



# PUBLIC-PRIVATE PARTNERSHIP IN VOCATIONAL EDUCATION OF EUROPEAN COUNTRIES: LEADING DEVELOPMENT TRENDS

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## Abstract.

**The relevance** of this article is conditioned by the necessity to identify and analyze the leading development trends of public-private partnership in vocational education in European countries to consider them in establishing state-private partnership in Ukraine's vocational education system.

**The aim** of the article is to identify and analyze the leading trends of public-private partnership development in the vocational education of European countries; to explore the possibilities of considering these trends in the domestic practice of establishing state-private partnership in the field of vocational education.

**Methods:** Examination of scientific sources, legislative and normative legal documents, empirical data regarding public-private partnership in vocational education – to identify its leading development trends in European countries; formulation of conclusions and recommendations.

**Results:** Based on the analysis of modern legislative, normative legal documents, scientific sources, and empirical data, the leading trends in the development of public-private partnerships in vocational education of European countries were identified and analyzed: expansion of partnership participants and development of its new forms; the partnership's impact on improving the quality of vocational education; joint development of educational programs with partners according to labor market requirements; increased funding for vocational education through investments from the public and private sectors, as well as international organizations, etc.

**Conclusions:** The leading trends in the development of PPP in vocational education in European countries are focused on: enhancing the efficiency of interaction between educational institutions, public and private establishments, civic, professional, and international organizations; engaging small, medium, and large companies in the process of developing new qualifications, standards, educational programs, implementation of innovative vocational training technologies; ensuring equal access to vocational education, employment opportunities in the labor market; increasing financial support for educational institutions and enterprises that provide vocational training to students, etc. Proposals for Ukrainian vocational education institutions to establish state-private partnership (SPP) include: ensuring effective communication among partnership participants – for the exchange of experience and joint resource utilization; defining clear conditions, commitments, and risks among partners – to increase their accountability for the quality of SPP project implementation; improving mechanisms for control and evaluation of cooperation results – for timely adjustment of partnership development directions; increasing financial support for SPP projects – to ensure the stable functioning of vocational education institutions based on additional resources; expanding public participation in the implementation of SPP projects – to enhance the prestige of vocational education and its impact on post-war Ukraine's recovery, etc.

**Keywords:** *leading trends; public-private partnership; vocational education; European countries; successful practices.*

**Introduction.** Amidst the escalation of globalization processes and technological shifts within the economic sectors of the majority of European countries, the role of Public-Private Partnerships (PPPs) in vocational education is increasingly accentuated. This mechanism serves as a pivotal tool that amalgamates private and public sector resources aiming to address specific challenges within vocational education, particularly enhancing its quality and accessibility. Such enhancements are instrumental in bolstering the national competitiveness of each country. To achieve this, numerous European nations have initiated the development and implementation of diverse PPP projects grounded on the principles of transparency, accountability, and efficiency. For instance, Scandinavian countries collaboratively design PPP projects that embrace these principles and jointly shoulder the responsibility for their fulfillment. In Sweden, the PPP initiative "Design – Build – Finance – Maintain – Operate" (DBFMO) is well-received, with its objectives encompassing the design, construction, financing, maintenance, and operation of facilities (Norré & Schmitz, 2013).

The execution of PPP projects in vocational education pays considerable attention to transparency and risk management. Consequently, European countries actively employ control and monitoring mechanisms for PPPs to ensure the openness and objectivity of the managerial decision-making process. The implementation of PPPs in vocational education takes into account not only potential benefits but also possible limitations and risks, including the emergence of conflicts of interest, risks associated with insufficient funding, and the necessity of ongoing monitoring and control to align the projects with the interests of all partnership participants. This approach facilitates the creation of optimal conditions for practice-oriented student learning, aiming to supply enterprises with skilled and professionally mobile workers. The realization of PPP projects in vocational education requires appropriate funding and the establishment of favorable conditions for cooperation among partners.

The need for such partnership development in Ukraine is driven by the heightened interest of the state, business sector, civil society, and educators in accelerating the modernization of vocational education, sustainable economic growth, and social stability of society. This is particularly pertinent given the rapid technological progress characterized by ex-

panding digitization processes, changing management approaches at various levels, and so forth (Radkevych, 2022).

**Sources.** The collaboration between public and private partners to ensure quality vocational education in European countries is conducted according to labor market demands, under the condition of obtaining mutual benefit and ensuring equal opportunities for all partnership participants. The development of PPPs in European countries is the subject of research by many international organizations, including: the European Commission (investigates PPP development in the European Union countries); the European Centre for the Development of Vocational Training (forms a consistent and coordinated policy in the field of vocational education, studies demand and supply of qualifications and skills in Europe); the International Labour Organization (examines relations between employers and workers in various countries of the world, covering the European Union); non-profit organizations, such as the European Employment Fund, the Leadership and Innovation Fund (research and implement projects to support PPPs in vocational education and employment of the population in the European Union countries). Successful PPP practices in vocational education of European countries demonstrate that private companies assist educational institutions in acquiring high-tech equipment for laboratories, participate in the construction of educational infrastructure, updating content, improving forms and means of training, necessary for the professional training of qualified specialists, including in the dual system (Germany, Norway, Denmark, Belgium, Sweden, etc.). At the same time, PPP participants have the opportunity to negotiate all aspects of such cooperation, taking into account financial conditions, obligations, resources, and other management and quality control issues of agreements. In doing so, they comply with legal norms and ethical standards established by European and national legislation of each country.

Among the most important laws of Switzerland, which define the duties and responsibilities of each PPP side in the field of vocational education, mechanisms for regulating their cooperation are: "On Vocational Education", which constitutes the legal basis of partnership between state institutions and the private sector in the field of vocational education; "On Youth Support", which defines the conditions for financial support of students obtaining

vocational education in partnership between state institutions and the private sector; "On Employment", which defines mechanisms for employment and assistance in job search for graduates of educational institutions.

In Austria, PPPs in vocational education are also regulated by various laws, namely: "On Vocational Education" (BAG, 2021), "On Cooperation between Educational Institutions and Industry". These laws contain provisions for creating partnership relations between educational institutions and private companies, which enables ensuring high quality of vocational education and practical skills for students with the aim of increasing their readiness for the labor market. In Germany, PPPs are regulated by the "Vocational Education and Training Act", which defines the rules for concluding contracts between state and non-state institutions, as well as regarding the financing of such partners. According to this law, private partners provide practical training for students, while state institutions provide theoretical training and issue qualification certificates (BBiG, 2005).

The development of public-private partnerships (PPPs) in vocational education in Finland is regulated in accordance with the "Vocational Education Act" (International Labour Organization, 1998), which defines the role of government bodies, educational institutions, and enterprises in the implementation of PPPs, as well as the criteria and requirements for the participation of private companies in the financing and development of vocational education. In this context, the legislative act that regulates PPPs in vocational education in France, known as the "Freedom of Career Choice Act" (Legifrance, 2018), is of scientific interest. This Act establishes the basic principles and mechanisms for cooperation between state institutions, private companies, and educational establishments. Equally important is the "Vocational Training Reform Act" (Legifrance, 2014), aimed at simplifying the financing of vocational education and creating favorable conditions for the development of PPPs in this field.

The foundation for the development of PPPs in vocational education in many European countries is based on the dual education model, which entails combining theoretical knowledge with practical experience in production (Euler, 2013). Researchers F. Rauner and E. Smith (2010) consider the role of the public sector to be in setting standards and regulating the educational process, while the private sector ensures the implementation of practical training and

the timeliness of updating curricula. The implementation of PPP projects in vocational education particularly contributes to the creation of innovative curricula that meet the demands of the modern labor market and the needs of students to acquire relevant qualifications necessary for building a successful career in the industrial sector, as well as stimulating innovation in various economic sectors.

**Objective:** to identify and analyze the leading trends in the development of public-private partnerships in vocational education in European countries; to explore the possibilities of their consideration in the domestic practice of establishing state-private partnership in the field of vocational education.

**Methods:** study of scientific sources, legislative, normative-legal documents, empirical data regarding public-private partnerships in vocational education - to identify its leading trends in European countries; formation of conclusions and recommendations.

**Results and Discussion.** Among the leading trends in the development of Public-Private Partnerships (PPPs) in vocational education in European countries, the following should be highlighted: the expansion of partnership participants and the development of its new forms to ensure effective collaboration. This trend is reflected in the strong support of PPPs by the governments of European countries and their state bodies. For instance, in 2021, Lithuania introduced the new program "Research and Development in Vocational Education," which funds PPP projects. The number of PPP agreements being concluded is increasing, primarily between educational institutions and employers from various economic sectors, ensuring the training of future professionals according to labor market needs. This enhances their opportunities to gain practical experience and the necessary professional knowledge and skills (Denmark, Spain, Ireland). Employers' interest in collaboration with educational institutions is associated with the shift in the economy's orientation of European countries towards new technological sectors that require skilled labor (Slovenia). In Germany, such a form of partnership with employers in vocational education is actively supported by the Government, allocating additional financial resources for this purpose. A successful example of collaboration between educational institutions and employers in the Netherlands is the implementation of the program "Apprentice at the Workplace." This program enables students to acquire professional qualifica-

tions at the workplace and promotes their further internships at various enterprises to develop professional knowledge and skills in real production conditions (Robert van Weze, 2021).

In recent years, the partnership between educational institutions and private companies has been actively developing, which jointly create: joint ventures and provide services for professional training and qualification improvement of specialists (Austria); educational-production centers for training specialists in the energy sector ("Ignitis group," Lithuania). An example of involving private companies in PPP projects in Latvia is the "Competence Development Program based on orders from industrial enterprises," which allows industrial enterprises to order training for their employees at educational institutions.

In Greece, private companies assist government bodies in providing quality practical training to students for their future professional careers in the labor market, especially in the field of green economy and sustainable development. This enables private enterprises to meet their own staffing needs, monitor the implementation of PPP projects, identify problems and opportunities for further partnership development, which positively affects the increase in the number of prepared skilled professionals and ensures the quality of vocational education (Denmark).

Considerable interest in PPPs (Public-Private Partnerships) in vocational education is shown not only by large enterprises but also by small and medium-sized ones, as well as various social groups. This facilitates practical experience and knowledge for students, enhances their employability in the labor market (Croatia), and ensures the availability of practical training for qualified professionals, taking into account the needs of small and medium-sized enterprises (Slovenia, Romania, Italy). Public and non-profit organizations actively contribute to the implementation of PPP projects and initiatives aimed at supporting the professional training of qualified specialists for work in the modern economy (Finland, Sweden, France). Specifically, civil society organizations participate in ensuring the alignment of educational programs with societal needs and labor market demands. Furthermore, in Italy, there are several professional associations and organizations that promote the development of PPPs in vocational education (van Weze, 2021). In Poland, professional organizations, particularly the Polish Confederation of Employers and the Polish Confederation of Workers, foster the development

of vocational education systems and advocate for the rights of employers and workers, including youth.

An important participant in PPPs in most European countries are regional chambers of commerce and industry. Collaboration between educational institutions and such partners contributes to the refinement of various forms for collecting and forecasting labor market needs for qualified professionals, determining the structure of professional qualifications (Italy, the Netherlands); updating the National Catalogue of Qualifications (NCQ) with the involvement of Sectoral Councils for Qualifications (SCQ) (Portugal); developing and implementing new vocational training programs focused on practical skills and competencies required by the labor market (France, Italy); and participating in examination commissions, etc. (Radkevych, 2023).

An innovative form of interaction between educational institutions and public institutions in certain European countries are partnership clubs with long-term cooperation agreements (France). The partnership between educational institutions and foreign companies and organizations is expanding. For instance, Belgian vocational schools and employers actively develop international partnerships, allowing students to gain professional experience in other countries to deepen their professional knowledge and skills. Educational institutions in Sweden and Slovenia collaborate with international organizations that provide financial support for the professional training of qualified specialists. Such a form of partnership promotes the exchange of experience and the use of best practices in the development of vocational education. The increasing number of PPP participants in the vocational education of European countries indicates growing interest in this type of cooperation. For example, in Sweden, the public is widely involved in partnerships in vocational education with the aim of: ensuring its quality, as well as the alignment of educational programs with societal needs and labor market demands; increasing the number of trained qualified workers.

Partnership between public institutions and private companies is enacted through various forms. For instance, these can include an agreement between an educational institution and a company regarding the organization of internships for students or long-term collaboration aimed at implementing joint educational projects (Sweden); investment funds and other financial instruments that facilitate the engagement of private partner funds for the development of vocational education (Denmark); joint ventures for providing services in professional

training and personnel development (Austria).

In Latvia, three types of PPP contracts are employed: a concession contract between public and private sectors, wherein the private partner obtains the right to operate and manage the corresponding property or services for a certain period; a procurement contract between public and private sectors, wherein the private partner performs a specific service or realizes a project by agreement with the state authority; a contract for joint activity between public and private sectors, creating a joint enterprise to implement a PPP project. The procedure for selecting the form of the contract depends on the nature of the PPP project and its characteristics.

The most significant requirements for PPP projects in vocational education in European countries are their economic efficiency, social significance, and the protection of the rights and interests of the state and citizens. In this context, prior to concluding a PPP contract, a comprehensive economic and legal examination of the project is conducted to ensure its compliance with legislative requirements and the efficient use of budgetary funds. In Estonia, within the framework of PPPs, the state and private enterprises collaborate on the development of vocational education. This form of partnership enables the state and private sector to jointly determine labor market needs, plan specialist training, and co-finance training programs.

An important aspect of PPPs in vocational education in European countries is the ongoing social dialogue among the various partnership parties, which facilitates the discussion of problems and the search for common solutions that take into account the interests of all partners. For example, in Austria, joint committees composed of representatives from the state, private sector, trade unions, and professional associations develop criteria for student selection, quality standards, educational programs, etc. To support PPPs in vocational education in Austria at the local level, regional administrations and vocational schools operate, collaborating with private companies and other stakeholders. These institutions actively interact with local enterprises, including small and medium-sized ones, to ensure effective integration of learning and practice. They also promote the dissemination of information about vocational education and career opportunities among youth, students, and their parents (Pilz, 2018).

One of the contemporary forms of PPP in vocational education in Bulgaria is regional educational clusters that unite public and private institutions, scientific organizations, and international

partners (Ministry of Education and Science of the Republic of Bulgaria, 2021). These clusters foster the development of innovative approaches to vocational education and the exchange of experience and knowledge among different participants.

The current trend towards the influence of partnerships on enhancing the quality of vocational education remains pertinent. This is reflected in public-private partnership (PPP) initiatives aimed at implementing standards, monitoring educational programs, developing innovative teaching methods, and improving the qualifications of instructors and trainers. This is addressed in the "Education and Training 2020" program (CEDEFOP, 2019). All partners involved in PPPs in vocational education must adhere to the educational and assessment standards set by the state. This ensures consistency and quality in training, which are key factors for the success of the partnership. Vocational education standards in European countries establish expected learning outcomes, providing clear benchmarks for ensuring the quality of the educational process in educational institutions across Europe. For instance, the application of the EFQM model in the European context allows for the assessment of various aspects of the educational process, covering strategies, leadership, personnel, partnerships, resources, processes, products, and services, as well as their impact on end results (Dahlgaard et al., 2008).

The process of ensuring the quality of vocational education includes the collection of data on quality indicators, the implementation of changes, and the monitoring of results. A critical component is feedback from stakeholders, including students, instructors, employers, and other participants in the educational process. Ensuring the quality of vocational education encompasses defining expected learning outcomes, monitoring student achievements, and continuously improving the quality of vocational education based on the obtained results. This process is embedded in the culture of the educational institution, stimulating ongoing improvement. The application of information and communication technologies facilitates this, namely: ensuring transparency and objectivity of assessment, speeding up information exchange, and supporting monitoring and assessment processes (Zawacki-Richter & Anderson, 2014). For example, learning management systems (LMS), used in educational institutions in many European countries, enable tracking of student progress, development of individual learning plans, and collection of detailed statistics for analysis (Watson & Watson, 2007).

An important PPP tool in enhancing the quality of vocational education is accreditation, which typically involves evaluating educational programs, the level of instructor qualifications, infrastructure, and student satisfaction with their education. For example, in institutions applying the Lean Six Sigma methodology, stakeholder requirements are considered, key indicators of vocational education quality are identified, and processes are implemented to improve these indicators. This means that the assurance of vocational education quality is continuously monitored by partners and improved with the aim of achieving high standards (Antony, 2011).

Through PPPs, a comprehensive management system is realized that enables the introduction of innovative educational technologies (Grimsey & Lewis, 2007), such as artificial intelligence, cloud technologies, blockchain, and the Internet of Things, which become effective tools for the quality of the educational process and contribute to preparing students for the challenges of the modern world. For example, the use of artificial intelligence in the educational process allows for the individualization of student learning at their own pace and according to their preferences. The application of cloud technologies facilitates more effective knowledge and resource exchange between students and instructors, which energizes their collaboration (Bates, 2015). Blockchain ensures the verification and preservation of student educational information, increases their mobility level, and recognizes learning outcomes.

In the implementation of PPP projects in the field of vocational education, large IT companies actively participate. Primarily, they invest in the development of the educational process of educational institutions to ensure that students have access to the most modern knowledge and professional skills. Additionally, this stimulates the pedagogical staff towards continuous self-improvement, the introduction of new methodologies, educational complexes, and forms of class organization (Hanushek et al., 2011). Private investments are an important source of funding for the research activities of educational institutions, which facilitates the development of modern teaching technologies that positively affect the increase in the competitiveness of their graduates in the labor market. PPP projects stimulate the implementation of flexible learning forms, such as online courses and profession-oriented training, etc. This opens up new opportunities for students who are able to assimilate knowledge from different sectors of the economy and gain competencies that meet the demands of the modern labor market.

The experience of the United Kingdom in quality control of vocational education is valuable, with a number of regulatory bodies for this purpose. In particular, Ofsted (2018) oversees the quality of education in educational institutions, covering educational programs implemented within PPPs. This body ensures compliance with the standards of quality of vocational education, utilizing the flexibility and resources of the private sector within the PPPs in vocational education in Denmark, helping to ensure access to quality education for a wide range of the population, regardless of socio-economic status and region of residence (Aarkrog, 2020).

The collaboration between the public and private sectors is important in the form of investments in technological infrastructure, ensuring regulation and assessment of the quality of the educational process to guarantee its conformity to high standards (OECD, 2020). Specifically, for improving the quality and efficiency of education, private companies assist educational institutions in accessing the latest equipment and production technologies (Austria, Belgium). In Latvia, PPP projects are directed towards the development of educational infrastructure. For this purpose, the country has initiated the "Strengthening the material and technical base of vocational education" program, which includes financing the repair and modernization of educational institutions with the participation of private companies (Ministry of Education and Science of Latvia, (n.d)). The "VET centres of excellence" program in Lithuania contributes to improving the quality of professional training of skilled specialists, based on the principle of combining resources of partners for financing projects to modernize the material and technical base of workshops and laboratories of educational institutions (MSN News, n.d.).

An example of the impact of PPPs on improving the quality and accessibility of vocational education is the "Build – Operate – Transfer" (BOT) model, which is widely used in Denmark (Budina et al., 2007). The specificity of this PPP model is that the private partner is obligated to build an infrastructural facility, operate it for a certain period, and then transfer it to state ownership. In Portugal, such projects aim at constructing new buildings and structures to improve conditions for organizing the educational process and ensuring a proper level of comfort for students and teachers. The PPP project "Skolebygg" was also created in Norway for the modernization of the material and technical base of educational institutions and the introduction of modern production technologies (Greve & Mörth, 2010).

Among the leading trends in the development of Public-Private Partnerships (PPP) in vocational education within European countries is the creation of collaborative educational programs aligned with labor market demands. This process entails coordinated efforts among all PPP stakeholders, encompassing educational institution representatives, employers, and vocational education regulators. The aim is to adapt the educational process to the needs of the contemporary labor market, contributing to the high employability of graduates upon completion of their studies. The educational programs developed with partners facilitate the harmonization of the educational landscape, enabling students to study material that meets the latest standards and requirements of specific economic sectors in European countries, including industries, the technology sector, transportation, and others. Educators and trainers from educational institutions collaborate with private companies to better understand labor market needs and identify the most crucial professional skills for students. This enables them to gain the necessary practical experience during their studies to more effectively work on real-world technological projects.

The application of collaborative educational programs aids educational institutions in most European countries to, on one hand, enhance the relevance of their courses, rapidly adapt content to labor market changes, offering students new modules that meet modern employer requirements, and on the other hand, improve students' opportunities to flexibly construct their individual learning trajectories, selecting the most pertinent content modules for their future professional activity. This becomes particularly significant in the context of rapid technological changes, where continuous updates to educational programs and adaptation to labor market demands are key factors in ensuring the quality of vocational education. For instance, in Lithuania, the initiative "Profesinio mokymo programos kokybės gerinimo projektas" (Project for the Improvement of Quality of Vocational Training Programs) is underway, involving the development and implementation of vocational education programs considering labor market needs and EU standards (MSN News, n.d.).

One of the fundamental principles of PPP development in vocational education across most European countries is the so-called "dual learning" system, which involves a combination of practical training at the workplace with theoretical instruction in a vocational school (Moretti et al., 2017). The private

sector's role in this process is to provide opportunities for practical training, particularly by creating internship positions and favorable conditions for the professional development of young specialists. Conversely, state institutions ensure funding, regulatory support, and quality control of education.

The dual vocational training program has gained significant popularity in Germany, Austria, and Switzerland due to its high efficiency and student success rates (Deissinger, 2015). For example, in Germany, students in the dual learning system acquire professional qualifications and practical experience essential for working in a specific sector (BMBF, 2020), which aids in increasing their employment levels since they possess real-world experience and knowledge that meet the demands of the labor market.

An example of successful PPP in vocational education in Austria is the "Apprenticeship with Matura" program, which combines the mastery of professional skills with obtaining a matriculation certificate, enabling students to continue their education at universities (Pilz et al., 2017). The program is based on the collaboration of public institutions, vocational schools, and private companies in forming young people's professional competencies and opening new career growth perspectives. Within this program, students undergo workplace training, acquire necessary professional skills, and gain theoretical knowledge in vocational schools and specialized courses complementing their practical experience (Angetter-Pfeiffer, 2023).

Another example of PPP in vocational education is the "Post-Matura Training" program, allowing students with a matriculation certificate to receive vocational education within a dual training system. This program facilitates the preparation of qualified specialists for specific industrial sectors, meeting labor market needs (Moretti et al., 2017). Students participating in this program benefit from both state and private sector support, gaining access to practical training at workplaces and theoretical lessons in vocational schools. These programs demonstrate that PPP in vocational education helps create effective mechanisms for preparing young professionals considering labor market needs and current trends. The collaboration between state institutions, the private sector, and other organizations contributes to developing a flexible, innovative, and competitive vocational education system that can adapt to labor market changes, respond to globalization challenges, and technological progress (Solga et al., 2014).

Within PPP frameworks, private companies assist educational institutions in creating training programs that can reduce bureaucracy levels and allow students to learn at their convenience and pace, fostering competencies necessary for remote work (Austria). Partnership in vocational education stimulates the development of new learning forms, such as distance education, integrative courses, and training programs, which are more efficient and convenient for students. Particularly in the Netherlands, there is an increase in training programs aimed at preparing students to work in innovative technological sectors (software development, cybersecurity, big data, etc.). Furthermore, private companies collaborate with educational institutions to develop international training programs. This enables students to gain international experience and increases their opportunities to find employment abroad. One of the successful examples of PPP in vocational education in Finland is the development of centers of competence such as Tampere Vocational College Tredu (Rees, 1997). These centers collaborate with enterprises, local and national government bodies, and foreign partners to jointly develop innovative training programs and provide students with high-quality practical knowledge and skills (Cai et al., 2012).

Another trend is the increase in funding volumes for vocational education through investments from the state and private sectors, as well as international organizations. These can be investment grants and sponsorship programs that enable the attraction of funds from various budgets for the development of vocational education. For instance, private investments facilitate the development of scholarship and grant systems for students and teachers, aiming to attract talented and motivated young people to the educational process. This stimulates the intellectual development of students, provides their financial support, and helps uncover new career opportunities. In Portugal, the EU budget funds the "Learning for All" program, which ensures opportunities for vocational education and lifelong qualification enhancement (Springer, n.d.). Since 2011 in Estonia, a PPP program called "Partnership for Qualification Development" has been funded (Estonian Qualifications Authority, n.d.). This program is aimed at developing, implementing, and evaluating new professional qualifications in cooperation with business structures and other interested partners. The increase in the level of private investments in vocational education becomes an integral component of sustainable economic development in European countries.

Private investments have a positive impact on the modernization of infrastructure, the introduction of innovative technologies, and teaching methods, which ultimately enables an enhancement of the quality of vocational education, ensuring the relevance of training content to the needs of the modern labor market. For example, in France, private partners are widely involved in financing educational infrastructure projects, where, according to the "Concession" model specifics, they are responsible for the construction and operation of infrastructure (Grimsey & Lewis, 2007).

In the UK, the PPP model called "Private Finance Initiative" is widely used, which involves private financing of the modernization of educational infrastructure (Akintoye et al., 2015). An example of PPP in the development of educational infrastructure for vocational training of qualified specialists is the program to strengthen the material and technical base of educational institutions in Latvia (Ministry of Education and Science of Latvia, n.d.) and the project for financing the repair and modernization of educational premises with the participation of private investors (CEDEFOP, 2019).

In Sweden, the state acts as the main investor in vocational education, while partnership with the private sector is an important supplement to the state education system. This enables an increase in the level of employers' influence on the quality of vocational training and ensures its alignment with their needs. According to Danish legislation, companies participate in financing vocational education projects, which gives them the right to influence the content of training and the selection of students for practical training. The state, for its part, provides financial support to educational institutions, organizes the educational process, and ensures compliance with educational standards.

Various funding and support programs for Public-Private Partnerships (PPP) in vocational education exist, including the "Dual VET Mobility" financing program, which facilitates the mobility of students and teachers between educational institutions and companies across different European countries (Austria, Denmark, Germany, etc.). In Germany, there are examples where government bodies and private enterprises jointly finance, develop, and implement PPP projects in vocational education that have strategic significance for the country. Such projects are associated with the construction of educational institutions, upgrading their material and technical base, and so forth. Moreover, the



projects must meet ecological safety and energy efficiency requirements and also be beneficial for private enterprises. The partnership can be concluded for a specific term, after which the state can renew control over the PPP project or continue cooperation with the private enterprise. Within the partnership, private enterprises usually are responsible for the technical realization of the project and its funding, while the state ensures the provision of land and infrastructure, and also defines the rules for regulation and control over the partnership's activity. In Estonia, the state provides funding for specialist training programs through PPP. Furthermore, the state allocates grants to private enterprises for the implementation of joint projects in vocational education.

The active involvement of government institutions, the private sector, and educational management bodies in regulating and financing PPP contributes to the support of initiatives in vocational education. Specifically, Denmark has a number of financing and incentive programs to encourage cooperation between the private and public sectors in developing and implementing innovative educational projects (Ministry of Higher Education and Science, 2020). In Slovenia, PPP project funding in vocational education is provided at various levels: the central government, regional and local authorities, and private investors. In particular, the Regulation on the Financing of Investments in Vocational Education (RFOI) (Uradni list, 2007) establishes the procedure for co-financing projects and programs implemented within the framework of PPP. In addition, active collaboration with international organizations facilitates the attraction of financial and technical support for the implementation of projects in vocational education, which enables the enhancement of its quality in European countries.

**Conclusions.** In general, Public-Private Partnerships (PPPs) in vocational education within European countries represent a dynamic and mixed form of partnership. The leading trends in their development can depend on numerous factors, such as economic conditions, political circumstances, changes in legislation, and more. Nonetheless, there persists a collective vision of the importance of collaboration between the state and private companies in preparing qualified professionals, aligned with the needs of the contemporary labor market. The analysis of the leading trends in PPP development in European vocational education indicates that they are aimed at: enhancing the efficiency of interactions between educational institutions, state and private establishments, civic, professional, and international

organizations; engaging small, medium, and large companies in the process of developing new qualifications, standards, educational programs, and the introduction of innovative vocational training technologies; ensuring greater accessibility, innovation, and quality of vocational education and its connection to the labor market; increasing financial support for educational institutions and businesses that conduct practical training for students, and so on. Simultaneously, this form of partnership is implemented considering the specificity of the economies of European countries, their educational systems, and labor market needs. Therefore, approaches to the development of PPPs in vocational education differ across European countries. For instance, in countries with a low level of technological development, programs supporting the financial backing of educational institutions might be crucial, while in countries with a high level of development, funding for training programs for future professionals in innovative sectors of the economy may be more pertinent.

The experience of PPP development in vocational education in European countries serves as an example for others, including Ukraine, which aspires to reform its vocational education system and provide its citizens with opportunities to obtain competitive professions and skills for successful careers. Hence, the identified advantages of the trends in PPP development in European vocational education should be considered in the domestic practice of establishing PPPs in the field of vocational education, namely: ensuring effective communication among partnership participants for the exchange of experience and joint resource use; specifying clear conditions of obligations and risks among partners to enhance their accountability for the quality of PPP project implementation; improving mechanisms for control and assessment of collaboration results to timely adjust the development directions of the partnership; increasing the volume of financial support for PPP projects to ensure the stable functioning of vocational education institutions based on additional resources; expanding public participation in the implementation of PPP projects to enhance the prestige of vocational education and its impact on the post-war reconstruction of Ukraine, and so forth.

To achieve this in Ukraine, it is necessary to ensure:

1. The refinement of state policy that would facilitate support for public-private partnership projects through the creation of special financing programs and state incentives for enterprises collaborating with vocational education institutions

in training future qualified professionals.

2. The development of legal foundations for enterprise participation in the implementation of public-private partnership projects regarding the organization of industrial practice, internships, mentorship training, as well as the dual form of vocational education.

3. The engagement of a wide range of stakeholders, including representatives of government, business, industry, service sectors, educators, students, and the public, in the development and implementation of public-private partnership projects in vocational education to enhance its quality, market labor needs alignment, and societal prestige.

4. The increase in investments for the modernization (renewal) of educational infrastructure and material-technical base, the creation of new vocational education institutions, training-practical and qualification centers, centers of vocational excellence, career centers, workshops, laboratories, dormitories, dining facilities, and so forth.

5. The creation of conditions for the expansion of interaction between enterprises and vocational education institutions at the national and international levels to form the content of vocational education in consideration of labor market requirements, the development of professional and educational standards, and the introduction of innovative teaching technologies.

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# ПУБЛІЧНО-ПРИВАТНЕ ПАРТНЕРСТВО У ПРОФЕСІЙНІЙ ОСВІТІ ЄВРОПЕЙСЬКИХ КРАЇН: ПРОВІДНІ ТЕНДЕНЦІЇ РОЗВИТКУ

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## Реферат:

*Актуальність* статті зумовлена необхідністю виявлення та аналізу провідних тенденцій розвитку публічно-приватного партнерства у професійній освіті європейських країн для їх урахування в налагодженні державно-приватного партнерства в системі професійної освіти України.

*Метою статті* є виявлення й аналіз провідних тенденцій розвитку публічно-приватного партнерства у професійній освіті європейських країн; з'ясування можливостей їх урахування у вітчизняній практиці налагодження державно-приватного партнерства у сфері професійної освіти.

*Методи:* вивчення наукових джерел, законодавчих, нормативно-правових документів, емпіричних даних щодо публічно-приватного партнерства у професійній освіті – для виявлення його провідних тенденцій розвитку в європейських країнах; формування висновків і рекомендацій.

*Результати:* на основі аналізу сучасних законодавчих, нормативно-правових документів, наукових джерел, емпіричних даних виявлено та проаналізовано провідні тенденції розвитку публічно-приватного партнерства у професійній освіті європейських країн: розширення учасників партнерства і розвиток його нових форм; вплив партнерства на підвищення якості професійної освіти; розроблення спільно з партнерами навчальних програм відповідно до вимог ринку праці; збільшення обсягів фінансування професійної освіти шляхом інвестицій державного та приватного секторів, а також міжнародних організацій тощо.

*Висновки:* провідні тенденції розвитку ППП у професійній освіті європейських країн орієнтовані на: підвищення ефективності взаємодії між навчальними закладами, державними та приватними установами, громадськими, професійними й міжнародними організаціями; залучення малих, середніх і великих компаній до процесу розроблення нових кваліфікацій, стандартів, навчальних програм, впровадження інноваційних технологій професійного навчання; забезпечення рівного доступу до професійної освіти, робочих місць на ринку праці; збільшення фінансової підтримки навчальних закладів та підприємств, які здійснюють професійне навчання студентів тощо. Сформульовано пропозиції українським закладам професійної освіти для налагодження державно-приватного партнерства (ДПП), а саме: забезпечення ефективної комунікації між учасниками партнерства – для обміну досвідом і спільного використання ресурсів; визначення чітких умов, зобов'язань і ризиків між партнерами – для підвищення рівня їхньої відповідальності за якість реалізації проєктів ДПП; вдосконалення механізмів контролю та оцінювання результатів співпраці – для своєчасного коригування напрямів розвитку партнерства; збільшення обсягів фінансової підтримки проєктів ДПП – для забезпечення стабільного функціонування закладів професійної освіти на основі додаткових ресурсів; розширення участі громадськості в реалізації проєктів ДПП – для підвищення престижності професійної освіти та її впливу на відновлення України в повоєнний час тощо.

**Ключові слова:** провідні тенденції; публічно-приватне партнерство; професійна освіта; європейські країни; успішні практики.

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