

## COOPERATION BETWEEN VOCATIONAL SCHOOLS AND BUSINESSES – GOOD PRACTICES

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**Purpose:** The main aim of the article was to present good practices in the field of cooperation between vocational schools and enterprises.

**Design/methodology/approach:** The study employed a survey method. The survey was anonymised and it was addressed to two types of respondents: school principals and industry representatives (employers). The first group of respondents was selected based on the school type – only vocational school principals were eligible to take part in the study – while the latter group of respondents was selected at random.

**Findings:** All reforms of vocational education must, first and foremost, be aligned with actual labour market needs. The data obtained can provide a reference point for streamlining cooperation between vocational schools and industry representatives, improving the organisation of practical classes in the form of dual education and patronage classes, and fostering other forms of cooperation with businesses.

**Research limitations/implications:** The main research limitation is that the issue is a new topic that has not yet been widely discussed in the literature. Another threat is the reluctance of entrepreneurs to cooperate with schools (fear of the need to carry out new tasks). On the other hand, however, these behaviours are slowly changing, which is caused by the lack of staff on the labour market, which in turn motivates entrepreneurs to look for employees already at the school stage.

**Practical implications:** The presented proposal of the concept of cooperation between entrepreneurs and vocational schools is a valuable initiative for the immediate implementation of business activity in practice, which in the near future will become a necessary action due to the lack of employees on the market.

**Originality/value:** The topic addressed is new and original, rarely discussed in the literature so far. The article presents the results of original research on the cooperation of vocational schools with enterprises and includes proposals for the practical application of the indicated solutions.

**Keywords:** vocational education, practical vocational education and training, employer, dual education, patronage classes.

**Category of the paper:** Research paper.

## 1. Introduction

The involvement of third-party stakeholders in vocational education is critical to the development of skills and qualifications that meet actual market needs. Under the education law, vocational school principals are obligated to cooperate with industry representatives. The form and scope of such a cooperation decide on the effectiveness of practical vocational education.

The article aims to analyse the cooperation between schools and industry representatives regarding vocational education and training, show how it is viewed and assessed by educators and business owners, and give recommendations using the Wielkopolska (Greater Poland) region as an example. For the purpose of the analyses, the authors used a survey method; the surveys were carried out in 2022 among principals of vocational schools and industry representatives in the Wielkopolska Wschodnia (Eastern Greater Poland) region by the Łukasiewicz Research Network – Institute for Sustainable Technologies, Radom, Poland and the Centre for Craftmanship, Dual Education and Vocational Education in Konin, as part of the project entitled: Innovative Vocational Education and Training in the Eastern Greater Poland Region in the Context of Energy Transition (no.: EOG/21/K3/W/0046).

The surveys allowed the authors to collect detailed information on the forms of the school-industry cooperation, educators and business owners' preferences, and drivers of and impediments to this cooperation. Based on the survey results, the authors were also able to produce recommendations concerning the future improvement of this cooperation and practical vocational education and training, with a view to designing a model of vocational education and training that would better prepare and make vocational school leavers' more likely to gain employment in their chosen professions. The search for solutions that facilitate cooperation between vocational schools, industry representatives (employers/businesses) and labour market institutions aims to improve the quality of vocational education and make it more attractive to and engaging for students. To be valid, the curriculum, particularly the practical vocational education and training curriculum, must be well aligned with labour market demand and tailored to the needs of students and their potential future employers; additionally, synergies must be created.

The main reason for creating the publication is the research gap between the education sector and business, as these two worlds often diverge from each other. Given the situation diagnosed in this way, a research question arises, which can be formulated as follows: how large are these discrepancies, i.e. how large is the indicated research gap? The aim of the

article, resulting directly from the previously described phenomena, is to examine and indicate how the above gap should be closed. However, in order to achieve the main goal, it is necessary to indicate several specific goals, including:

1. Defining the framework for cooperation between education and business.
2. Identifying opportunities for joint activities between school and business.

To achieve the above-mentioned objectives, a specific research procedure was used, which involved preparing a survey in schools and among entrepreneurs. The research results and their interpretation are presented later in the article.

Challenges facing the vocational education sector have been widely studied and discussed in the literature, and authors agree that modernisation of the vocational education process will, among other things, increase vocational school leavers' employability (Białczak, Radomski, Żurek, 2021). Researchers also point out that the implementation of solutions provided for in education laws and stipulating the establishment of cooperation between vocational schools and local stakeholders may have a crucial impact on the organisation of vocational education and training as well as on the adaptation of the curriculum to the local labour market needs and requirements (Bieszk-Stolorz, Gdakowicz, Markowicz, 2017). Important aspects of the vocational education analysis include the following: the teaching venue (school, training centre, company or university); the source of vocational education funding (private and public); and the entity in charge of the curriculum and quality assurance (state, company or social partners) (Biostat, 2019). According to S. Golinowska, the strategy directed at developing human capital and creating job opportunities was not properly prioritised (Cedefop, 2020). The analyses by the Ministry of Family and Social Policy show that school leavers and graduates find it difficult to gain employment in their chosen professions mainly because they lack relevant experience and their qualifications are not adapted to the labour market needs (Chatzichristou, Ulicna, Murphy, Curth, 2013). To be effective, vocational education should receive systemic support, as it is far more capital-intensive than general education, and be harmonised with the labour market. P. Kolczyński states that this is impossible without centrally managed programmes and that in Poland a lot needs to be done when it comes to the organisation and implementation of practical vocational education (apprenticeships and internships) (Education Law of 14, 2023).

Contemporary vocational education should not only develop students' practical vocational skill and competences, but also provide them with general knowledge. Without well-organised vocational education, there is no strong economy (European Training Foundation, 2013). Development of solutions that guarantee effective cooperation between schools, industry representatives and labour market institutions is critical to designing a curriculum that will be tailored to the actual labour market needs and students' expectations (Golinowska, 2018). However, establishing cooperation between schools and industry representatives is not the only problem – maintaining it is far more challenging. Vocational education and apprenticeships/internships give students hand-on experience that directly increases their employability (Hanushek, Schwerdt, Woessmann, Zhang, 2017).

Making students more likely to gain employment in their chosen professions, by adapting the curriculum to labour market needs, complies with the 2020/2030 Strategy for Responsible Development (Information Office of the Wielkopolska Region in Brussels, 2021). The Strategy provides for the necessity to involve industry representatives in the process of designing the vocational education and training curriculum (mainly when it comes to apprenticeships/internships and dual education) and stresses the importance of boosting its effectiveness as well as the importance of harmonising it with the local labour market, in particular. It should be stressed that such measures also promote vocational education and enhance its prestige. The rules and principles of vocational school-industry cooperation are also laid down in applicable laws and regulations. The Ministry of Education and Science indicates that the so-called new vocational education system introduced under the Education Law and in force since 2017 (level 1 and level 2 vocational schools, technical schools and community colleges) must be based on close cooperation between schools and industry representatives (Kolczyński, 2019). Pursuant to Article 68 of the Education Law, school principals shall establish cooperation with relevant industry representatives, which can have the following forms: patronage classes, joint design of curricula, involvement in vocational education (including internships/apprenticeships), retrofitting of classrooms and laboratories, organisation of the vocational exam, upskilling vocational education teachers (organisation of training courses, provision of advisory services) and promotion of vocational education (Koziełska, 2019). Pursuant to Article 120 of the Education Law, internships/apprenticeships in companies or at farms that allow students to gain hands-on experience in real professional environment, as well as vocational education at vocational or continuing education centres or in school laboratories are the basic form for providing vocational education. Article 4 of the Regulation of the Minister of Education and Science on practical vocational education adds that practical vocational education may also have the form of practical classes at technical schools, level 2 vocational schools and community colleges, as well as the form of internships/apprenticeships (Local Government of the Wielkopolska Region, 2020). On the other hand, however, industry representatives are still under a very limited obligation to cooperate with schools. Legal regulations in this regard only provide for their involvement in the definition of the labour market needs pursuant to the Special Economic Zones Act. Additionally, cooperation with schools is unquestionably very capital-intensive and costly for industry representatives. This particularly discourages small enterprises for which such extra costs can simply be too high (Lodz Observation Centre for Territorial Development and Cohesion, 2017). The absence of specific formal procedures in this regard is definitely a huge impediment to effective cooperation between vocational schools and industry representatives.

On the one hand, legal regulations concerning vocational school-industry cooperation obligate schools to cooperate with industry representatives, and, on the other hand, no such obligations are imposed on industry representatives and no support is provided to them in this regard. Additionally, taking into consideration the costs of practical vocational education and

its formal restrictions resulting, among other things, from the occupational health and safety requirements or labour code provisions, one can also conclude that without institutional solutions and grants industry representatives, especially small enterprises, will not closely cooperate with vocational schools and fully engage in the vocational education and training processes.

To address the issues and problems of school-industry cooperation concerning vocational education and training, the authors aim to analyse current forms of cooperation between vocational schools and industry representatives, show how such cooperation is viewed and assessed by educators and business owners, particularly with reference to the forms of cooperation specified in the Education Laws, and give recommendations using the Greater Poland region as an example.

## **2. Discussion**

### **2.1. Methods**

#### **Study location**

The studies were carried out in the Eastern Functional Area (EFA) of the Greater Poland region – one of the biggest and strongly industrialised Polish regions, where over 36,000 manufacturing entities operate (with 99% of them representing the private sector) (Ministry of Economic Development, Strategy Development Department, 2017). Pursuant to the provisions of the 2030 Development Strategy for Greater Poland Voivodship, employees' qualifications are increasingly ill-aligned with employers' needs, which results in unemployment in certain professions and insufficient headcount in other sectors. However, the Greater Poland EFA is also a region where students' interest in vocational and technical education is not sufficient to meet the local labour market needs, and where the number of industry representatives cooperating with schools, particularly on vocational education and training, is pretty small. As per Objective 1.3: Higher and better use of human capital in the labour market of the Development Strategy, industry representatives need to be far more engaged in the vocational education and training process (dual education, also as regards crafts) and vocational education teachers must be better prepared and experienced in their respective fields. This requires closer cooperation between vocational schools and industry, easier access to vocational education (including dual education), combining theoretical and practical vocational education, and development of practical vocational education centres or school incubators of entrepreneurship (Ministry of Education and Science, 2016).

### **Subject of the study**

The study aimed to analyse existing cooperation between vocational schools and industry representatives in the Eastern Greater Poland region. The analyses concerned current forms of cooperation. As part of the study, representatives of public vocational schools, educational institutions and employers from the Konin, Turek, Słupca and Koło district/counties were surveyed.

### **Research problem**

The main problem addressed in the study was as follows: How do school and industry representatives view and assess cooperation between vocational schools and industry representatives in the Eastern Greater Poland region? The following auxiliary research questions were also asked:

- How many companies cooperate with vocational schools and what is the object of such cooperation?
- Who initiates cooperation between schools and employers?
- What are the terms and conditions of cooperation?
- What forms does cooperation between vocational schools and employers take?

### **Study method and procedure**

The study employed a survey method. The survey was anonymised and it was addressed to two types of respondents: school principals and industry representatives (employers). The first group of respondents was selected based on the school type – only vocational school principals were eligible to take part in the study – while the latter group of respondents was selected at random. The surveys were conducted in 2022. Each respondent, no matter which group they represented, was asked to choose only those answers they found important.

## **2.2. Analysis of research results. Applications**

### **A. Respondents' characteristics:**

Questionnaires for principals of vocational schools in the Eastern Greater Poland region were completed by 26 respondents. The types of schools represented by this group of respondents (i.e. level 1 and 2 vocational schools, technical schools, and community colleges) are presented in Table 1.

**Table 1.**

*Detailed list of school/educational institutions from Eastern Greater Poland that participated in the survey per county/district*

District/county	Number of schools	Types of schools			
		Level 1 vocational school	Technical school	Level 2 vocational school	Community College
Konin (town)	8	7	5	2	2
Konin (county/district)	4	4	2		1
Turek (county/district)	3	2	2		
Słupca (county/district)	5	3	4		
Koło (county/district)	6	3	5		

Source: Own elaboration based on empirical research.

Schools participating in the study offer vocational education in 65 professions in total (vocational schools – 33, and technical schools – 32). The survey was also addressed to industry representatives (56 respondents). In their case, the questionnaire was made available in an online version. The number of respondents representing the industry per each county/district is presented in Table 2.

**Table 2.**

*Surveyed businesses per county/district*

City/district name	Total
Konin (town)	29
Konin (county/district)	8
Turek (county/district)	4
Słupca (county/district)	6
Koło (county/district)	9

Source: Own elaboration based on empirical research.

The majority of the surveyed businesses were micro-enterprises (43%), i.e. businesses with up to 9 employees. Small (10-49 employees) constituted 27% of the respondents, medium companies (50-249 employees) – 16% and large companies (with a headcount of over 250 staff) – 14%. As the respondents represented different sectors, they were asked to enter the respective PKD (business classification) codes (Ministry of Family and Social Policy, 2021). The respondents most frequently chose “other sections” (approximately 30%). This was followed by Sections F (Construction) – approximately 14% and C (Manufacturing) – approximately 9%. The remaining respondents represented Section G (Wholesale and retail, automotive repair), Section E (Water supply, sewerage, waste management and remediation activities), Section I (Hospitality) – 4 respondents (approximately 7%) per section; Section M (Professional, scientific and technical activities) and Section H (Transportation and storage) – 3 respondents each; Section K (Financial and insurance activities), Section A (Agriculture, Forestry and Fishing), Section Q (Human health and social work activities) – 2 respondents each; as well as Section J (Information and communication) and Section D (Electricity, gas, steam and air conditioning supply) – 1 respondent each. The data obtained from the respondents show that the oldest surveyed business was established in 1930. One in three of the surveyed businesses was established between 1990 and 2000, and one in four – before 1989.

Thirteen (13) businesses were established between 2001 and 2010, and ten (10) – between 2011 and 2020. The majority of the surveyed businesses (almost 50%) were sole traders, followed by limited liability partnerships/companies (ca. 36%), i.e. 20 entities.

The vast array of the respondents (businesses varying in terms of the legal form, size, age, profile, business environment, and experience in offering internship/apprenticeship opportunities for students) allowed the authors to gain a better insight into the perception and quality of school-industry cooperation concerning vocational education and training in the region. Additionally, the participation of level 1 and level 2 vocational schools as well as technical schools, which offer vocational education in different professions and industries, meant that the authors were also able to survey institutions that are legally obligated to establish cooperation with industry representatives, and learn what their opinions on this cooperation are.

### **B. Analysis of the quality of vocational school-industry cooperation in the Eastern Greater Poland region – selected aspects**

From the survey it follows that approximately 62% of the respondents representing the industry cooperate with various schools and educational institutions that offer vocational education; most commonly these are level 1 vocational schools (approximately 34%) and technical schools (25%). The results show an improvement versus the 2010–2011 national study, where 23% businesses reported cooperation with vocational schools or practical education centres (Ministry of National Education, 2011), and versus the 2017–2018 study conducted in the Dolnośląskie (Lower Silesia) region, where business respondents stated that they cooperated with schools when organising apprenticeships (22.6%) and internships (44.2%) (Pachocki, Smolak, 2021).

The employers from the Eastern Greater Poland region participating in the survey were keen to report their cooperation with other institutions supporting, connected with or providing education, among others with county/district job centres (41%), universities (approximately 29%), and craft guilds (25%). Of all industry respondents, 25% stated that they cooperated with one educational institution, and 18% – with three. This data are analogous to the Biostat survey in the Lower Silesia region, where most businesses also cooperate with one educational institution only (Pachocki, Smolak, 2021). However, it should be stressed that this cooperation is mainly on a one-time basis only (as confirmed by 63% of the respondents). Of all the respondents, only 37% stated that they cooperate with such institutions on a regular basis.

Most respondents representing the industry (over 80%) stated that schools should be the ones to initiate cooperation. Similar opinions were expressed by the vast majority (90%) of the representatives of vocational schools and educational institution surveyed in 2013. The authors of the 2013 survey also stressed the importance of changing the employers' approach to cooperation with schools and encouraging them to make it more frequent (PKD codes classification, 2021).



As regards the respondents representing vocational schools and educational institutions in the Eastern Greater Poland region, the majority of them (23 of the 26 respondents) stated that the decision to establish cooperation mainly depended on the businesses' technical and technological infrastructure and on their willingness to cooperate (22 of the 26 respondents). This means that for schools these are decisive factors. However, the school principals surveyed also stated that the quality of past cooperation (i.e. the opinion of students) and the atmosphere in the workplace also play an important role, as they are conducive to effective practical learning of a profession in a real environment.

### **C. Types of vocational school-industry cooperation in the Eastern Greater Poland region – good practices**

The analysis of the respondents' perception and assessment of cooperation between vocational schools and industry representatives was carried out for the forms of cooperation provided for in the Education Law. One of them is practical vocational education that requires employers to provide students with access to company's technical and technological infrastructure so as to help them gain hand-on experience in their selected professions. From the survey it follows that 53% of the respondents confirm that companies allow students of vocational schools and educational institutions in the Eastern Greater Poland region doing internships/apprenticeships to use their technical and technological equipment in the course of the practical vocational training. This result can be compared to the results reported in the publication regarding the survey conducted in Lodz Voivodship between 2014 and 2020, where the vast majority of schools (93%) indicated various forms of vocational school-industry cooperation (Regulation of the Minister of National Education, 2019), and to the results of the survey carried out by the Foundation for the Development of the Education System (FRSE), where it was found that more than 80% of businesses cooperating with the education sector provide internship and apprenticeship opportunities (Sitek, Stasiowski, 2022). The results of the authors' own survey show that of the 96 professions taught at the level 1 vocational schools surveyed, in 64 the schools provide practical vocational education and training in cooperation with up to 5 employers, in 16 – with 6 to 10 employers, and in 9 – with 11 to 20 employers. On the other hand, of the 72 professions taught at the technical schools surveyed, in 22 the schools provide practical vocational education and training in cooperation with 11 to 20 employers, in 19 – with 6 to 10 employers, and in 18 – with more than 21 employers. It should also be noted that some schools also stated that they cooperated with a relatively large number of industry representatives (e.g. schools in Konin indicated that they cooperated with 63 hair salons and with 48 garages, while a school in the Koło county/district stated that it cooperated with 50 agricultural businesses and farms. The results obtained correspond with the results of the 2014–2020 survey mentioned above, whose authors noted that cooperation was most effective in the case of vocational schools that teach typically technical professions. Besides, such broad participation of businesses in practical vocational education and training may be the result of schools' cooperation agreements under, for example, internships/

apprenticeships for individual students. This observation is valid in the context of the FRSE's survey findings, as per which only 2% of the businesses surveyed use contacts with schools in this regard (Skarzyński, 2015).

Another form of practical vocational education and training in a real work environment is dual education. The implementation of a dual education system at all levels of vocational education in Poland was recommended as early as 2015 by the Hanseatic Parliament, which unites the craft guilds and enterprises in the Baltic Sea region. Dual education is not uniformly defined in the literature (Skarzyński, 2015). Dual education refers to education or training that combines learning in the classroom with on-the-job learning at a company (Szlosek, 2012). Vocational education and training is characterised by the dualism of the teaching venue, as it takes place at school, where students learn theory, and at an enterprise, where they are provided with practical training. On the other hand, dualism may also concern entities (public and private) responsible for the vocational education and training policy and practice. The issue of dual education in Poland is regulated by the Regulation of the Minister of Education on practical vocational training (Journal of Laws, 2019), which states that practical classes are organised for students to help them master the professional skills necessary to gain employment in a given profession, and can be taught in a dual education model. As regards students, the indisputable advantages of this form of practical vocational education and training include contact with the real work environment and internal and external customers, and as regards business owners – reduction of costs associated with future employee onboarding (Wenclik, 2018). Dual education opportunities offered by the surveyed businesses are presented in Table 3.

**Table 3.**

*Vocational Education and Training in the form of dual Education in the Eastern Greater Poland Region (N = 23)*

Question	Number of answers	
	Yes	No
Does your educational offer allow students to take part in practical vocational training courses at enterprises offered in the form of dual learning?	7	16
Do you plan to expand your educational offer for the 2023–2030 period and provide students with the dual learning option, also in professions relating to energy transition in the Eastern Greater Poland region?	4	17

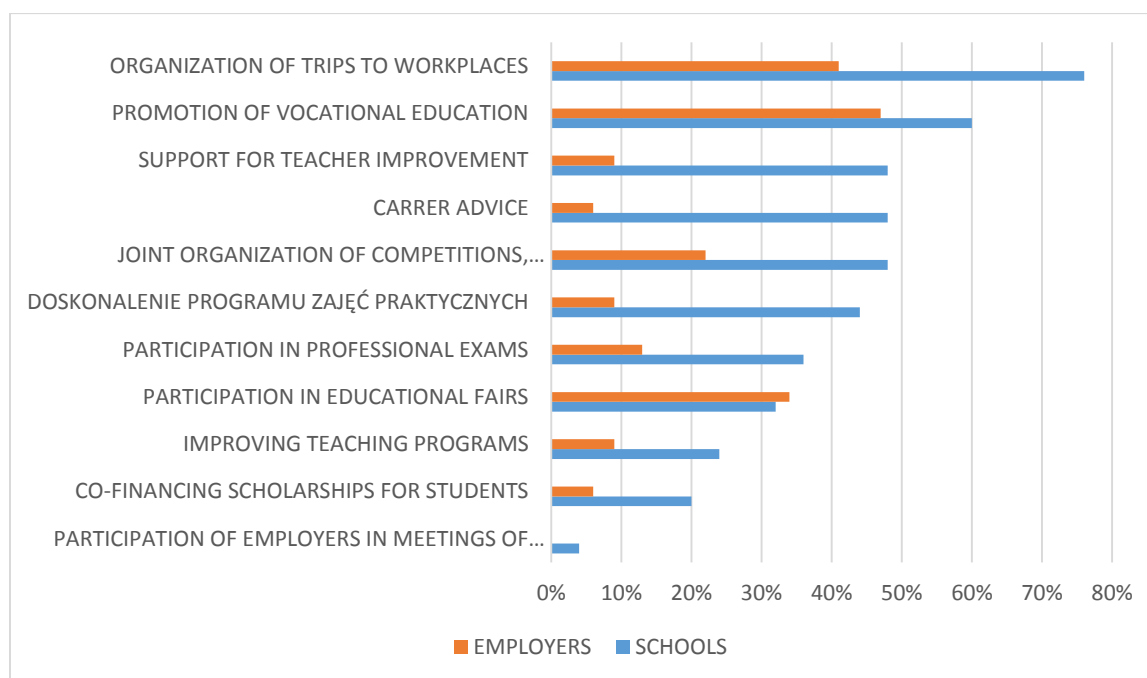
Source: Own elaboration based on empirical research.

Table 2 shows that 7 (30%) of the 23 schools offer practical vocational education and training in the form of dual education. Only four schools plan to offer such an opportunity by 2030, also in professions relating to energy transition in the Eastern Greater Poland region. The first school to offer practical vocational education and training in the dual education system was the Stanisław Staszic Mining and Energy School in Konin (2012). The respondents stated that 1,236 students completed practical classes in the dual education model in the 2021/2022 school year. The information provided by the schools surveyed also shows that practical vocational education and training in the form of dual education is offered in 42 professions taught

at 6 schools surveyed. On the other hand, the information provided by the industry representatives surveyed shows that students of vocational schools in Eastern Greater Poland can learn the following 9 professions in the dual education model: hairdresser/barber, electrician, electromechanical engineer, locksmith, carpenter, mechanic, cook, stonemason, and fitter. The observed differences between answers given by the school principals and industry representatives surveyed may result from the fact that the idea and specificity of dual education is not fully comprehended by business owners. Therefore, it is necessary to discuss in detail the principles of this form of practical vocational education when negotiating cooperation between schools and businesses.

The vocational school-industry cooperation can also take the form of patronage classes. As a patron, the business owner (employer) defines the scope of support. The survey shows that the professions for which patronage classes were set up were connected with energy transition in the Eastern Greater Poland region. They include: Renewable energy equipment and systems technician (planned patronage class), mechatronics technician, refrigeration and air conditioning technician (planned patronage class). From the survey it follows that patronage classes in Eastern Greater Poland were established at five (20%) of 26 vocational schools surveyed, and that three more schools were planning to establish four patronage classes by the end of 2030. Compared to a survey conducted in Lower Silesian Voivodship, where 35.7% of schools established at least one patronage class, this shows that such a form of cooperation between vocational schools and industry representatives in the Eastern Greater Poland region is less popular.

In the survey, the authors also included other forms of cooperation between schools and industry representatives aimed to improve the quality of practical vocational training. Nearly 60% of the respondents from the industry said they cooperated with vocational schools in the Eastern Greater Poland region in one form or another. All forms of cooperation between the schools and businesses surveyed are presented in Figure 1 (Employers N = 32, Schools N = 25).



**Figure 1.** Forms of cooperation between schools and businesses participating in the survey.

Source: Own elaboration based on empirical research.

Figure 1 shows that nearly half of the respondents representing industry were involved in joint undertakings with vocational schools which aim at promoting vocational education. Other forms of cooperation frequently mentioned by the industry representatives include: organisation of company visits (41%), participation in education fairs (34%), co-organisation of competitions and contests (22%), participation of company's employees in vocational exams (13%). On the other hand, the school principals surveyed stated that the forms of cooperation with businesses they most frequently choose included organisation of company visits (76%) and joint undertakings aimed at promoting vocational education (60%). A comparative analysis of the forms of cooperation indicated by the respondents indicates varying preferences of schools and industry representatives, which, undoubtedly, is connected with the effectiveness and stability of a given form of cooperation, and – particularly in the case of business owners – with the limitations relating to the additional costs incurred. Besides, as noted by J. Kozielska (Kozielska, 2019), increasing changeability of the education system is one of the main problems and factors impeding successful cooperation (Zaręba, Kępczyk, Misztal, Hadrian, Biernat, 2013). The result of the survey shows that the form of cooperation preferred by schools and businesses alike are company visits. For industry representatives this form of cooperation does not involve any extra costs or formalities. Company visits also allow students to learn more about the local labour market. The survey results also show that businesses are unwilling to engage in cooperation that requires them to invest money (e.g. co-funding scholarships), or time (e.g. improving existing curricula, participating in career counselling or teacher training). These conclusions are consistent with the FRSE survey, which indicated that systemic changes, i.e. as regards laws and regulations (94% of the respondents) and financial support for

entrepreneurs earmarked for practical vocational education and training (93% of the respondents), would significantly improve the situation (Sitek, Stasiowski, 2022). Additionally, the conclusions are also consistent with the results of the study on dependencies between cooperation and external sources of funding carried out in Lodz Voivodship, which found that external sources of funding (e.g. EU funds or funds obtained by schools or county offices) foster cooperation between vocational schools and industry representatives.

Taking into account the varying preferences and the vocational schools' legal obligation to cooperate with industry representatives, the authors also analysed alternative forms of cooperation that can be used along with those indicated by the respondents (Table 4).

**Table 4.**

*Alternative forms of cooperation per County/District (N = 25)*

<b>Question: Other forms of cooperation – good practices (please specify)</b>	<b>Number of affirmative answers</b>
Implementation of pedagogical innovations	<b>1</b>
Co-organisation of vocational workshops, shows, training courses in latest technologies, etc.	<b>1</b>
ERASMUS+ (international internships for technical school students)	<b>1</b>
Job fairs	<b>1</b>

Source: Own elaboration based on empirical research.

The survey results show that good practices presented in Table 3 are not popular among the school principals surveyed. This may be because of the lack of sufficient funds, heavy workload, inability to comply with additional stringent legal requirements, understaffing or fear of potential problems caused by businesses. However, to gain better insight into the causes of this situation, additional studies on the dependency between the institutional support and regulations governing vocational school-industry cooperation and success of such cooperation concerning practical vocational education and training are required. The survey conducted by the authors can provide a starting point for such studies.

### 3. Summary

All reforms of vocational education must, first and foremost, be aligned with actual labour market needs. The data obtained can provide a reference point for streamlining cooperation between vocational schools and industry representatives, improving the organisation of practical classes in the form of dual education and patronage classes, and fostering other forms of cooperation with businesses. Based on the survey results, the authors recommend the following:

- Improving the quality and attractiveness of education through large-scale involvement of businesses in the process of vocational education.
- Introducing measures aimed to raise the awareness of industry representatives and schools of the need to put more emphasis on the development of students' practical skills by taking actions intended to gradually extend the scope of internships and apprenticeships, and enabling education in the real work environment (dual education).
- Developing incentive programmes encouraging industry representatives to cooperate with vocational schools to better adapt the curriculum to actual business needs.
- Strengthening the cooperation between vocational schools, local authorities and employers through the creation of a network of linkages.
- Introducing mechanisms for assessing the quality of practical classes (internal and third-party audits similar to audits by the Polish Accreditation Committee).
- Introducing regulations encouraging employers to tighten cooperation with vocational schools.

In conclusion, the survey results and recommendations presented in this article indicate potential ways for improving the quality and effectiveness of the vocational school-industry cooperation to better respond to the changing needs of the local labour market in the Eastern Greater Poland region.

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