicator: Number of innovations accepted for co-financing on a micro scale	5	completed
Product indicator: Number of people with primary or lower secondary education supported by the program	500	completed
Product indicator: Number of institutions that have cooperated with a foreign partner in the program	1	completed
Product indicator: Number of grant meetings conducted	19	completed
Product indicator: Number of reports prepared	8	in progress
Product indicator: Number of visits for partner exchange of knowledge and experience in the field of innovative approaches to vocational education	5	completed
Product indicator: Number of people covered by expert advisory services in the field of career counseling for students	500	completed
Product indicator: Number of people participating in vocational courses for entrepreneurs	48	completed
Product indicator: Number of practical training programs consulted with the transnational partner	5	completed
Product indicator: Number of people participating in a study visit to the country of the foreign partner as part of transnational cooperation	10	completed

Source: Own elabouration based on the analysis of existing data

### 5.2 COMPARATIVE ANALYSIS OF GRANTS

The project specifies the recruitment procedure. Then, in accordance with the prepared documentation, and under two recruitments, a selection of 10 Grantees was made who implemented (tested) 10 Innovative Practical Training Models in the Świętokrzyskie Voivodeship (IMKP).

As evident from the presented data, the Grantees were technical schools, Practical Training Center, Vocational Training Center, local governments, employers' organizations, and business environment institutions (BEI).

The analysis of specifications, substantive and financial schedules, final reports on the implementation of grants, and interviews with Grantees confirmed that all Grantees demonstrated knowledge of the specificity and current needs of the market in the Świętokrzyskie Voivodeship. The analysis of individual grants showed that in all IMKP innovative educational solutions were implemented to increase the frequency and quality of practical training at the employer. In each IMKP, at least 40% of practical training hours in the field of vocational education in technical classes have been transferred to employers. This confirms that all the grants implemented were in line with the project objective. In addition, each IMKP takes into account close cooperation of at least the school and the employer (and in some IMKP also other partners) regarding the adaptation of the school curriculum to the possibility of carrying out some of the practical classes at the employer (taking into account the scope of activity, company profile, equipment, etc.). Schools, students, and entrepreneurs were involved in the implementation of individual grants. Detailed data on the scale of this involvement is presented in the table below.

**TABLE 4.**THE NUMBER OF SCHOOLS, STUDENTS, AND ENTERPRISES COVERED BY GRANTS AND DURATION OF GRANTS

Grant no.	Number of schools covered by support	Number of supported students*	Number of supported enterprises	Duration of grant (in term)
I	2	29	4	3
II	5	61	5	5
III	2	40	7	3
IV	2	37	6	2
V	1	26	4	2
VI	3	68	12	2
VII	3	99	21	2
VIII	3	87	11	4
IX	3	59	7	4
X	3	79	13	3
Total	27	585	90	-

<sup>\*</sup>number of students who have completed the educational program covered by the grant

Source: Own elabouration based on final reports on the implementation of grants

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Grants offered many forms of support for schools, entrepreneurs, students, and also for the Grantees themselves. If the Grantee was a school, it used both forms of support intended for the Grantee, as well as for grant participants.

The conducted analysis showed that all Grantees offered students practical training at the employer's with the participation of a practical training tutor on behalf of the employer, as well as medical examinations and insurance. In addition, the provision of workstation equipment and/or the purchase of clothing and footwear, as well as equipping students with the necessary work tools. All students were also paid scholarships and provided career counseling. Other forms of support were included in individual grants in various configurations. Detailed information on the forms of support in individual grants is presented in the table below.

TABLE 5.
FORMS OF SUPPORT OFFERED IN GRANTS

Form of support	I	II	III	IV	V	VI	VII	VIII	IX	X	Total
Practical training at the employer's	Yes	Yes	Yes	10							
Specialized courses for students	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	9
Training, courses, or practical workshops for teachers	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	5
Health examinations for students	Yes	Yes	Yes	10							
Health and safety training for students	No	Yes	Yes	Yes	9						
Student insurance	Yes	Yes	Yes	10							
Practical training tutor	Yes	Yes	Yes	10							
Supplying equipment for the workplace (including the purchase of clothing, footwear, etc.)	Yes	Yes	Yes	10							
Providing students with the necessary work tools	Yes	Yes	Yes	10							
Scholarships for students	Yes	Yes	Yes	10							

Trips to trade fairs, study visits	Yes	No	No	Yes	Yes	Yes	Yes	No	Yes	No	6
Reimbursement of travel expenses to the employer	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	8
Training specialist	No	Yes	No	1							
The person responsible for professional development and contacts with companies*	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	5
Practical training specialist**	No	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	7
Specialist educational consultancy for Grantees	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No	No	6
Career counseling for students	Yes	10									
<b>Educational courses for companies</b>	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	9

<sup>\*</sup>Career animator/Professional activity trainer/Animator for contacts with entrepreneurs/School Cooperation Animator/Consultant for communication and cooperation with schools and entrepreneurs/Professional advisor/Professional mentor/Job coach

Source: Own elabouration based on final reports on the implementation of grants.

In grants, quite different solutions were adopted in terms of the tasks assigned to the vocational teacher representing the technical school and the practical training tutor on the part of the employer. The most common differences concerned:

- The presence of a vocational teacher during the practical training of students at the employer (optional: the teacher stayed with the students at the employer or the students stayed with the employer without the teacher's supervision, the teacher acted as an observer or gave the students substantive instructions)
- Responsibility for entering grades obtained by students during education with employers (optional: the employer's practical training tutor entered grades for the students on their own or the grades were entered by the teacher on behalf of the tutor)

<sup>\*\*</sup>Specialist for dual education/Creator of practical training/Consultant for practical training/Pioneer of implementation processes/Consultant for the implementation of forms of support

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- Responsibility for checking the presence of students during classes at the employer's (optional: the employer's practical training tutor checked and recorded in the journal the presence of students during classes on his own or was checked by the teacher on behalf of the tutor)
- Responsibility for the learning outcomes achieved by the students, achieved by the employer (optional: only a vocational teacher or a vocational teacher together with the employer's practical training tutor)

The detailed scope of duties of a practical training teacher and tutor on the part of the employer within individual IMKP is presented in the annex to the report.

### 5.2.1 Grants assessment from the perspective of entrepreneurs

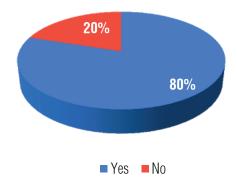
The evaluation of grant implementation from the perspective of enterprises (employers) participating in individual grants was based on the results of an online survey (hereinafter referred to as the CAWI survey). The target group of the study were persons supervising the practical training of the entrepreneur (usually these were practical training tutors in the company, with pedagogical qualifications). 30 respondents took part in the survey.

The research confirmed that entrepreneurs report great demand for the pedagogical training of their employees, who are to be entrusted with the function of practical training tutors for students. The CAWI survey showed that 80% of enterprises benefited from support in the form of pedagogical courses for their employees, which were financed under the project. According to the vast majority of employers (87%), pedagogical courses for employees of enterprises educating students are needed not only for formal reasons but also because they allow them to be better prepared to transfer knowledge and establish cooperation with occupational teachers

and students. The respondents emphasized that the majority of employees of enterprises do not have pedagogical preparation, and therefore such activities are necessary to implement the *Model* in accordance with the adopted assumptions.

CHART 1.
USE OF PEDAGOGICAL COURSES UNDER GRANTS BY THE COMPANY'S EMPLOYEES (N=30)

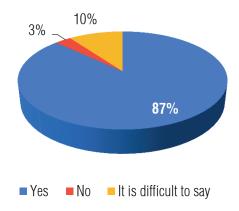
Question: Did the employees take advantage of the pedagogical course for entrepreneurs?



#### CHART 2.

DEMAND FOR PEDAGOGICAL COURSES AMONG COMPANIES ACCEPTING STUDENTS FOR PRACTICAL TRAINING (N=30)

Question: Are pedagogical courses for entrepreneurs necessary in the context of the admission of students to practical training

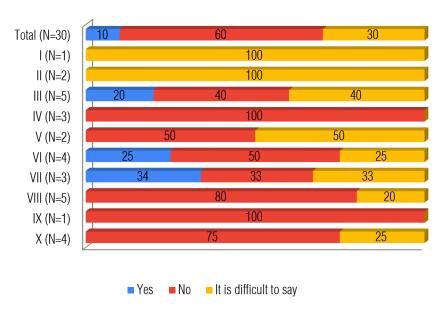


In most grants, entrepreneurs were not initiators of practical training in their companies. This resulted, inter alia, from the entrepreneurs' lack of knowledge about such a possibility or the early actions of the school which established contact with the employer by itself. Entrepreneurs who took the initiative to conduct practical training in their company (10%) justified it with the interest in participating in a new project as well as the willingness to contact schools or to upgrade and modernize the workplace for students.

CHART 3.

THE FREQUENCY OF INITIATING PRACTICAL TRAINING BY ENTREPRENEURS

Question: Did you take the initiative to conduct practical training in the company?



Entrepreneurs indicated, inter alia, the following reasons for admitting students to practical training:

- The possibility of retrofitting and modernizing the workplace
- The possibility of effective recruitment among students studying in the company, i.e., finding a potential employee and training him/ her as part of the classes, and thus improving his/her practical knowledge and qualifications even before employment in the company
- Interest in terms of cooperation under the grant, willingness to learn about IMKP, and at the same time a desire to gain new experience
- Helping young people to enter the local labour market; participation in improving the qualifications of future staff for the local economy
- Willingness to introduce future employees to the reality of work in a given profession
- Willingness to establish contact with a school that educates students in a given industry
- Implementation of the mission related to corporate social responsibility, consisting in enabling students to acquire practical knowledge in real employment conditions
- Possibility of obtaining additional help from students in the enterprise in the period of increased traffic.

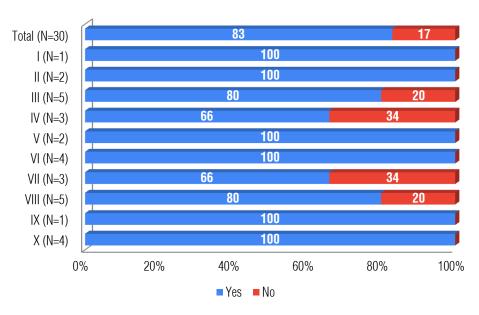
Most of the surveyed entrepreneurs confirmed that they had an impact on the shape and scope of practical training of students in their companies at every stage of the project or at least at the stage of co-creating the curriculum together with the school.

According to the majority of entrepreneurs (83%), their participation in creating the program of practical classes is definitely important for the process of educating students.

CHART 4.

INFLUENCE OF EMPLOYERS ON THE VOCATIONAL EDUCATION PROGRAM OF STUDENTS IN THEIR COMPANIES

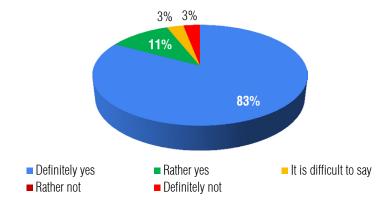
Question: Does the company have any influence on the program of the classes conducted in the company?



#### CHART 5.

THE IMPORTANCE OF INVOLVING ENTREPRENEURS IN CREATING A PROGRAM OF PRACTICAL CLASSES WITH EMPLOYERS FOR THE PROCESS OF EDUCATING STUDENTS (N = 30)

Question: Is the participation of entrepreneurs in creating the practical training program for employers important for the process of educating students?

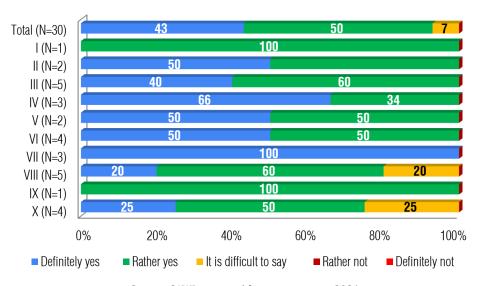


Source: CAWI survey with entrepreneurs, 2021.

The very good cooperation between schools and employers during the preparation of practical training programs is evidenced by the fact that as many as 93% of entrepreneurs considered that the program was adequate to the company's expectations. The remaining respondents were unable to express themselves unequivocally, while none of the employers stated that the practical training program was inadequate to the company's expectations.

CHART 6.
ASSESSMENT OF THE ADEQUACY OF THE IMPLEMENTED PRACTICAL TRAINING PROGRAM TO THE COMPANY'S EXPECTATIONS

Question: Was the implemented practical training program adequate to the company's expectations?

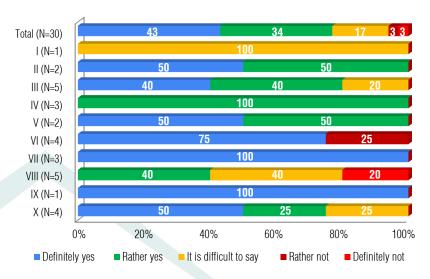


Only entrepreneurs participating in the grant implemented by ZDZ in Kielce (25%) and in the grant implemented by the County Office in Kielce (20%) stated that the number of practical training hours completed in their companies was insufficient for students to learn about the work environment and acquire new skills. At the same time, 38% of the respondents confirmed that the number of hours completed was sufficient, and 17% of the respondents were not able to provide an unambiguous answer to this question.

#### CHART 7.

ASSESSMENT OF THE NUMBER OF HOURS OF PRACTICAL TRAINING CONDUCTED IN THE COMPANY UNTIL THE STUDENTS LEARN ABOUT THE WORKING ENVIRONMENT AND ACQUIRE NEW SKILLS

Question: Was the number of hours of practical training for students in the company sufficient for them to learn about the working environment and gain new skills?

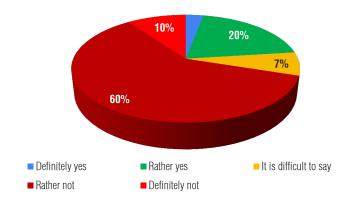


Only 23% of the surveyed enterprises believed that the presence of a teacher from the school is necessary during the practical training of students. This proves the high self-esteem of practical training tutors in terms of their substantive knowledge and the ability to transfer it to students. Moreover, it should be emphasized that employers were not directly responsible for the results of vocational examinations achieved by students.

## CHART 8.

CHART 8. THE DEMAND OF COMPANIES FOR THE PRESENCE OF A SCHOOL TEACHER DURING THE PRACTICAL LEARNING OF STUDENTS IN THE ENTERPRISE (N=30)

Question: Is the presence of a school instructor necessary during classes in the course of the practical training of students in the enterprise?



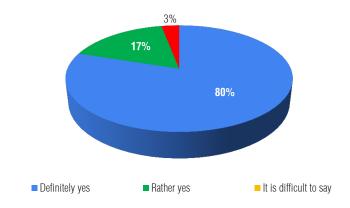
Source: CAWI survey with entrepreneurs, 2021.

As many as 97% of employers were satisfied with the cooperation with schools. The reasons for this satisfaction included: smooth cooperation, good contact, a very well-planned method of combining classes at the employer's with education at school, timeliness, efficient project implementation, providing help from the school, including substantive assistance in the implementation of the task.

CHART 9.

LEVEL OF ENTERPRISE SATISFACTION WITH THE COOPERATION WITH SCHOOLS (N=30)

Question: Were you satisfied with the cooperation with the school/schools?



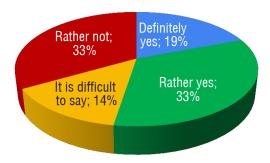
 $Source: CAWI\ survey\ with\ entrepreneurs,\ 2021.$ 

The majority of entrepreneurs (52%) previously cooperating with schools stated that the manner of carrying out activities under the grant differed from the manner in which they had been conducted earlier. The features that positively distinguished the way in which the activities were carried out under the grant were, inter alia, a more extensive program, greater involvement of the practical training tutor in conducting classes, better care by the school, creating greater development opportunities for students, creating/retrofitting a workplace, a different way of financing the practical training of students at employers, assistance in the selection of education topics by schools.

#### CHART 10.

THE OCCURRENCE OF DIFFERENCES IN THE MANNER OF CONDUCTING CLASSES DURING THE GRANT AND THE MANNER OF CONDUCTING CLASSES IN THE EXISTING COOPERATION WITH THE SCHOOL (N=21)

Question: Were the activities with students carried out under the existing cooperation with the school different from the way they were carried out under the grant?



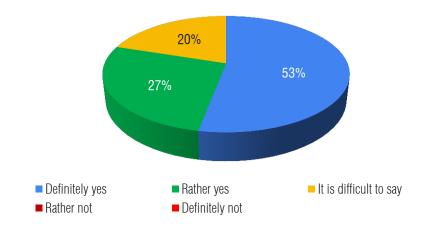
Source: CAWI survey with entrepreneurs, 2021.

The positive assessment of the implemented IMKP is also evidenced by the fact that none of the surveyed entrepreneurs intends to end their cooperation with the school after the implementation of the grant.

CHART 11.

COMPANIES' PLANS TO START COOPERATION WITH THE SCHOOL AFTER THE IMPLEMENTATION OF THE GRANT (N=30)

Question: Will the enterprise cooperate with the school after the implementation of the grant?



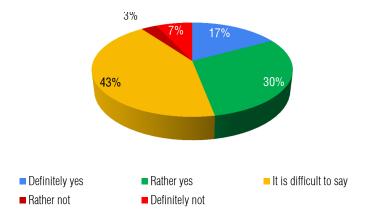
Source: CAWI survey with entrepreneurs, 2021.

The results of the CAWI survey were also confirmed by the high percentage (47%) of employers planning to employ at least one of the students studying in the enterprise under the grant.

#### CHART 12.

COMPANIES' PLANS CONCERNING THE EMPLOYMENT OF STUDENTS PARTICIPATING IN THE GRANT (N=30)

Question: Does the company intend to hire any of the students after the grant is implemented?



Source: CAWI survey with entrepreneurs, 2021.

Entrepreneurs also indicated the following additional benefits, which they have achieved thanks to participation in grants:

- Possibility of cooperation with the school in order to recruit graduates for employment in the company in the future
- Building a potential base of future employees
- A better understanding of the situation in the local labour market
- Purchase of fixed assets related to the company's development
- Assistance in the purchase of equipment and tools used to conduct classes
- Gaining new experience in educating young staff
- Obtaining pedagogical qualifications by employees of enterprises

- Financing to better motivate students to study with the employer (scholarships)
- Financial rewards for practical training tutors at the employer's
- Taking action in the field of corporate social responsibility (CSR)
- Periodic reduction of employee costs
- Prestige and recognition among local employers
- Establishing cooperation with other companies participating in the grant

The entrepreneurs participating in the survey also commented on the adaptation of the current education system to the needs of the labour market. However, the opinions presented were rather fragmented: 40% of the respondents stated that the education system is adequate to the needs of the labour market, 30% of the respondents were of the opposite view, and the remaining 30% of entrepreneurs were unable to give an unambiguous answer to the question.

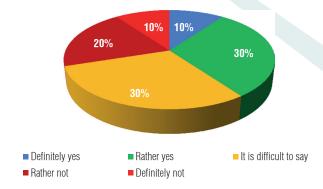
Entrepreneurs who believed that the education system was not adequate to the needs of work indicated the following reasons:

- Changes in the education system taking place too slowly in relation to the dynamic changes in the economy and technologies
- Too few practical classes
- Supersaturation of education in a technical school with theoretical classes
- Obsolete practical knowledge of professional teachers
- Significant differences in the form of conducting practical classes in schools compared to practical classes in enterprises
- Lack of educating students in the development of social skills based on values such as responsibility, motivation, honesty
- Lack of training students to develop teamwork skills
- Staff shortages among practical vocational training tutors
- Shortage of technical facilities with the most modern equipment for practical occupational learning

# CHART 13.

ASSESSMENT OF THE ADEQUACY OF THE EDUCATION SYSTEM TO THE NEEDS OF THE LABOUR MARKET (N=30)

Question: Is the current education system adequate to the needs of the labour market?



Source: CAWI survey with entrepreneurs, 2021.

As part of the CAWI survey, employers were also asked to assess the feasibility of the obligatory inclusion of IMKP in the vocational education system. Almost half of the respondents (43%) do not see any obstacles hindering the continuation of education in the form implemented under the grant. The remaining respondents pointed to the following barriers and problems:

- Logistic barriers (organization of transporting students to the employer)
- Lack of financing
- Noncoverage of the cost of the practical training tutor who dedicates time to teaching students
- Lack of the latest apprenticeship equipment
- Staff barriers (insufficient number of instructors)
- COVID-19 pandemic
- Too little time spent by students on company activities
- Too little involvement of students (absenteeism, forced shortening of classes).

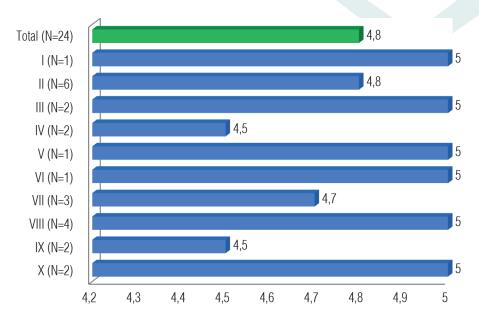
# 5.2.2 Grants assessment from the perspective of schools

The evaluation of grant implementation from the perspective of schools (technical schools) participating in individual grants was based on the results of an online survey (hereinafter referred to as the CAWI survey). If the school was both the Grantee and IMKP participant, the respondents were asked to evaluate the project from the perspective of the grant participant. The target group of the study were vocational teachers involved in the implementation of IMKP. 24 respondents took part in the survey.

All respondents agreed that the process of dual education under the grants ran smoothly. This proves the assumptions of IMKP, properly prepared by the Grantees, resulting from the correct recognition of the specificity of sectors in which the students were educated and in which the employers conducted business. It is particularly important due to the significant difference between the specificity of dual education under the grant and the previously used practice.

**CHART 14.** 

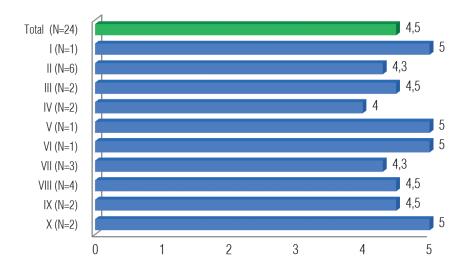
THE AVERAGE ASSESSMENT OF THE RESPONDENTS' COMPLIANCE WITH THE STATEMENT "THE PROCESS OF DUAL EDUCATION (COMBINING EDUCATION AT SCHOOL WITH PRACTICAL CLASSES AT THE EMPLOYER'S) RAN SMOOTHLY UNDER THE GRANT."



Rating scale: from 1 to 5, where 1 meant "strongly disagree" and 5 "strongly agree"

CHART 15.

THE AVERAGE ASSESSMENT OF THE RESPONDENTS' COMPLIANCE WITH THE STATEMENT "DUAL EDUCATION CONDUCTED DURING THE GRANT IMPLEMENTATION DIFFERED FROM THE ACTIVITIES PREVIOUSLY CONDUCTED AT SCHOOL"

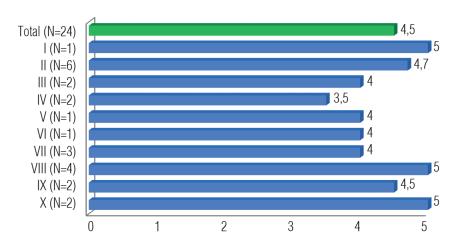


Rating scale: from 1 to 5, where 1 meant "strongly disagree" and 5 "strongly agree"

Most of the respondents representing the schools participating in the grant agreed with the statement that the implemented IMKP correctly responded to the needs of the school (average grade 4.5 on a 5-point scale), with the lowest degree of the consent of the schools participating in the ZS grant in Opatów.

CHART 16.

AVERAGE ASSESSMENT OF THE RESPONDENTS' COMPLIANCE WITH THE STATEMENT "THE IMPLEMENTED INNOVATIVE MODEL OF PRACTICAL TRAINING APPROPRIATELY RESPONDED TO THE NEEDS OF THE SCHOOL"

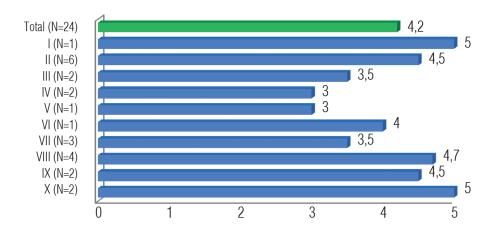


Rating scale: from 1 to 5, where 1 meant "strongly disagree" and 5 "strongly agree"

The assessment of the problematic nature of adjusting the school hours schedule to IMKP was not unanimous and it can be assumed that it depended on the scope of the grant being implemented. Adjustment of the organizational sheet was considered to be the most problematic by the ZSP in Końskie and the ZS in Opatów.

**CHART 17.** 

THE AVERAGE ASSESSMENT OF THE RESPONDENTS' COMPLIANCE WITH THE STATEMENT "ADAPTATION OF THE TIME PATTERN TO DUAL EDUCATION PLANNED IN THE GRANT DID NOT POSE A PROBLEM"



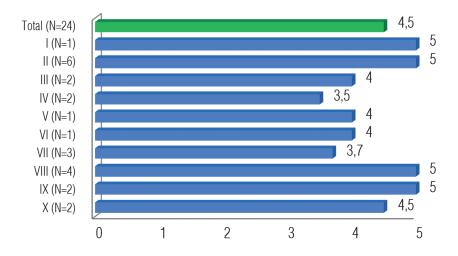
Rating scale: from 1 to 5, where 1 meant "strongly disagree" and 5 "strongly agree"

SCHOOL IN THE FUTURE"

Schools generally agreed fully with the statement that the allocation of hours of practical training between the school and the employer proposed in the grant would be acceptable in the future. The ZS in Opatów and NTZ in Kielce considered the system of dual education implemented in grants as the most troublesome.

CHART 18.

AVERAGE ASSESSMENT OF RESPONDENTS' COMPLIANCE WITH THE STATEMENT "THE HOURLY WORK SYSTEM IMPLEMENTED UNDER THE GRANT IS ACCEPTABLE FOR THE

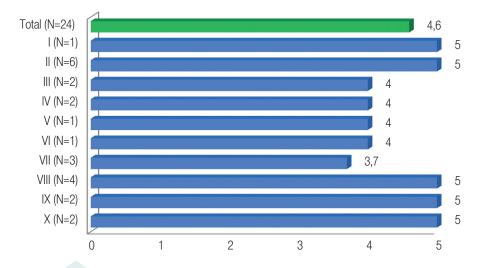


Rating scale: from 1 to 5, where 1 meant "strongly disagree" and 5 "strongly agree"

The acceptability of the forms of support used in IMKP for schools participating in grants was assessed slightly better than the hourly work system from the point of view of its continued use in the future. Half of the assessed IMKP obtained the highest score (5.0) in this criterion. This concerned grants implemented by CKP Starachowice, ŚZPP Lewiatan, SP Kielce, SFP and ARR.

**CHART 19.** 

AVERAGE ASSESSMENT OF RESPONDENTS' COMPLIANCE WITH THE STATEMENT "THE APPLIED FORM OF EDUCATION IN THE INNOVATIVE MODEL IS ACCEPTABLE FOR THE SCHOOL IN THE FUTURE"

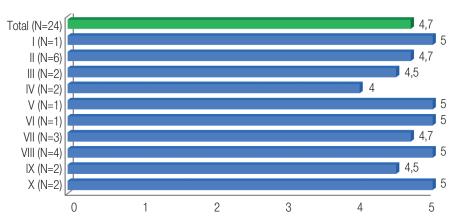


Rating scale: from 1 to 5, where 1 meant "strongly disagree" and 5 "strongly agree"

From the perspective of teachers of the profession, students showed a very high interest in participating in the grant and were very involved in the implementation of IMKP. Among the studied schools, the lowest level of interest and involvement of students in participation in IMKP was assessed by teachers at the ZS in Opatów (4.0), while in other grants this issue was assessed much better.

## CHART 20.

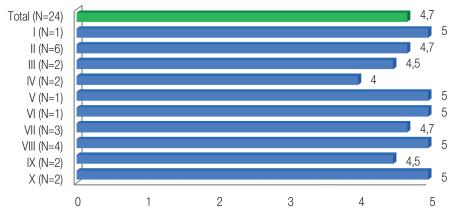
AVERAGE ASSESSMENT OF RESPONDENTS' COMPLIANCE WITH THE STATEMENT "SCHOOL STUDENTS SHOWED INTEREST IN PARTICIPATING IN THE GRANT" ON A SCALE FROM 1 TO 5, WHERE 1 MEANT STRONGLY DISAGREE AND 5 – STRONGLY AGREE



Rating scale: from 1 to 5, where 1 meant "strongly disagree" and 5 "strongly agree"

CHART 21.

AVERAGE ASSESSMENT OF THE RESPONDENTS' COMPLIANCE WITH THE STATEMENT "STUDENTS PARTICIPATED IN DUAL EDUCATION UNDER THE GRANT WITH COMMITMENT"

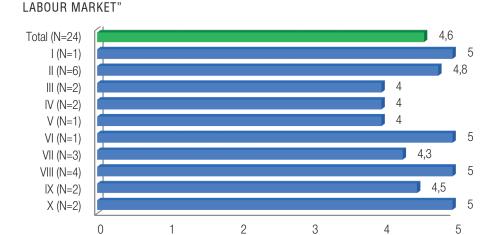


Rating scale: from 1 to 5, where 1 meant "strongly disagree" and 5 "strongly agree"

The representatives of ZS in Ożarów, ZS in Opatów, and ZSP in Końskie agreed to the least extent with the statement that participation in the grant improved the situation of students on the labour market, although these assessments can still be considered high (average grade 4.0 on a 5-point scale).

CHART 22.

AVERAGE ASSESSMENT OF RESPONDENTS' COMPLIANCE WITH THE STATEMENT "PARTICIPATION IN THE GRANT IMPROVED THE SITUATION OF THE STUDENT ON THE

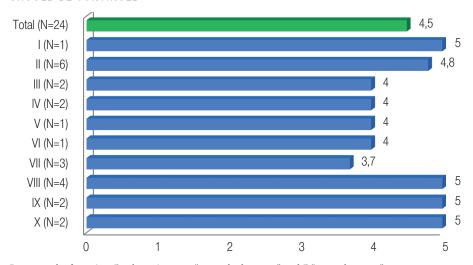


Rating scale: from 1 to 5, where 1 meant "strongly disagree" and 5 "strongly agree"

Most of the representatives of the studied schools agreed that the implementation of the IMKP grant should be continued (average rating 4.5 on a 5-point scale). Only the grant implemented by NTZ in Kielce received an average score below 4.0.

#### CHART 23.

AVERAGE ASSESSMENT OF RESPONDENTS' COMPLIANCE WITH THE STATEMENT "THE INNOVATIVE MODEL OF PRACTICAL TRAINING IMPLEMENTED UNDER THE GRANT SHOULD BE CONTINUED"



Rating scale: from 1 to 5, where 1 meant "strongly disagree" and 5 "strongly agree"

Source: CAWI survey with schools (grant participants), 2021.

The schools considered the following to be particularly valuable elements of IMKP:

- Contact of students with the employer
- Acquainting the student with real working conditions
- Acquiring skills in real working conditions
- Acquainting the student with devices, machines, and their industrial use
- Familiarizing the student with the organizational culture in the workplace (rules of social coexistence prevailing in enterprises, work culture, circulation of documents)

- Improving the situation of students on the labour market
- Scholarships
- Gaining professional experience, increasing professional competences
- Contact with customers
- Learning about the discipline and compliance with work regulations
- Implementation of the program going beyond the requirements resulting from the core curriculum
- Developing habits needed for future work, e.g., punctuality, diligence, reliability in performing professional tasks
- The pupils' experience of the purposefulness of their activities, their learning in real working conditions, which cannot be experienced while studying in classrooms.

School representatives did not notice such elements in the implemented IMKP that they would not like to implement in schools after the implementation of the grants. It was only pointed out that the IMKP implementation should concern whole classes, not selected students.

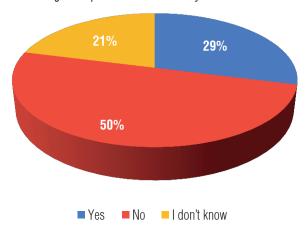
A representative of every second school participating in the grant believes that in order to introduce IMKP to the school permanently, it is not necessary to change the curriculum. Every fifth respondent (21%) did not have an unambiguous opinion on this matter. On the other hand, the remaining respondents (29%) opted for the need to introduce the following changes:

- Making the core curriculum more flexible
- Updating the content of the core curriculum/adapting to the current needs and expectations of employers
- Including in the core curriculum skills that are needed in a given region (e.g., sanatorium catering)
- Increasing the number of hours of practical vocational training with employers
- Changes to the number of hours and curricula required by the Ministry of Education and Science

# CHART 24.

DEMAND FOR A CHANGE IN THE CORE CURRICULUM IN ORDER TO INTRODUCE IMKP TO SCHOOL PERMANENTLY (N=24).

Question: Should the core curriculum be changed in order to introduce the Innovative Model of Practical Training on a permanent basis at your school?



Source: CAWI survey with schools (grant participants), 2021.

The vast majority of the surveyed schools (79%) benefited from additional forms of support under the implemented grants. When asked to indicate additional forms of support for schools/teachers, representatives of the surveyed educational institutions mentioned: educational counseling, counseling on inclusive education, legal consultations, training for students (also certified and granting qualifications with qualification certificates, training in Industry Business Simulations), training for teachers, vocational counseling classes, remote learning support, participation in meetings with a partner from Austria, teachers' consultations with the expert coordinator, detailed analysis of the curriculum, additional classes developing social competences.

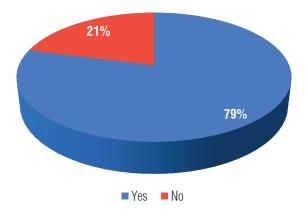
As many as 88% of the schools surveyed would like to use the forms of support related to dual education in the future. Forms of expected support were mentioned, such as: practical training with the employer, internships and apprenticeships with the employer, educational counseling, in-service

training courses, training and specialist courses with teachers (also completed with a certificate), financial gratification for employers admitting students, remuneration for work with employers.

# CHART 25.

THE DEMAND OF SCHOOLS/TEACHERS FOR ADDITIONAL FORMS OF SUPPORT UNDER THE GRANT (N = 24).

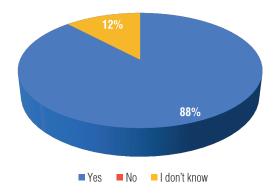
Question: Did the school/teachers benefit from additional forms of support under the grant?



# CHART 26.

SCHOOL DEMAND FOR FORMS OF SUPPORT RELATED TO CONDUCTING DUAL EDUCATION AFTER THE IMPLEMENTATION OF THE GRANT (N = 24)

Question: Would the school want to use the forms of support related to dual education in the future?

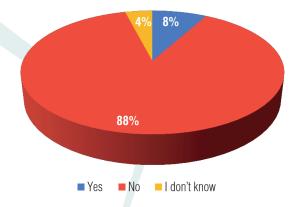


Source: CAWI survey with schools (grant participants), 2021.

# CHART 27.

PARTICIPATION OF TEACHERS IN VOCATIONAL TRAINING FOR AN ENTREPRENEUR UNDER THE GRANT (N = 24)

Question: Did teachers/practical training tutors take part in vocational training for an entrepreneur under the grant?

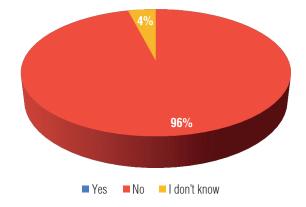


In the opinion of the vast majority (96%) of the representatives of the schools surveyed, vocational teachers are prepared for classes with students at their employers and do not require additional training in this area.

CHART 28.

TEACHERS' DEMAND FOR ADDITIONAL TRAINING BEFORE CLASSES WITH STUDENTS AT EMPLOYER'S (N = 24)

Question: Did the preparation for classes with students conducted at the employer's require additional training from teachers?

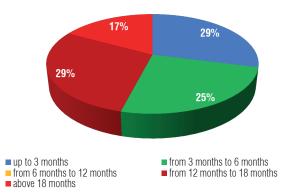


The surveyed vocational teachers presented divided opinions as to the amount of time needed to implement and adapt IMKP to the curriculum in various professions. Only 17% of schools defined this period as longer than 18 months.

## CHART 29.

THE AMOUNT OF TIME NEEDED BY SCHOOLS TO IMPLEMENT AND ADAPT IMKP TO THE CURRICULUM IN VARIOUS FIELDS OF STUDY (N=24)

Question: How many months would a school need to implement and permanently adapt IMKP to the curriculum of various faculties?



Source: CAWI survey with schools (grant participants), 2021.

Only every third school surveyed (33%) does not see any obstacles related to the implementation and permanent adaptation of IMKP to the curriculum in various professions. Others pointed to the following barriers:

- The necessity to subordinate the implementation of the core curriculum to the current economic activity of the enterprise
- The need to schedule practical training classes for one day a week, given a large number of hours per week for technical classes in the school curriculum
- There are no employers who will meet the requirements for participation in the *Model*
- The need to transport students to employers far away from the school or the student's place of residence (lack of funds in the school

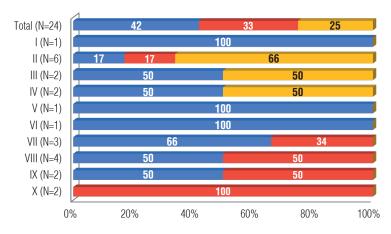
budget for the transport and accommodation of young people when providing education outside the place of study)

- Lack of funds for additional remuneration of the tutors of the pupils
- Too few employees of enterprises with pedagogical training
- Lack of employers' involvement
- Inability to finance a possible retrofitting of the workstation for students

## CHART 30.

OBSTACLES RELATED TO THE IMPLEMENTATION AND ADAPTATION OF IMKP BY SCHOOLS PARTICIPATING IN INDIVIDUAL GRANTS

Question: Does the school perceive the obstacles related to the implementation and adaptation of the Innovative Model of Practical Training permanently to the curriculum in various fields?



# 5.2.3 Grants assessment from the perspective of students

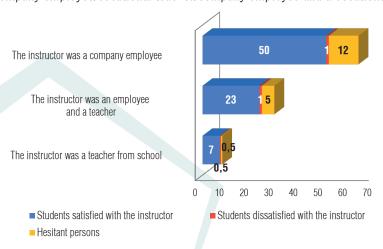
The evaluation of the grant implementation from the perspective of students participating in the implementation of individual IMKP was based on the results of an online survey (hereinafter referred to as the CAWI survey). 219 respondents took part in the survey.

63% of the surveyed students indicated a company employee as a practical training instructor, and 29% – both a company employee and a vocational teacher from their school. Regardless of who was the practical training instructor, the students were satisfied with the solutions applied. The respondents pointed out that when the practical training instructor was an employee of the company, it was noticeable that he had better knowledge of the specificity of the company, and when this role was played by the teacher – he enjoyed a greater trust of his pupils.

## CHART 31.

ASSESSMENT OF STUDENTS' SATISFACTION WITH THE TRANSFER OF KNOWLEDGE BY THE VOCATIONAL TEACHER/PRACTICAL TRAINING TUTOR (N = 219)

Question: Were you satisfied that the practical vocational training was provided by a company employee/vocational teacher/company employee and a vocational teacher?



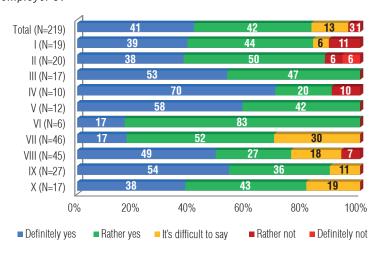
Source: CAWI survey with students, 2021.

The vast majority of students (83%) stated that as a result of practical training, employers developed their skills and/or competencies, while 13% of students were not able to answer this question unequivocally. Only a few respondents stated that as a result of practical training, employers did not develop their skills/competencies (12% of all respondents from the ŚZPP Lewiatan grant, 11% from CKP Starachowice; 10% from the ZS in Opatów, and 7% from the SP in Kielce).

CHART 32.

SELF-ASSESSMENT OF THE IMPROVEMENT OF SKILLS/COMPETENCIES IN CONNECTION WITH PRACTICAL TRAINING AT THE EMPLOYER'S

Question: Did your skills/competencies increase in connection with the practical training at the employer's?



Source: CAWI survey with students, 2021.

Students participating in the implementation of IMKP were also asked about the strengths and weaknesses of the grants being implemented. The collective results are presented in the table below.

To the highest degree (with an average rating of all respondents **at least 4.0**), the students agreed with the following statements:

- I have received working clothes for work in the enterprise (4.5)
- During my stay in the company, I found out what the working environment looks like in my field of study (4.2)
- I was properly prepared to work at the company (4,1)
- The employer's approach to me was appropriate (4.0)
- I used the workstation at the entrepreneur's premises as part of the grant (4.0)

To a moderate extent (average rating of all respondents at least 3.0), the students agreed with the following statements:

- The division between education at school and practical classes at the employer's ran smoothly (3.9)
- The number of hours with the employer devoted to practical vocational training was sufficient (3.8)
- The employer was involved in the education process during dual classes in the company (3.8)
- After participating in a grant that combines school education with practical training at the employer's, it will be easier for me to find a job in my profession (3.8)
- I felt needed at work in the company (3.7)
- I would like to continue education in the direction of which I received practical training from the employer (3,6)
- Classes at the entrepreneur's allowed me to obtain a more favourable result of the professional exam (3.5)
- I will start working immediately after graduation (3.5)
- If I had such an opportunity, I would like to work for an entrepreneur with whom I was on apprenticeship (3.4)
- I will continue my education at university in the field related to my profession (3.1)

In turn, to a low degree (the average of all respondents was **lower than 3.0**), the students agreed with the following statements:

 During classes with an entrepreneur, it is possible to gain the same knowledge as during classes at workshops at school (2.9)

The obtained results indicate that the students were satisfied with the conditions of practical training in the enterprise to the greatest extent. In many cases, learning about the actual working conditions could have changed the professional plans of the grant participants (students agreed to the least extent with the statements about continuing education in the profession and taking up employment with the employer with whom they received practical training).

**TABLE 6.**AVERAGE ASSESSMENT OF RESPONDENTS' COMPLIANCE WITH INDIVIDUAL STATEMENTS REGARDING PARTICIPATION IN IMKP (N = 219)

Opinion about the grant	Average	I	II	III	IV	V	VI (6)	VII	VIII	IX	X
The division between school education and practical classes was smooth	3,9	3,6	3,8	3,7	4,8	4,6	4,3	3,8	3,9	4,3	3,3
The number of hours at the employer's office was sufficient	3,8	3,4	3,6	3,9	4,2	4,5	4,5	3,6	4,2	4,0	2,4
The employer was involved in the training process	3,8	3,3	3,3	4,0	4,0	4,5	4,2	3,8	4,0	4,1	3,0
The classes at the entrepreneur's allowed me to obtain a more favourable exam result	3,5	2,8	3,2	3,6	3,3	4,3	3,7	3,2	3,7	4,2	3,2
During classes in the company, it is possible to gain the same knowledge as during classes at school	2,9	2,5	2,4	3,0	3,0	3,2	4,2	3,5	2,4	2,8	2,9

I felt needed at work in the company	3,7	2,9	3,2	3,9	3,9	4,5	4,5	4,0	3,7	3,5	3,0
The employer's approach to me was appropriate	4,0	3,6	3,2	4,1	4,3	4,7	4,2	4,0	4,2	4,2	3,5
I used a workstation in the company as part of the grant	4,0	3,5	3,4	4,1	4,4	4,5	4,8	4,0	4,0	4,2	3,3
I have received working clothes for work in the company	4,5	4,5	4,5	4,4	4,2	5,0	5,0	4,4	4,5	4,6	3,6
I was properly prepared to work in the enterprise	4,1	3,8	4,1	4,3	4,5	4,8	4,0	4,0	4,2	4,3	3,3
During my stay in the company, I found out what the working environment looks like in my field of study	4,2	3,9	4,1	4,3	4,6	4,9	4,8	4,0	4,1	4,3	3,4
If I had such an opportunity, I would like to work for an entrepreneur with whom I was on practical vocational training	3,4	2,7	2,7	3,7	3,9	4,2	4,8	3,6	3,5	3,9	2,5
After participating in the grant, it will be easier for me to find a job in my profession	3,8	3,4	3,6	3,9	4,1	4,4	4,5	3,6	3,8	4,3	3,3
I would like to continue my education in the field of which I received practical training from my employer	3,6	3,2	3,4	3,9	3,7	3,8	4,0	3,6	3,6	3,9	3,2
I will continue my education in higher education in the field related to my profession	3,1	2,7	2,6	3,3	3,1	2,9	3,3	3,4	3,2	3,5	2,5
Immediately after graduating from school, I will take up employment	3,5	3,8	3,5	3,0	3,7	3,9	3,2	3,6	3,8	3,5	2,8

Rating scale: from 1 to 5, where 1 meant "strongly disagree" and 5 "strongly agree" Green indicates values above average (N=219), red – below average (N=219)

Source: CAWI survey with students, 2021.

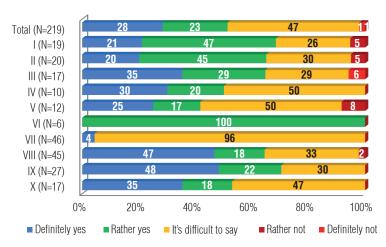
Only 2% of the surveyed students considered that the practical vocational training under the grant did not differ from the previous classes in the dual system organized by the school. Others pointed to the following differences:

- As part of the grant, the employer devoted more time to students and discussed the activities performed by each student
- Possibility to acquire more professional experience
- Greater training opportunities with the employer
- A richer range of content at the employer
- In the grant, less weight was placed on studying for vocational exams and more on working in the profession
- Access to more equipment, including new equipment

## CHART 33.

ASSESSMENT OF THE DIFFERENCES BETWEEN THE PRACTICAL VOCATIONAL TRAINING UNDER THE GRANT AND THE PREVIOUS CLASSES IN THE DUAL SYSTEM ORGANIZED BY THE SCHOOL (N=219)

Question: Was practical vocational training under the grant different from the previous dual system classes organized by the school?



Source: CAWI survey with students, 2021.

# 5.2.4 Barriers/issues in the implementation of grants based on qualitative research with Grantees

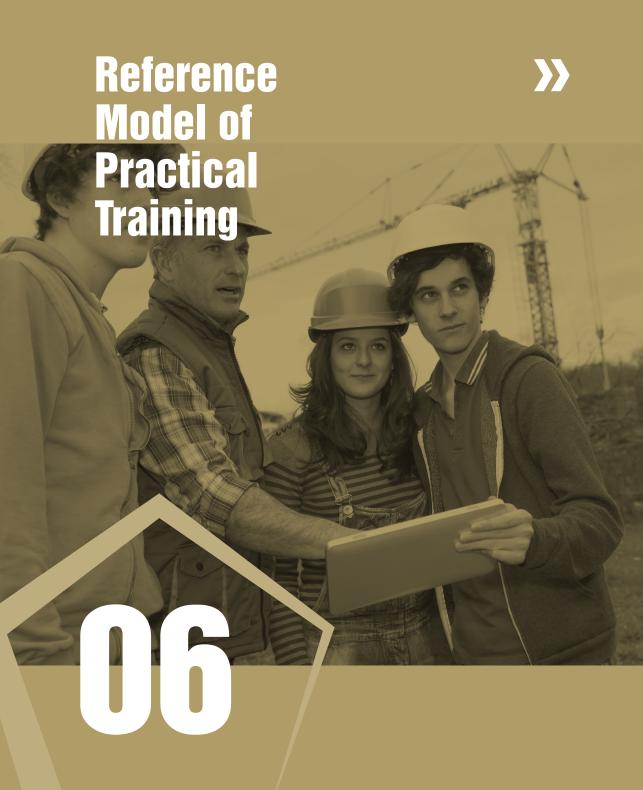
In order to obtain information on the implementation of individual IMKP, indepth interviews were conducted with representatives of all Grantees. When asked about the problems encountered in the implementation of grants, the respondents indicated the following barriers to the implementation of IMKP:

- Students withdrawing from participation in the grant due to: students transferring to another school or not being promoted to the next grade
- Student absences during classes with employers
- Lack of possibility to open a bank account by a student of Ukrainian nationality, in which case such rights were held by their legal guardian
- Introducing restrictions related to the COVID-19 pandemic, which caused difficulties in completing planned activities (e.g., study trips)
- Personal changes in the position of a person acting as a practical training tutor
- Cancellation of classes in schools covered by the grant; cancellation of planned additional practical training classes and cancellation of planned trips to the Industry Fair in connection with the Regulation of the Ministry of National Education of 11 March 2020 on the temporary suspension of the functioning of education institutes in connection with the counteraction, prevention, and combating of COVID-19.

According to the respondents, the encountered problems were overcome by applying the following solutions:

- Including a student from the reserve list in the grant, replacing a student who resigned,
- Introducing changes to some of the grant assumptions on an ongoing basis
- Change of facilities where the grant was implemented

Taking advantage of the possibility of extending the grant, which made it possible to settle all grant obligations and achieve the assumed indicators.



The Reference Model for Practical Training was created on the basis of the best solutions used in ten Innovative Models of Practical Training (IMKP), piloted as part of the project in the Świętokrzyskie Voivodeship. The solutions taken from IMKP have been modified in a way that enables the widespread implementation of the final version of the *Model* on a regional and national scale.

The leading, innovative idea on which both the pilot-implemented IMKP and the *Model*, presented below in the final version were based, was to increase the frequency and quality of practical training at the employer. The *Model* makes it possible to change the established, long-term practice in the approach to practical training in technical classes. It consisted in the fact that practical classes were carried out mainly in schools, while their key goal should be the effective preparation of the student to perform professional tasks after graduation, in working conditions.

# **6.1 INNOVATIVENESS OF THE** *MODEL*

The innovativeness of the *Model* consists in the obligatory transfer of 40% of practical training hours in the field of vocational education from technical school to employers, and an optional transfer of 10% of practical hours from technical school to Vocational Training Centers (CKZ).

The assessment of the grant implementation carried out by the Research Team and the results of the research confirmed that the transfer of at least 40% of the hours of practical classes to the employer, tested in all IMKP, turned out to be effective. The Grantees participating in the interviews confirmed that **the implementation of 40% of practical classes with employers should permanently function in the practice of vocational training in technical schools.** The only major difficulty indicated by research and expert assessment is that schools in the local market find a sufficient number of employers to provide education to the required standard for all students studying in a given profession. At the same time, it

should be emphasized that employers participating in the project expressed their interest in continuing cooperation with schools, and students – willingness to continue using this form of education after the implementation of the grants. Ensuring that technical school work together with a sufficient number of employers will be the task of the School Collabouration Animators, whose role in implementing the *Model* is described below.

In order to further increase the quality and diversify vocational education, as well as to effectively use the infrastructure of Vocational Training Centers (CKZ), which successfully operate in many regions of Poland, the Model also includes the optional transfer of 10% of hours of practical classes from technical secondary schools to CKZ. Such a solution is recommended for those schools with the possibility of developing cooperation with a nearby CKZ, whose educational offer allows to ensure proper conditions for educating students in a given profession. The implementation of the Model should primarily involve schools like CKZ which can provide highquality practical classes and contact with specialist equipment, other than that at the school's disposal. The described practice was very well assessed by students and teachers participating in the grant implemented by the CKP in Starachowice. The possibility of improving skills in well-equipped labouratories is important in the context of preparation for the vocational exam. The research shows that thanks to the implementation of classes at CKZ, young people could flexibly practice difficult tasks in very well-equipped teaching labouratories, while at the employer's existing workplace, the time for such exercises is limited. Therefore, the completion of 10% of hours of classes at CKZ is a very desirable supplement to education at the employer's. At this point, it is worth noting that in recent years some CKZ significantly improved their equipment, incl. thanks to the EU subsidies obtained, and therefore the recommended formula of classes also ensures the effective use of this specialized infrastructure in order to improve the professional competencies of the future staff of the local economy.

### 6.1.1 Organization of practical classes outside the technical school

The *Model* predicts that there will be an average once a week (up to eight hours) practical training outside school. On the day of the practical classes, no additional lessons will be planned on the school premises. The number of hours realized by the student in connection with the practical training outside the school and the size of the group must comply with the applicable law<sup>29</sup>.

Implementation of practical training will take place during two years of study in a technical secondary school (to choose from: in grade two, three, or four – depending on the education program and the possibilities declared by employers).

Regular delegation of students for practical classes to employers once a week was the most frequently used solution in grants. The research also confirmed that organizing regular classes with employers was the approach generating the fewest organizational problems in schools. At the same time, in the opinion of some Grantees and experts, such a solution is not always possible for schools and employers. It was emphasized that the activity profile of some entrepreneurs requires a different system of practical training organization (e.g., classes twice a week or continuous classes for 3 weeks, during which the student does not attend school at the same time and is involved in the performance of tasks assigned by the practical training tutor on behalf of the employer).

Taking into account all the arguments, the **Research Team recommended** a **flexible approach to the issue of the organization of education at employers in the school year.** In the *Model*, it is relevant to organize regular classes with the employer throughout the school year (e.g., one day per week

The daily number of hours of practical training in the apprenticeship of students is regulated, among others, by the Regulation of the Ministry of National Education of 22 February 2019 on practical vocational education § 5, and the number of students in the group § 6 of the above-mentioned Regulation.

of school on average), as well as practical training with the employer in fixed cycles (e.g., once, for three weeks, with the exception of during this period of school activity). It should be noted that the method of organizing practical classes outside the technical school in a given school year and its change each time requires the approval of the governing body, on the basis of an application submitted by the school.

An important advantage of the *Model* is **encouraging schools to provide students with practical training with more than one employer, if possible**. This solution was tested in a grant implemented by CKP Starachowice. The innovation consisted in the practical training of the profession with at least two entrepreneurs and was considered a very effective solution. Students participating in this grant were able to get to know the industry in which they plan to find employment in the future, and had the opportunity to specify their professional preferences. The discussed approach was also supported by other Grantees and experts evaluating the *Model*.

For the purpose of improving the effectiveness of practical training outside the school, it is recommended that the classes at the employer's place are always preceded by thematically related classes conducted at the school by the vocational teacher. The described solution was very positively assessed under the grants and is worth consolidating as a good practice resulting from the implementation of the project.

## 6.1.2 The role of the vocational teacher and practical training tutor at the employer

The comparative analysis of grants showed that IMKP used two solutions regarding the staffing of a practical vocational training instructor: this role was played only by the tutor of practical training, i.e., an employee of the employer or these tasks were performed jointly by a company employee and a vocational teacher. The students were satisfied with both of these solutions, which was confirmed by the results of the CAWI survey. The

students emphasized, above all, a good understanding of the specificity of the company and industry of the employer's employee, but at the same time declared their greater trust in the vocational teacher who knew their needs better and was able to convey knowledge well.

Quantitative research has revealed a discrepancy between tutors representing the employer and teachers of the profession. The first group is not convinced that the participation of a vocational teacher in educating apprentices at the employer is necessary. Employers have got used to the fact that the vocational teacher was not involved in the cooperation with the school so far (taking students for apprenticeships). At the same time, vocational teachers indicated that they were prepared to participate in practical training at the employer's and that they did not need any additional training. As responsible for the results of vocational education of students, teachers see the need to cooperate with employers in the implementation of activities outside the school and to conduct ongoing monitoring of the manner in which these activities are carried out.

Taking into account the opinions presented above, as well as the results of expert evaluation, it was found that providing students with optimal conditions for practical training under the *Model* at the employer's (and possibly also at CKZ) also requires the involvement of a vocational teacher. In the process of practical training at the employer's (and optionally at CKZ), the occupational teacher should interact with the person educating students outside the school. The presence of a vocational teacher is desired by students, and also necessary when it comes to supervision over the course of education and the achievement by students of the required learning outcomes. Vocational teachers will be involved in cooperation with tutors of practical training and instructors conducting classes in a given class, teaching courses in this class, the hours of which will be transferred outside the school. In cooperating with the tutor of practical training at the employer, as well as with the instructor at CKZ, the vocational teacher carries out the working hours for practical training of students in a given class, in the part corresponding to the hours of training at employers or CKZ. This approach is not in conflict with the *Teacher's* 

Charter, Educational Law, and the Ministry of Education Regulation on practical vocational education<sup>30</sup>.

The solution described above, which takes into account the *Model*, **is innovative in terms of the way the vocational education process is implemented.** In the previous practice, the cooperation between the school and the employer was limited to the implementation of compulsory apprenticeships by the students with the employer or enabling the students to participate in dual education, however, the role of the vocational teacher in the preparation and implementation of practical training outside the school was smaller than in the described *Model*. It was naturally related to the limited influence of the school on the way of implementing dual education and training and their results.

**Added value** and the **innovation** resulting from the solution described above is the **transfer of knowledge from the employer to the vocational teacher.** Taking into account the dynamic changes taking place in many sectors, the possibility of being together with students in the professional environment provides the teacher with wide opportunities for contacts with practitioners, as well as ongoing monitoring of new technological trends that reach enterprises much earlier than schools. The knowledge and experience gained by teachers of the profession through contacts with employers will also enrich the content of education that they provide at school, as well as strengthen their sense of self-confidence and value in the educational market.

Pursuant to §5 of the *Act of January 26, 1982 – the Teacher's Charter (consolidated text: Journal of Laws of 2019, item 2215)*, the weekly compulsory number of hours for practical vocational training teachers in all types of schools may not exceed 20 hours. On the other hand, pursuant to the *ordinance of the Ministry of National Education of February 22, 2019*, practical training is provided by practical vocational training teachers. The Regulation also discusses that practical training may be provided by employers. On the other hand, pursuant to *the Educational Law*, art. 120 *professional practice*, practical vocational training can take place not only with employers but also, inter alia, in vocational training centers.

#### 6.1.3 Curriculum

Effective implementation of the *Model* requires the preparation of an appropriate educational program. The following will be responsible for the development of the part of the education program for a given profession, which will be carried out at the employer's or CKZ's: the school and the employer or the school and the CKZ. When training in a given profession is carried out with the participation of more than one employer, each of them should be involved in the development of the practical training program in cooperation with the school. The obligation to adapt the education program in a given profession to the conditions of its implementation at the employer or CKZ rests directly school head teacher, who should closely cooperate with the vocational teacher and the tutor/instructor of practical training representing the employer or CKZ.

Only employers meeting certain criteria should be invited to participate in the implementation of the *Model*. Recruitment of employers interested in conducting practical training should begin with the presentation of the scope of tasks and processes that they most often implement in their activities, as well as with a list of the equipment held. It is necessary to determine the possibility of implementing a part of the core curriculum at these employers and for students to obtain the learning outcomes. The appraisal is made by the vocational teacher under the supervision of the headmaster of the school. In order to ensure high effectiveness of education, the employers will indicate the skills that students referred to classes should possess, and occupational teachers will verify the adequate preparation of students in line with the employers' recommendations.

The assessment of the possibility of transferring some of the practical classes to the CKZ is made by the school headmaster, who should closely cooperate with the vocational teacher and the CKZ representative. The purpose of this assessment is to identify the conditions for conducting practical classes at the CKZ in the selected profession in terms of compliance with the elements of the core curriculum and the required learning outcomes.

The process of recruiting employers interested in practical training of students (or the process of updating the list of employers providing practical training for students in a given profession in a given school) should be carried out in advance so that it is possible to develop and approve the curriculum taking into account practical training at employers and at CKZ in accordance with the regulations time limit. According to the school year calendar, this process should be carried out in the school year preceding the school year in which the practical training outside the school will take place.

The employer and CKZ are responsible for the implementation and results of practical training of the entrusted group of students. The mentioned entities sign an appropriate agreement with the school, and in agreed cases – with the school's managing authority. In order to ensure the proper education process, the employer and the CKZ cooperate with the vocational teacher for the given group of students, whose task is to monitor the implementation of the practical training program outside the school.

Until now, students took classes outside the school only as part of apprenticeships, the main purpose of which was to familiarize the student with the actual working conditions in the profession. The apprenticeship program took into account only the learning outcomes specific to the profession to a small extent. With reference to the practice so far, an innovative element of the *Model* can be recognized as an obligation to obtain some of the key learning outcomes specified in the core curriculum also in activities outside school.

Furthermore, the *Model* distinguishes *the* **need for close cooperation between the employer and CKZ in developing school curricula.** This provides employers and CKZ with the possibility of agreeing on a training program that is feasible taking into account the specificity of their activities and the equipment held. At the same time, a good identification of the conditions for the implementation of classes at the employer or CKZ enables schools to precisely distinguish from the core curriculum those contents that can be implemented outside the school and guarantee the achievement of the learning outcomes provided for in the core curriculum. **The cooperation** 

of schools, employers, and CKZ at the stage of preparation of curricula will positively affect the quality of practical training outside the technical secondary school because the current method of organizing practical training did not assume such close cooperation of these entities in the preparation of educational programs.

#### 6.1.4 The role of schools

In the light of the applicable regulations, the role of the school with regard to practical vocational training with employers is regulated by the *Regulation of the Ministry of National Education of February* <sup>22</sup>, 2019 on practical vocational education (hereinafter referred to as the *Regulation*). The *Model* assumes that the school, when transferring practical training to the employer, must fulfill all the tasks imposed on it, contained in the *Regulation*. The document specifies, inter alia, the key elements of the contract concluded between the school and the employer,<sup>31</sup>, along with the scope of the curriculum attached to the contract<sup>32</sup>. The *Regulation* also imposes duties on the school such as:

Pursuant to §7 of the Regulation of the Ministry of National Education on practical vocational 31 education, the contract between the school and the entity accepting students for practical vocational training should contain: the name and address of the entity accepting students for practical vocational training and the place of its performance; the name and address of the school directing students to practical vocational training; the profession in which the practical training of the profession will be conducted; a list with the names and surnames of apprentices undergoing apprenticeship, divided into groups; a form of practical vocational training: practical training or apprenticeship, and its scope, and in the case of practical classes held at employers' premises, including the principles of a dual education system - also the number of days a week in which practical classes are held at employers' premises; the dates of commencement and completion of the practical apprenticeship; the rights and obligations of the parties to the contract; the manner in which the parties to the contract bear the costs of implementing the practical apprenticeship along with the calculation of these costs additional arrangements of the parties to the contract related to the practical training of the profession, including the method of submitting and considering applications.

According to § 7, point 3 of the Regulation of the Ministry of National Education on practical vocational education, the contract between the school and the entity accepting students for practical vocational training is accompanied by the curriculum of a given profession. The curriculum includes knowledge and skills as well as personal and social competencies acquired by students during practical classes and apprenticeships, and the number of hours of these classes and apprenticeships. Pursuant to the Regulation, the employer may submit applications to the school rector regarding the content of the curriculum in terms of practical classes carried out by him/her.

supervision of the implementation of the apprenticeship program; cooperation with the employer; student insurance; reimbursement of travel expenses; providing students who cannot travel to the employer on a daily basis – free accommodation and care, and a lump sum meal allowance. The school is also obliged to prepare a calculation of the costs incurred for the implementation of practical vocational training, within the financial resources granted by the governing body.

Furthermore, for purposes related to the implementation of the *Model*, schools will be required to:

- Obtaining approval from the leading authority to transfer 40% or 50% of the hours of practical training outside the school, respectively: to employers or employers and to the CKZ.
- Making the necessary changes to the school curriculum and organizational sheet, taking into account, inter alia, cooperation of vocational education teachers with practical vocational training tutors in the following scope: participation in the didactic process outside the school, monitoring the quality of education, assessing the learning outcomes acquired by students from the employer, consulting grades and entering them into the online gradebook, participating in the preparation of forms of checking the knowledge and skills acquired during education outside school, solving current problems, supporting the vocational education tutor with one's knowledge and pedagogical experience.

#### 6.1.5 School Cooperation Animator (SAW)

Comparative analysis of grants showed that as part of IMKP, positions for people responsible for cooperation between the school and the employer have been created (e.g., school cooperation animator; professional career animator; professional activity coach; animator for contacts with entrepreneurs; consultant for communication and cooperation with schools and entrepreneurs; career counselor; career mentor; job coach). As part of the qualitative research, the Grantees agreed that the creation

of the above-mentioned positions was a good practice. The creation of the SAW function minimizes the risk that employers interested in cooperation with the school who report to the facility will not receive appropriate feedback.

Due to the positive effects of the involvement of people responsible for shaping cooperation between the school and the employer in the implementation of IMKP, the *Model* takes into account the need to establish at least one SAW in the technical school. Until the establishment of a fund intended to cover the costs related to the obligatory transfer of practical training from the technical secondary school outside the school (referred to in the point "Model financing sources"), it is recommended that the costs of SAW activities are covered by the authorities running schools. The tasks performed by SAW can be entrusted to:

- an existing employee of the school
- a newly hired school employee

and/or

 business environment institutions (BEI) selected by the body running the school in accordance with the provisions of applicable law.

School staff or BEI acting as SAW should demonstrate knowledge of the principles, scope, and possibilities of cooperation between schools and employers (including as part of dual education) and a very good knowledge of the local labour market.

The *Model* for SAW includes the following tasks:

- Establishing and maintaining cooperation with employers, including creating a database of employers declaring their willingness to accept students for practical training and participation in their recruitment
- Organization of employers' meetings with students at school and/ or at the employer's premises, the purpose of which is to familiarize students with the specificity of work in a given profession and industry and to provide students with a better understanding of

- the possibilities of practical training among employers (if such a choice is possible)
- Organization of study visits for students to employers and participation in industry fairs, as well as obtaining funds for this purpose enabling students to finance free participation in these activities
- Establishing and maintaining cooperation with non-governmental organizations, employers' organizations, economic self-governments, industry institutions, business environment institutions, labour market institutions, as well as organizing meetings of students with representatives of the above-mentioned institutions
- Shaping the training offer for teachers and encouraging teachers to in-service training, as well as obtaining funds for this purpose enabling teachers to participate in these activities free of charge
- Diagnosing the needs of students and schools regarding practical training.
- Diagnosing the needs of local employers in terms of the skills and competencies expected from students, as well as ongoing monitoring of local employers' expectations towards newly hired employees (e.g., due to changes in the labour market and changes in their business models by employers)
- Searching for funding opportunities for students of certified courses and training, increasing their attractiveness on the local labour market.

#### 6.1.6 The role of employers

The obligations of employers regarding their participation in the practical learning of the profession are regulated by the *Regulation of the Ministry of National Education of February 22, 2019 on practical vocational education,* according to which entities admitting students are obliged to:

1. ensuring the material conditions for the implementation of practical vocational training, in particular:

- training station equipped with the necessary devices, equipment, tools, materials, and technical documentation, taking into account the requirements of occupational health and safety,
- clothing, footwear, and personal protective equipment as well as personal hygiene products available to employees at a given workplace,
- rooms for storing work clothes, footwear, and personal protective equipment,
- free prophylactic meals and drinks to which employees are entitled at a given workplace, in accordance with the regulations issued under Art. 232 of the Act of June 26, 1974 the Labour Code
- access to hygiene and sanitary facilities as well as rest and refreshment rooms;
- 2. appointing teachers, apprenticeship instructors, and apprenticeship tutors, respectively,
- 3. familiarizing students with the organization of work, work regulations, in particular with regard to compliance with work order and discipline, and with the provisions and principles of health and safety at work;
- 4. supervision of the course of practical vocational training;
- 5. preparation of accident documentation during the practical training of the profession;
- 6. cooperation with the school;
- 7. notifying the school about the violation of the work regulations by the student or adolescent.

The employers' tasks presented above are in line with the *Model's* requirements. Furthermore, the *Model* takes account of the employer's additional obligations:

- supervision over the practical training of students at the employer, including the acquisition of the required learning outcomes and ensuring their safety,
- current assessment of the student's progress in learning the profession and consulting these assessments with the vocational teacher, who will enter the grades in the online gradebook,

- preparation and organization of a test and a mock vocational exam at the end of practical training at the employer,
- confirmation of the student's participation in practical vocational training with the employer,
- cooperation and maintaining contact with the school, especially with the vocational teacher and the School Cooperation Animator.

All the obligations of the employer related to his/her participation in the practical training of students will be included in the provisions of the contract concluded between the employer and the school or the school governing body.

The costs generated by employers are covered by the school authority to the extent regulated by the *Regulation on practical vocational education*. Other costs, including the costs related to any possible, additional equipment for the workplace, will have to be covered by employers – until the possible creation of a fund for the needs of practical training outside the technical school referred to in point "*Model* Financing Sources". It is worth emphasizing at this point that employers are aware of the non-financial benefits associated with accepting students for practical vocational training, therefore the inability to obtain additional equipment for a job in the same amount as it was in the case of grants, does not mean a decline in employers' interest in participating in the *Model*.

#### 6.1.7 The role of the Vocational Training Center (CKZ)

In poviats which have CKZ that enable education in selected fields and provide students with the development of practical skills in optimal conditions, it is possible to optionally transfer 10% of hours of practical education classes from the school to CKZ. This is justified in cases where schools do not have training equipment that is comparably modern.

CKZ, like the employer, is obliged to sign a contract with the school for the implementation of practical training. The task of the school is to enable the

CKZ to participate in the co-creation of the school curriculum in the field related to the practical training of students at this institution. CKZ, which undertakes to participate in practical training, will appoint a tutor for practical training and will provide students with properly equipped learning stations. Practical training at CKZ will be carried out in cooperation with the vocational teacher from the school. The tutor of practical training on behalf of CKZ will conduct an ongoing assessment of the student's progress in learning the profession and will consult the results of this assessment with the vocational teacher, who will enter the grades in the online gradebook. After completing the classes at CKZ, the student will receive confirmation of having completed some of the practical classes there.

#### 6.1.8 The role of the school authority

As part of the implementation of the *Model* school authorities are required to provide schools with financial resources enabling students to undergo practical vocational education with the employer, within the scope described in § 9 of the Regulation on vocational training practice<sup>33</sup>. Other costs, generated by the *Model* (e.g., the cost of remuneration for SAW) are recommended to be covered by the authorities running schools until the possible creation of a fund for the needs of practical training outside the technical school referred to in point "*Model* Financing Sources".

In addition, school authorities will be required to verify and approve updated school curricula and to exercise substantive supervision over compulsory practical training at the employer's to the extent that this is the case for the case of supervision over apprenticeship. In justified cases, school authorities may also sign contracts with employers, if schools are unable to do so.

Financial resources provided by the school authorities may be used for: reimbursing employers' remuneration for apprenticeship instructors; reimbursement of a training allowance for apprenticeship instructors to employers; reimbursement to employers of the cost of work clothing and footwear as well as personal protective equipment necessary for a given training position; reimbursement of diet and benefits to employers.

#### 6.1.9 The role of the Board of Education

In the case of the implementation of the *Model*, the Board of Education, as part of the pedagogical supervision over public and non-public schools, will also supervise the *Model* introduced to schools.

Due to the fact that the Board of Education in Kielce was a member of the Steering Committee for the Development of Vocational Training under the project "Innovative Education – New Career Opportunities", it is recommended that the above-mentioned Board of Education is to be the first to act as a promoter of the *Model* in the region and in the country. Promotional activities are understood as e.g., posting information on a website, informing schools about the *Model* as part of routine activities, or initiating discussions about the *Model* in the educational environment.

#### 6.1.10 The role of business environment institutions (BEI)

In the case of three grants, implemented by ŚZPP Lewiatan, SFP in Kielce and ARR in Starachowice, an important role in IMKP was played by BEIs, which were responsible, inter alia, for:

- Establishing and maintaining cooperation with employers (appointed, among others, a business cooperation animator, a communication consultant, and cooperation with schools and enterprises, a school cooperation animator, a specialist for contact with entrepreneurs, an animator for contacts with entrepreneurs)
- Supporting companies in the process of educating students in the workplace, diagnosing the demand for employees, analyzing the demand and supply on the local labour market (e.g., Corps of Professionals, Vocational Education Support Council consisting of BEI, representatives of education, business, and the labour market)
- Supporting schools and employers in developing practical training programs (e.g., by the Corps of Professionals, the Vocational Education Support Council).

The involvement of BEI in the process of practical training outside the school was positively assessed by the Grantees and participants of grants in which BEI participated. The appointment of a person responsible for cooperation with entrepreneurs allowed vocational teachers to focus on vocational education also acquiring knowledge by schools about the needs of employers and the local labour market leads to the improvement of school curricula and gradual equipping of graduates with key competencies and skills on the local labour market.

In the context of the implementation of the *Model* on a national scale, it is recommended to enable the BEI to play the role of SAW in a situation where they operate in the school's area of operation, and entrusting the role of SAW to a vocational teacher is, for example, impossible or ineffective. In other cases, BEIs should support SAW in diagnosing the needs of the local labour market and changes in industries. Moreover, due to the implementation of pilot grants by BEIs, they should be involved in promoting the *Model* in the environment of employers and economic self-governments. The involvement of BEI in the implementation of the *Model* will allow the adjustment of vocational education to the labour market at the local level.

# 6.1.11 The role of self-government of Voivodeships and competent voivodeship self-government organizational units (e.g. the Voivodeship Labour Office)

As part of the implementation of ten IMKP, the Marshall Office of the Świętokrzyskie Voivodeship played the role of a Grantor and at the same time the project Leader of "Innovative Education – New Career Opportunities".

The role of the self-government of voivodeship will be to promote the *Model* in business and educational environments, as well as among BEI. The Marshall Office will be responsible for:

encouraging employers to cooperate with schools and communicating the benefits of this cooperation to them, e.g., corporate social responsibility, better opportunities for recruiting staff, etc.

animation of the exchange of knowledge and experience between individual schools (including SAW) as well as business organizations and organizations representing employers.

#### 6.1.12 Model financing sources

The current legal regulations allow for practical training of the profession with an employer on the terms set out in the *Regulation of the Minister of National Education of February 22, 2019 on practical vocational education.* Pursuant to this *Regulation* school governing bodies that organize practical training outside the school provide funding to enable students to undergo practical training. This financing serves for:

- reimbursement of employers' remuneration for apprenticeship instructors,
- reimbursement of the training allowance for apprenticeship instructors to employers,
- reimbursement to employers of the costs of work clothing, footwear, and personal protective equipment, necessary for a given training position, assigned to students for the period of practical classes conducted at the employer's in a given school year, including practical classes held at employers under the principles of a dual education system up to 20% average salary;
- reimbursement of diet and benefits to employers.

With regard to financing other elements of the *Model*, not regulated by the *Regulation* on the basis of consultations with Grantees, external experts, and on the basis of knowledge obtained from the Partner from Austria, it is recommended that the Ministry of Education and Science initiates activities to create a fund dedicated to covering other costs related to the practical training of students outside school, such as: pedagogical courses for employees of enterprises, salaries for SAW, education in Vocational Training Centres (costs of using the studio, costs of the practical training tutor), conducting a mock vocational exam at the employer's and

possible costs of equipping the workplace, necessary to be borne by the employer in the purpose of admitting students.

The *Model* does not provide for the payment of scholarships to students for the duration of practical training with the entrepreneur and/or CKZ, as was the case in pilot grants. Such solutions were piloted in grants to encourage students to participate in the project, which required additional involvement on their part. Involvement in the *Model* of permanent scholarships for students studying with the employer would generate too high costs of implementation and could distort its purpose. The main benefit that should encourage students to educate with the employer is better preparation for entering the labour market and not immediate financial benefits. The resources necessary for the effective implementation of the *Model* should be directed primarily at providing students with high-quality practical training, in good organizational conditions.

Bearing in mind the need to promote and implement the *Model* for vocational training in technical schools throughout Poland, at the same time, potential difficulties, including financial difficulties, may accompany this process. Considering the financial perspective of the European Union for the years 2021-2027, it is recommended to include in the scope of the regional operational programs' interventions the types of tasks that may facilitate the implementation of the *Model* in technical schools. In particular, it concerns activities supported by the European Regional Development Fund and the European Social Fund, covered by the specific objective no. 4 of Cohesion Policy "A Europe with a stronger social dimension" objective no. 4 of Cohesion Policy "A Europe with a stronger social dimension" concerning vocational education, internships for students, costs of pedagogical training for practical vocational training instructors, costs of equipping the workplace for students with the employer, or the costs of participation of students and teachers in certified courses and training.

Proposal for a Regulation of the European Parliament and of the Council on the European Regional Development Fund and the Cohesion Fund COM/2018/372 final – 2018/0197 (COD)

In connection with plans to rebuild the economy of Europe after the COVID-19 crisis, European Union member states have created a new fund - the Instrument for Reconstruction and Increasing Immunity, which will also benefit Poland. Currently, the strategic document: National Plan for Reconstruction and Increasing Immunity, is in the phase of public consultations. The version of this document, published in February 2021, includes, inter alia, component A "Economic resilience and competitiveness" where the planned investments include, inter alia, Reform No. A3.1. Human resources for the modern economy, and the planned investments, incl. action No. A3.1.1. "Supporting the development of modern vocational education, higher education and lifelong learning, i.e., providing space for effective cooperation of schools, including technical schools, universities, employers, research and development centers and other institutions of the economic environment, and promotion of vocational education". It is recommended that school authorities as well as other stakeholders interested in the development of local labour markets apply for these funds in order to cofinance activities related to the implementation of the *Model*.

### 6.1.13 Practical training with employers and vocational examination

An element that cannot be omitted from the *Model* is the effective and professional preparation of students of technical secondary schools for the vocational exam. Both in all IMKP and in the *Model* it was assumed that the thematic scope of practical training at the employer's will be consistent with the core curriculum. Therefore, employers will be required to achieve educational effects resulting from the contract concluded with the school.

In each of the grants, solutions were introduced to monitor the results of practical training of students at the employer's (e.g., by issuing partial grades, semester grades, individual discussion with students about the grades obtained by them, conducting competence tests), however, external experts found the solution used by the School Complex No. 1 in Opatów

the most effective. As part of the grant entitled *Innovative dual vocational* education in Opatow County ver. 2.0. a team was appointed to conduct a mock vocational examination confirming qualifications in the profession at the place of practical training by students - at employers' premises. The team was composed of representatives of the governing body, schools, and individual employers participating in the grant, and was responsible for arranging a practical exam at the employer's. Thanks to the implemented innovation, employers became more aware of the requirements imposed by the education law on students taking such examinations and the schools that organize them. On the other hand, schools organizing a mock examination at the employer's premises, under different conditions than before, gained new experiences, which translated into an improvement in the organization of the education process at school and its better adaptation to the employer's requirements. The results of the exam were discussed by the team and presented to teachers' councils, and the conclusions were entered for implementation as part of pedagogical supervision for the next school year.

In the light of the analysis of the solutions used in the grants to monitor the learning outcomes of students and their preparation for the vocational exam, it is recommended that during their studies with the employer, students receive grades proposed by the practical training tutor, and approved and entered in the online gradebook by the vocational teacher. Each completed cycle of practical training at the employer should end with at least a test for students. The grade for this test will be taken into account when assigning a semester grade for a given vocational subject. Furthermore, it is recommended that each student undergoes a mock vocational examination at the employer's at least once while studying in a technical school (which means that the examination will not be conducted at every employer). The examination should be developed and conducted in cooperation with the employer and the school. The introduction of new employer's tasks in the form of tests and, above all, a mock vocational exam at the company's headquarters as part of the Model is another innovative change in relation to the current practice.

In the process leading to the development of the *Model*, research participants, as well as external experts, often pointed out that in attempts to design the *Model*, one may encounter problems related to the threat of inability to properly prepare students for the vocational exam.

In the opinion of the surveyed students, practical training with an employer prepares them to work in the profession better than learning at school. At the same time, both students and vocational teachers confirmed that the way of organizing education at school and the scope of educating students prepare them for the vocational exam better than studying at the employer's. On the other hand, the surveyed employers think that a positive result of the vocational exam does not prepare the student sufficiently for work in the profession. Considering the discrepancy in the goals of education concerning, on the one hand, successful completion of the vocational examination by the student, and on the other hand – finding employment on the local labour market, it is recommended to introduce an innovative change in the scope and method of organizing the practical part of the vocational examination by involving employers in its preparation. Bearing in mind the solutions proposed by the Grantees, as well as research participants and experts, the best solution is to diversify the tasks solved by students as part of the practical part of the vocational exam and link them better with the needs of employers. There should be a database of examination tasks for each qualification, to which schools and employers can submit their proposals. In the current legal framework, the core curriculum and the resulting learning outcomes are formulated in a fairly general manner. Moreover, it should be noted that currently, the content of examination tasks is public only for a narrow group of qualifications.<sup>35</sup> It is recommended that organizational changes concerning vocational exams should be the responsibility of the Central Examination Board, which will be entrusted with this task by the Ministry of Education and Science.

https://cke.gov.pl/images/\_KOMUNIKATY/9\_2021\_PP2019\_JAWNE.pdf

## 6.2 THE CONCEPT OF INCORPORATING THE *MODEL* INTO THE VOCATIONAL EDUCATION SYSTEM

It should be emphasized that in the current legal situation, the provision of practical training outside the school on a voluntary basis is regulated by the *Regulation of the Ministry of National Education on practical vocational education.* In order to compulsorily include the *Model* in the vocational education system, it is necessary to change the legal status. It is necessary for the Ministry of Education and Science to prepare a regulation imposing the obligation to carry out 40% of the hours of practical classes in vocational education in technical classes with employers and allowing 10% of the hours of practical classes at CKZ. Practical classes at CKZ are recommended when school labouratories for vocational training in technical Model in schools are inferior in terms of equipment to those at CKZ, and when the location of CKZ allows students to travel outside the school for these classes.

Until the *Model* is widely implemented in technical schools, the implementation of vocational training under the described conditions is possible by making changes to school teaching plans and organizational sheets and by approving the changes made by the body running the school, based on the *Regulation on practical vocational education*. <sup>36</sup> If classes at the employer's premises will be conducted continuously (e.g., for three consecutive weeks) and during this period the classes attending school activities outside the school will not carry out other activities at the school, then the school will be obliged to make a change in the organizational sheet.

In order to compulsorily include the *Model* in the vocational education system, a fund should also be established to cover the costs of practical training resulting from the implementation of the *Model*, and not provided for financing by the authorities running schools in the *Regulation on practical vocational education*. Regardless of the creation of the fund, an important task of SAW should be to search for sources of financing educational activities for students and teachers.

Regulation of the Ministry of National Education of February 22, 2019 on practical vocational education

#### 6.3 ASSESSMENT OF THE FEASIBILITY OF THE *MODEL*

The development of the final version of the *Model* was based on the assumption that it should be applicable in real conditions of practical training in technical classes, within the current system of vocational education. The feasibility of the *Model* and the detailed solutions it contains were assessed from the point of view of the applicable law regulating the operation of the vocational education system in Poland. The opinions of the project Leader and Partner, the opinions of Grantees who implemented IMKP as well as the results of research and expert assessment were also taken into account. The feasibility of the *Model* is also evidenced by the fact that none of the schools covered by the CAWI survey found any obstacles in the implementation of the tested IMKP, and the majority confirmed that it is possible to implement it within 12 to 18 months. As a result of the analysis of the obtained research material, it is stated that:

- The role of the school, the employer, and the body running the school in the *Model* is in line with the *Regulation on practical vocational education*, and the additional tasks assigned to the above-mentioned entities do not conflict with the applicable law.
- The implementation of the vocational education teacher's working hours is in line with the *Teacher's Charter*. The current educational law allows for the teacher's workload to be allocated to the care of students during practical training in real working conditions at the employer, which clarifies the workload of the vocational teacher for the time of practical training of students at the employer and CKZ.
- The method of financing the *Model* complies with the *Regulation* on practical vocational education. To cover the remaining costs, it is recommended to establish a fund dedicated to compulsory practical training outside the technical secondary school. Until the fund is established, all costs generated by the *Model*, which cannot be financed by the school governing body, in accordance with the *Regulation*, will be recommended for coverage by employers and schools.

- The time of practical apprenticeship for apprentices at the employer is in line with the *Labour Code* and the *Regulation on practical vocational education*.
- The model is in line with the *Framework Curriculum* and the core curriculum.
- Until regulation is issued, introducing the mandatory use of the *Model* in technical classes, the implementation of the *Model* is possible through changes in the school curricula and school organizational sheets.

Research has shown that the implementation of the *Model* may encounter the following barriers:

- Lack of flexibility in adapting the timetable by a given school to the requirements of the employer and the specificity of the industry
- Lack of possibility of using financial incentives for entrepreneurs,
   e.g., in the form of additional equipment for a student's position
- Insufficient involvement of employers in preparing students for the vocational examination
- Lack of involvement by students (absenteeism, forcing employers to shorten the number of hours on a given day)
- The reluctance of employers to have a vocational teacher from a school in the workplace

The presented barriers result primarily from established attitudes and previous practices which – as in the case of any innovation process – inhibit changes causing uncertainty and necessitating adaptation to new conditions. Overcoming the above-mentioned barriers requires not so much legal changes as effective promotion of the *Model* in environments that should include its use in the practical training of students outside school. These roles were assigned in the *Model*, inter alia, to Voivodeship self-governments and their subordinate institutions, e.g., Voivodeship Labour offices, as well as business environment institutions, non-governmental organizations or education boards.

TABLE 7.
DIAGRAM OF THE REFERENCE MODEL FOR PRACTICAL TRAINING

STAGE NO.	PROCESS	ENTITIES INVOLVED	RESULT	SCHEDULE
1	<ul> <li>Recruitment         of employers         interested in the         practical training         of students and         assessment of their         potential to conduct         these classes</li> <li>Establishing         contact with CKZ         and assessing         the possibility of         carrying out some         of the practical         classes at CKZ</li> </ul>	School Cooperation Animator Employers CKZ	<ul> <li>Creating a database of employers</li> <li>Creating a CKZ database</li> </ul>	• From September to February in the school year preceding the school year in which the practical training takes place at the employer's
2	Agreeing with employers and CKZ on the scope of practical training and other terms of cooperation	<ul> <li>Employer/ practical training tutor</li> <li>School/ vocational teacher</li> <li>CKZ</li> </ul>	Curriculum update for practical training	<ul> <li>Until March 31, in the school year preceding the school year in which the employer's practical training takes place</li> </ul>

3	<ul> <li>Adaptation of the curriculum and organization sheet to practical training at employers and CKZ.</li> <li>Acceptance of documents by the authority running the school</li> </ul>	<ul> <li>Employer/ practical training tutor</li> <li>School/ vocational teacher</li> <li>CKZ</li> <li>Authority running the school</li> </ul>	<ul> <li>Curriculum adapted to the Model</li> <li>Organization sheet adapted to the Model</li> </ul>	• Until April 30, in the school year preceding the school year in which practical training takes place at the employer's
4	Conclusion of contracts between the school/governing body and employers and CKZ	<ul><li>School/governing body</li><li>Employer</li><li>CKZ</li></ul>	Agreements between the school/ governing body and employers and CKZ	• Until June 30, in the school year preceding the school year in which practical training takes place at the employer's
5	■ Practical training at the employer and at CKZ carried out by the practical training tutor in cooperation with the vocational teacher, completed with a test.	<ul> <li>Students</li> <li>School</li> <li>Vocational teacher</li> <li>Employer</li> <li>Practical training tutor</li> <li>CKZ</li> </ul>	<ul> <li>Exam grade</li> <li>Certificate of completion of practical training with the employer</li> </ul>	■ From September to May in the school year in which practical training takes place outside the school

Source: Own elabouration

## **Conclusions**





CONCLUSIONS

On the basis of ten Innovative Models for Practical Training implemented under the pilot project "Innovative Education – New Career Opportunities", innovative educational solutions were tested, which finally enabled the formulation of the Reference Model for Practical Training. The essence of the *Model* is an obligatory transfer of 40% of the hours of practical training from school to the employer and an optional transfer of 10% of the hours of practical training to the Vocational Training Center. The solutions included in the final version of the *Model* were highly appreciated by the Grantees themselves, as well as by participating schools, students, and employers. They were also positively received by experts and were finally recognized by the Research Team as elements of the *Model*, guaranteeing its positive impact on the quality of vocational education of students of technical classes.

The final shape of the *Model* is primarily a response to the students' need for practical vocational training in real working conditions, with the simultaneous support of the vocational teacher and the employer's representative. The Model also opens up new opportunities for schools to collabourate with employers and other stakeholders in the labour market. The implementation of the *Model* is also supported by the fact that it has been very well assessed by employers, most of whom declare that they will continue their cooperation with schools also after the end of grants. The Reference Model for Practical Training is based on a 5-stage process of preparing and carrying out some of the classes as part of practical training outside the school. According to the expert assessment, the *Model* may be implemented systemically at the latest from the school year 2023/2024 (implementation of stage 5 of the *Model*), assuming that the second semester of the 2021/2022 school year and the entire school year 2022/2023 will be used to prepare schools for practical training under the *Model* implementation of stages 1-4 of the *Model*), and in 2021 – to popularize the *Model* and initiate the desired legislative changes.

The *Model* can be implemented under the currently binding educational law, which means that interested schools can develop practical training at employers and CKZ even before introducing the postulated changes in the vocational education system. In this situation, the approval of the school authority only requires changes to the school curricula and organizational

sheets. The *Model* does not assume changes to the core curriculum and learning outcomes, but changes in the organization of vocational exams are recommended, involving the Central Examination Commission cooperating with the business community and labour market institutions in order to consult the thematic scope of the exam questions prepared. It is expected that thanks to the changes concerning vocational exams, the thematic scope of the exam will be more closely linked with the actual needs of employers in terms of knowledge, skills, and competencies of graduates of technical classes.

Under the *Model* authorities running schools, schools, employers, vocational teachers, and practical training tutors must fulfill the tasks imposed on them by the *Regulation of the Ministry of National Education on practical vocational education*. However, due to the fact that the *Model* provides for much closer cooperation between schools and employers in vocational education in enterprises, additional tasks were assigned to schools and employers.

Schools are required to appoint a School Cooperation Animator. Until the Ministry of National Education initiates the creation of a fund for practical training, it is a recommended solution, and after the abovementioned fund is created or in the case of earlier provision of financial resources for the remuneration of the SAW by the school managing body – the establishment of SAW will be obligatory.

On the other hand, employers are required to supervise the learning outcomes of students in accordance with the signed contract and to conduct tests and mock vocational exams at the company's headquarters (prepared and carried out in cooperation with the school). It is also recommended that, until the fund for practical training is established, employers should be encouraged to retrofit workplaces for students, emphasizing the non-financial benefits of enrolling students (including the possibility of acquiring potential trained employees and shaping a favourable image of the company based on activities in the field of corporate social responsibility).

CONCLUSIONS 101

It is recommended that in the process of promoting the *Model*, an important role should also be played by business environment institutions, education offices, and Voivodeship self-governments as a tool enabling the adaptation of human resources to the labour market at the local level.

## **Recommendations**





RECOMMENDATIONS 103

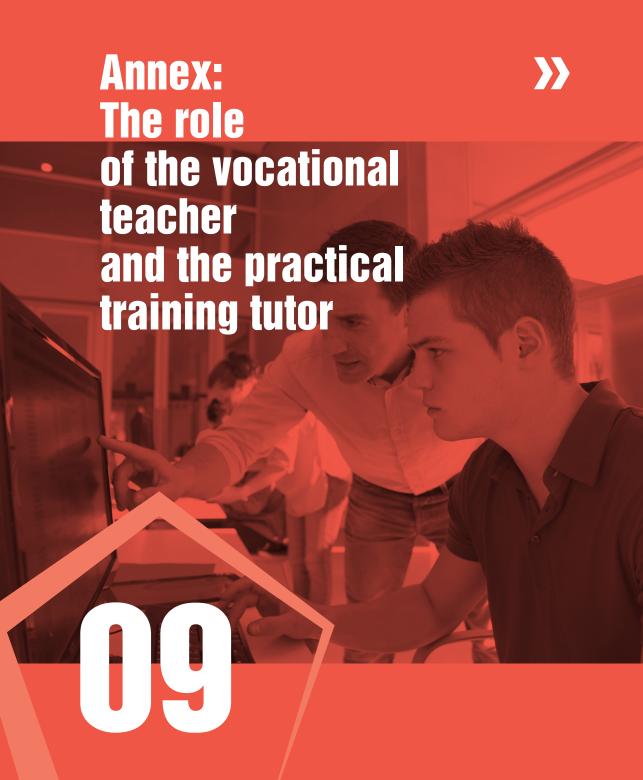
Due to the fact that the obligatory implementation of the Reference Model for Practical Training may take place in the current conditions of the functioning of the vocational education system in Poland, however, without the financial support similar to that obtained by the Grantees under the project, the Research Team has formulated the following recommendations regarding the necessary activities:

- Introduction by the regulation of the Minister of Education and Science in technical classes of 40% of practical classes at the employer's (obligatory) and 10% of practical classes at the Vocational Training Center (optional).
- Recommendation of the Minister of Education and Science for the Central Examination Board to undertake cooperation with the employers' community and labour market institutions in order to better adapt the scope of the vocational exam in technical classes to the requirements of the labour market (without changing the curriculum and learning outcomes).
- Initiation by the Ministry of Education and Science of activities aimed at creating from the budget a fund to cover certain costs related to the practical training of students outside school, e.g. salaries for SAW, education at Vocational Training Centers (costs of using the studio, costs of the practical training tutor), conduct a mock vocational exam at the employer's and possible costs of equipping the workplace, necessary to be borne by the employer in order to enroll students.
- Including in the scope of intervention of regional operational programmes types of tasks that may facilitate the implementation of the *Model* in technical schools. In particular, it concerns activities supported by the European Regional Development Fund and the European Social Fund, covered by the specific objective no. 4 of Cohesion Policy "A Europe with a stronger social dimension", concerning vocational education, internships for students, costs of pedagogical training for practical vocational training instructors, costs of equipping the workplace for students with the employer, or the costs of participation of students and teachers in certified courses and training.

Acquisition by school bodies and stakeholders interested in the development of local labour markets of funds from the *Recovery and Resilience Facility*, especially under Measure A3.1.1. Support for the development of modern vocational education, higher education, and lifelong learning, indicated in the currently consulted strategic document called the *National Plan for Recovery and Increasing Resilience*.



RECOMMENDATIONS 105



Grant no.	The role of the vocational teacher representing the school	The role of the practical training tutor representing the employer
I	<ul> <li>divided the teaching content to be implemented in the enterprise and school workshops (together with the practical training tutor)</li> <li>cared for students studying with the employer in substantive terms</li> <li>was responsible for the results of practical training at employers (in line with the core curriculum and taking into account the requirements of the exam confirming qualifications in the profession)</li> <li>assessed the work of students on an ongoing basis and systematically (the role played by the vocational teacher and the practical training tutor depending on the group)</li> <li>constantly and systematically exchanged information with the practical training tutor</li> <li>became acquainted with the real working conditions in which the students were educated</li> <li>realized the number of obligatory teaching hours for students in real working conditions (which is in line with the educational law)</li> <li>took part in practical workshops for teachers</li> </ul>	<ul> <li>became familiar with the core curricula and planned learning outcomes</li> <li>divided the teaching content to be implemented in the enterprise and school workshops (together with a vocational teacher)</li> <li>indicated (together with the employer) the learning outcomes resulting from the core curriculum, possible to be implemented in the company, in line with the needs of the employer and the possibilities and needs of students resulting from the necessity to take the exam confirming qualifications in the profession</li> <li>looked after the students studying at the employer in terms of content.</li> <li>was responsible for the results of practical training at employers (in line with the core curriculum and taking into account the requirements of the exam confirming qualifications in the profession)</li> <li>constantly and systematically exchanged information with the practical training tutor</li> <li>took part in a pedagogical course</li> </ul>
II	<ul> <li>prepared the program and schedule of practical classes in the company, in line with the core curriculum (together with the practical training tutor)</li> <li>collabourated with the practical training tutor in developing a modification of the curriculum for students educated outside the model</li> <li>was the School Cooperation Animator (SAW), which was part of the Corps of Professionals</li> <li>monitored the proper implementation of practical classes</li> <li>As SAW, he gained knowledge and resources to adapt education to the local labour market</li> <li>cooperated with the vocational education support unit</li> </ul>	<ul> <li>prepared the program and schedule of practical classes in the company, in line with the core curriculum (together with the vocational teacher)</li> <li>collabourated with a vocational teacher in developing a modification of the curriculum for students educated outside the model</li> <li>was responsible for the results of the vocational exam that the students took during the grant (together with the vocational teacher)</li> <li>consulted the content of competency tests prepared by the vocational teacher</li> <li>was authorized to give grades in the students' online gradebooks made available to them by the schools</li> </ul>

#### П defined and monitored the effects of education in the labour market monitored the student's progress in the context of the vocational exam, was responsible for early response to the threats of failure in the exam) was in constant contact with the students was an observer of the practical training of students in the enterprise acted as a tutor during the students' commuting to enterprises signaled problems in relations with the company and students developed and conducted competence tests with students at least once a quarter participated in the work of the Corps of Professionals updated his professional knowledge by contacting a company from the industry

observer

tutor).

- informed the School Cooperation Animator about the course of the classes and about any problems, barriers, and progress
- was responsible for the preparation and equipment of the workstation for students (in consultation with business cooperation animators)
- identified the industry permissions necessary to practice the profession
- agreed on the powers in the scope of which schools should prepare students
- took part in a pedagogical course

implementation of the grant, e.g., during regular meetings of students with employers

■ kept in touch with employers, also after the

performed the role of a dual education specialist

participated in courses certified as an

was responsible for the results of the

conducted a survey of students on the satisfaction with the course of practical

 conveyed to the school management the expectations of employers towards students

training in enterprises

of technical schools

vocational exam that the students took during the grant (together with the practical training

- developed a vocational training program (in consultation with the employer)
- was involved in the development of enterprise training documentation and partnership contracts
- supervised the process of practical training in enterprises but was not always physically present in the enterprise where the practical training took place
- made entries in the online gradebook

- consulted the apprenticeship program prepared by the Dual Education Specialist
- was responsible for the organization of the education process in accordance with the developed curriculum, taking into account the core curriculum, the company's resources, and the profile of students
- took part in a pedagogical course

III

III	<ul> <li>determined and entered partial and semester grades</li> <li>monitored the course of practical training at the entrepreneur's premises, including the implementation of the core curriculum</li> <li>entered the attendance</li> <li>supervised entries in the internship journal</li> <li>looked after the students during their pick-up and drop-off</li> <li>solved current problems</li> <li>participated in specialist courses for teachers</li> </ul>	
IV	<ul> <li>performed the role of a dual education specialist</li> <li>developed a vocational training program (in consultation with the employer)</li> <li>was involved in the development of enterprise training documentation and partnership contracts</li> <li>supervised the process of practical training in enterprises but was not always physically present in the enterprise where the practical training took place</li> <li>made entries in the online gradebook</li> <li>determined and entered partial and semester grades</li> <li>monitored the course of practical training at the entrepreneur's premises, including the implementation of the core curriculum</li> <li>entered the attendance</li> <li>supervised entries in the internship journal</li> <li>looked after the students during their pick-up and drop-off</li> <li>solved current problems</li> <li>participated in specialist courses for teachers</li> <li>was involved in organizing and conducting a mock vocational examination confirming qualifications in the profession at the employer's premises</li> </ul>	<ul> <li>consulted the apprenticeship program prepared by the Dual Education Specialist</li> <li>was responsible for the organization of the education process in accordance with the developed curriculum, taking into account the core curriculum, the company's resources, and the profile of students</li> <li>took part in a pedagogical course</li> <li>was involved in organizing and conducting a mock vocational examination confirming qualifications in the profession at the employer's premises</li> </ul>

DISSEMINATION REPORT

V

- co-created, modified, and monitored the curriculum, including the school curriculum, together with the entrepreneur.
   The program covers the issues of the core curriculum with the use of materials, technology, and company profile
- collabourated with the entrepreneur to adapt school curricula to the needs of the local labour market
- maintained contact with the employer
- collabourated with the employer in extracting a list of content to be taught at the employer's
- cooperated with the employer in preparing the schedule of external courses for students and teachers
- supervised the logistics of implementing practical training at employers
- participated in workshops and training based on the in-service teacher training program implemented by employers
- collabourated with the practical training tutor during the implementation of tasks by students at the employer
- looked after a group of students at the employer
- supervised that the work of students for the employer did not come down to the simplest work
- supervised the pace of students' work and its compliance with the methodology
- monitored the presence of students during classes
- assessed the work of students with the participation of the practical training tutor
- cared for the correlation between activities performed by employers and theoretical preparation for them

- co-created, modified, and monitored the curriculum, including the school curriculum, together with a vocational teacher. The program covers the issues of the core curriculum with the use of materials, technology, and company profile.
- collabourated with the school to adapt school curricula to the needs of the local labour market
- participated in extracting the list of content intended for teaching at the employer
- prepared a list of requirements for skills and competencies for both students and teachers
- indicated specialized training as the necessary preparation of teachers so that they could fully use the company's infrastructure and the knowledge of its employees.
- participated in the preparation of the schedule of external courses for students and teachers
- collabourated with the vocational teacher during the implementation of tasks by students at the employer
- conducted classes with the participation of teachers seconded from the school
- had teaching qualifications (he no longer participated in pedagogical courses available under the grant)
- In joint work on the brigade of students, he was responsible for the proper preparation of the workplace and defining the scope of work, for providing tools and materials.
- collected the completed works
- was responsible for conducting initial, final and ongoing training
- was directly responsible for the safety of students and the organization of work in the student group, as well as for the documentation of the work performed

VI	<ul> <li>participated in meetings of students and teachers with the project staff</li> <li>cooperated with a job coach to prepare a schedule for practical classes at the employer's with subjects in practical vocational training</li> <li>was responsible for the appropriate substantive preparation of students before undertaking practical training with the employer</li> </ul>	<ul> <li>participated in meetings of students and teachers with the project staff</li> <li>was involved in the development of the practical training program at the stage preceding the implementation of the model</li> <li>cooperated with a job coach to prepare a schedule for practical classes at the employer's with subjects in practical vocational training</li> <li>took part in a pedagogical course</li> </ul>
VII	<ul> <li>participated in meetings of students and teachers with the project staff</li> <li>cooperated with the vocational mentor, responsible for contacts with employers, in order to prepare an analysis of entrepreneurs' activities in terms of the needs and expectations of future interns</li> </ul>	<ul> <li>participated in meetings of students and teachers with the project staff</li> <li>cooperated with the vocational mentor, responsible for contacts with employers, in order to prepare an analysis of entrepreneurs' activities in terms of the needs and expectations of future interns</li> <li>cooperated with the mentor of the profession in the development of the Individual Practical Training Program</li> <li>supervised the work of the students and gave them the necessary instructions</li> <li>assisted the employer in issuing opinions, assessments, and confirmation of dual education, along with a description of the type and quality of work provided</li> </ul>
VIII	<ul> <li>participated in adapting the curriculum and making appropriate changes to the organizational sheets</li> <li>was responsible for the care of the students, together with the practical training tutor</li> <li>took care of the organized trips to the site where classes were conducted</li> <li>assisted the practical training tutor in terms of didactics</li> <li>participated in the practical training of students at the employer (ZS in Łopuszno, faculty: mechanic technician, School in Chmielnik, faculty: motor vehicle technician)</li> </ul>	<ul> <li>participated in establishing the principles of cooperation between schools and enterprises</li> <li>participated in the development of teaching content implemented in the form of dual education</li> <li>was responsible for the care of the students, together with the practical training tutor</li> <li>was responsible for the selection of technical means to implement the developed curriculum</li> <li>was responsible for the implementation of the developed curriculum at designated production positions in the plant</li> </ul>

VIII	<ul> <li>organized exams, on the basis of which credits were given (ZS in Łopuszno, faculty: mechanical technician)</li> <li>coordinated the grades with the practical training tutor (ZS in Łopuszno, faculty: mechanical technician)</li> </ul>	<ul> <li>was mainly responsible for conducting classes (ZS in Łopuszno, faculty: hotel technician)</li> <li>took part in a pedagogical course</li> </ul>
IX	<ul> <li>was the School Cooperation Animator (SAW)</li> <li>was responsible for meetings with students</li> <li>was responsible for conducting additional classes at school in order to verify and supplement the knowledge acquired during practical classes in enterprises</li> <li>participated in the development of the curriculum, defining the knowledge and skills as well as personal and social competencies acquired by students during practical classes and the number of hours of these classes</li> <li>monitored the ongoing education process and supervised the knowledge acquired by students</li> <li>was responsible for quick reaction to possible threats to the proper preparation of students to pass vocational exams</li> <li>participated in the semester evaluation of the student's work at the entrepreneur</li> <li>issued a descriptive evaluation when the semester grade was poor or negative</li> <li>discussed the grades verbally with each student at the end of the semester</li> <li>familiarized himself with the structure and functioning of the enterprise</li> <li>gave guidance on educating students in the enterprise</li> <li>cooperated with the Grantee and Partner in the implementation of current activities</li> </ul>	<ul> <li>visited schools and talked about plants and the specifics of work</li> <li>participated in the development of the curriculum, defining the knowledge and skills as well as personal and social competencies acquired by students during practical classes and the number of hours of these classes</li> <li>was responsible for the preparation of the workshop/workplace in the company, taking into account the specificity of the company and educational requirements</li> <li>was responsible for practical training in the company</li> <li>cooperated with the School Cooperation Animator</li> <li>conducted the student's semester evaluation in cooperation with SAW</li> <li>gave a descriptive grade to supplement the semester grade on a scale from 1 to 6</li> <li>discussed the grades verbally with each student at the end of the semester</li> <li>presented the students' semester grades to the Practical Training Support Council</li> <li>took part in a pedagogical course</li> </ul>
	<ul> <li>collabourated on the development of the curriculum, taking into account the capabilities of the technical and human resources of the company</li> <li>was responsible for getting acquainted with the equipment of individual company departments</li> <li>conducted classes at school in accordance with the curriculum</li> </ul>	<ul> <li>collabourated on the development of the curriculum, taking into account the capabilities of the technical and human resources of the company</li> <li>was responsible for the implementation of the developed curriculum at designated production positions in the plant</li> <li>supervised the practical training of students in the enterprise</li> </ul>

<ul> <li>x</li> <li>exchanged knowledge and experience with an entrepreneur</li> <li>was responsible for care during organized commuting to the enterprise</li> <li>assisted the employer in taking care of students at the plant</li> <li>assisted the practical training tutor in terms</li> <li>was responsible for the selection of technical means to implement the developed curriculum</li> <li>exchanged knowledge and experienc with the school</li> <li>conducted classes with teachers of the profession (in the case of</li> </ul>
<ul> <li>assisted the practical training tutor in terms of teaching in the implementation of practical training</li> <li>organized the exam, on the basis of which the credits were given (ZS in Łopuszno, faculty: mechanical technician)</li> <li>coordinated the grades with the practical training tutor (ZS in Łopuszno, faculty: mechanical technician)</li> </ul>

 $\textbf{Source: Own elabouration based on the \it Final \it Reports from the implementation of the grants.}$ 

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