UDC 37.014.6:339.137.2:378.4
ISSN: 2707-3092 (Online)
DOI: https://doi.org/10.32835/2707-3092.2025.30.104-122

Professional Pedagogics/1(30)'2025, pp. 104-122

TRENDS IN QUALITY ASSURANCE OF VOCATIONAL EDUCATION AND TRAINING FOR SPECIALISTS IN THE KINGDOM OF THE NETHERLANDS

Alla Onyshchenko

PhD, Research Fellow, Institute of Vocational Education of the National Academy of Educational Sciences of Ukraine, https://orcid.org/0000-0001-6098-8792, e-mail: aponyschenko@gmail.com

Abstract

Relevance. The article's relevance is driven by the pivotal role of vocational education and training (hereinafter referred to as VET) in shaping a competitive workforce for strategically important sectors of the economy in the Kingdom of the Netherlands. The negative perception of VET within the country, despite its international recognition, poses challenges for attracting young people and maintaining public trust in the system. Contemporary demands for the integration of digital technologies, artificial intelligence, and ensuring inclusivity, among other factors, necessitate continuous improvement of the VET quality assurance system. Investigating these and other trends is crucial for Ukraine, as it allows for adapting the advanced experience of the Netherlands to enhance the effectiveness of the national quality assurance system for vocational education.

*Aim***:** To identify and analyze the main trends in quality assurance of VET for specialists in the Kingdom of the Netherlands, and to ascertain the possibilities of incorporating them into the improvement of the vocational education quality assurance system in Ukraine.

*Methods***:** Study of scientific sources, legislative, regulatory, and legal documents, and empirical data on quality assurance of VET for specialists in the Kingdom of the Netherlands – to clarify the state of the research problem; theoretical analysis and synthesis – to identify the main trends in quality assurance of VET for specialists in the Netherlands; generalization and systematization – to formulate conclusions and recommendations.

*Results***:** The following were identified and analyzed: the multi-level structure of VET for specialists in the Kingdom of the Netherlands (initial, basic, professional, specialized); two educational pathways (school-oriented (BOL) – for youth; work-oriented (BBL) – for adults); types of VET institutions (Regional Training Centers (ROCs), agricultural colleges, specialized professional colleges, and private accredited institutions); legislative reform in the VET sector; the VET quality assurance system (division of responsibility between VET institutions (self-regulation) and external bodies (Inspectorate of Education), tripartite organization SBB); and trends in quality assurance of VET for specialists.

*Conclusions***:** The contemporary trends in quality assurance of VET for specialists in the Kingdom of the Netherlands include: aligning VET with labor market needs (high graduate employment rate: 85.4%, with 81% finding employment within three months); development of professional competence and lifelong learning (competence-oriented education, LLO Katalysator initiative (2022-2027) supports continuous learning); development of "green" skills (integration of research through "hubs" for the development of ecological competencies); digital transformation of VET and the use of artificial intelligence (AI) (Npuls program until 2031 promotes digitalization); inclusivity and equal opportunities in VET access (investments of €1 billion for 2024-2027 and the "Appropriate education" policy aim to ensure equal opportunities); professional development of teachers and their engagement in pedagogical activities (a shortage of 13,500 teachers affects quality, and Comenius Teaching Fellow grants aim to retain them); internationalization of VET (Erasmus+ programs contribute to expanding mobility and developing intercultural competencies); increasing public funding for VET (high public expenditure on VET – 0.76% of GDP, but there are concerns about the efficiency of fund distribution); development of a VET quality culture and internal quality assurance system (self-regulation of VET institutions, student surveys, and cooperation with stakeholders foster a VET quality culture, but teacher involvement is needed).

Keywords: *trends; vocational education and training; quality assurance system; Kingdom of the Netherlands; recommendations for Ukraine.*

Introduction. Vocational education and training (hereinafter referred to as VET) in the Kingdom of the Netherlands plays a fundamental role in shaping the national economy and society. Approximately 40% of the Dutch working population holds a vocational qualification, underscoring the importance of VET as the "foundation of the economy" and the "basis of society" (MBO Amersfoort, n.d.). Graduates of the VET system are vital for key sectors such as healthcare, construction, technology, and energy, where there is a chronic shortage of skilled labor (Eurydice, 2023; Holland Times, 2025). This critical reliance on specialists trained in VET institutions creates an urgent need for robust and effective quality assurance systems. Any shortcomings in quality assurance mechanisms directly lead to risks for national economic competitiveness and the country's social well-being.

Despite the high international reputation of the VET system in the Kingdom of the Netherlands, recognized as one of the best in the world by international organizations such as the OECD, it faces a paradoxical "poor image domestically" (Cedefop, 2017). Surveys show that 41% of respondents in the Netherlands have a negative perception of VET, which is significantly higher than the EU average (23%) (Cedefop, 2017). This dissonance between external recognition and internal perception is a significant problem. Even if the quality assurance system is reliable in practice, a lack of public trust or understanding can undermine its effectiveness in attracting talented young people and ensuring its societal role. The negative internal image indicates a gap in public perception that deters potential students, affecting recruitment and, ultimately, the supply of skilled labor, even if the VET itself is excellent. Furthermore, the VET quality assurance system in the Netherlands constantly faces challenges related to adapting to rapid labor market changes, integrating new technologies into the educational process, such as artificial intelligence (AI) and digital skills, ensuring inclusivity, and overcoming teacher shortages (Eurydice, 2023; OECD, n.d.; Erasmus University Rotterdam, n.d.). These structural changes highlight the need to rethink certain components of the VET system to make them more resilient and ensure maximum utilization of the opportunities provided by digital and green transitions (OECD, n.d.).

Effective quality assurance of VET in the Netherlands is critically important for training specialists who can successfully adapt to dynamically changing labor market requirements (OECD, n.d.) and contributes to their social cohesion and equal opportunities, especially for vulnerable population groups (Netherlands Court of Audit, 2024; Government of the Netherlands, n.d.). Accordingly, the quality management of VET specialists in the Netherlands, as in other European Union countries, according to scholars from the Institute of Vocational Education of the National Academy of Educational Sciences of Ukraine led by Academician V.O. Radkevych, involves the application of a quality assurance methodology that complies with standard international systems (ISO or IFQM). In VET quality assurance, emphasis is placed on: defining VET quality assurance policy and its implementation tools; developing and approving educational programs; implementing a student-centered approach to teaching and assessing learning outcomes; establishing transparent procedures for student enrollment, recognition of their learning outcomes, and certification; ensuring transparency in the competitive selection of VET institution teachers and continuous improvement of their professional qualifications; the availability of modern learning resources, high-tech material and technical base, and diversified funding sources; providing informational and educational-methodological support for the educational process and its systematic monitoring; ensuring public access to information (Radkevych et al., 2021). In view of this, when defining the trends in VET quality assurance for specialists in the Kingdom of the Netherlands, it is important to consider the trends

in partnership development in the VET sector in EU countries, namely: development of motivation of partnership participants aimed at improving qualifications and graduate employment, which is the basis of partnership and goes beyond financial incentives; legislative support for partnership and its formal administrative basis – the memorandum; co-financing mechanisms; risks in the development of professional skills; compliance of VET content with constantly changing labor market requirements; mechanisms for monitoring the labor market and professional potential; the role of the private partner is higher than the role of the regulator of VET service providers, as it is more interested in VET development; eighth, the private sector is motivated to ensure the quality of professional skills, and therefore to solve problems of their compliance with labor market needs and market competition (Radkevych, 2022).

Sources. The problem of quality assurance of VET for specialists in the Kingdom of the Netherlands is widely researched, as reflected in a significant number of publications. Existing works comprehensively cover the structure of the VET system, its legal framework, including the Education and Vocational Training Act (Wet educatie en beroepsonderwijs – WEB, 1996), and the role of key institutions such as the Foundation for Cooperation in Vocational Education, Training, and the Labor Market (SBB), the Inspectorate of Education, and the Accreditation Organization of the Netherlands and Flanders (NVAO) (Cedefop, 2021; Cedefop, 2023; Eurydice, 2023; Gatsby Foundation, 2024). Of particular value to the research is the work by Radkevych O.P. regarding the legal framework for the functioning of the education and vocational training system in the Netherlands, which implements educational programs of various levels. The author established that educational institutions and vocational training schools are united into regional vocational training centers, where theoretical studies are combined with practical training at enterprises (Radkevych, 2018).

The impact of the WEB Act on the consolidation of vocational colleges and the unification of qualifications, which was a significant step in reforming the VET system in the Kingdom of the Netherlands, is analyzed (Cedefop, n.d.). Considerable attention is paid to aligning the Dutch VET quality assurance system with the European Quality Assurance in Vocational Education and Training (EQAVET) framework. Although the direct impact of EQAVET on the already established Dutch VET quality assurance system is considered "insignificant," it serves as a "guideline" and contributes to improving quality assurance and international cooperation (Gatsby Foundation, 2024). The research also covers issues of VET alignment with labor market needs and graduate employment, highlighting the high employment rate of VET system graduates (Government of the Netherlands, 2023; Cedefop, 2019). Specific trends such as digital transformation, the integration of "green" skills, as well as inclusivity and equal opportunities, are also subjects of scientific analysis (Government of the Netherlands, n.d.; RSIS International, n.d.; EQAVET, 2025; Cedefop, 2024).

Scientific interest lies in studies of the comprehensive impact of AI on VET quality assurance, specific challenges, and best practices for integrating AI into educational programs (St. Matthew's University, n.d.; UCLanData, n.d.; Autoriteit Persoonsgegevens, n.d.), as well as regarding teacher training in assessing algorithmic materials, changes in the role of teachers, and ensuring data confidentiality (Autoriteit Persoonsgegevens, n.d.). This indicates a gap between strategic vision and operational capacity of VET, which requires targeted investment in human capital and infrastructure, beyond simply implementing technology. Cause-and-effect studies in the field of VET system management are valuable, which complicates determining the effectiveness of specific quality assurance policies (Tandfonline, 2025). This means that, while general quality assurance principles can be defined, their application and effectiveness in specific national contexts, such as the Netherlands, require targeted study. Finally, problems related to the perception of VET quality assurance as an an administrative burden by teachers and insufficient parental involvement in quality assurance processes are important aspects that require further research to improve the internal quality culture of VET (EQAVET, n.d.). This proves that the effectiveness

of internal VET quality assurance systems depends not only on processes and indicators but also on human and organizational factors.

The **aim of the article** is to identify and analyze the main trends in quality assurance of VET for specialists in the Kingdom of the Netherlands, and to ascertain the possibilities of incorporating them into the improvement of the vocational education quality assurance system in Ukraine.

Methods: Study of scientific sources, legislative, regulatory, and legal documents, and empirical data on quality assurance of vocational education and training for specialists in the Kingdom of the Netherlands – to clarify the state of the research problem; theoretical analysis and synthesis – to identify the main trends in quality assurance of vocational education and training for specialists in the Netherlands; generalization and systematization – to formulate conclusions and recommendations. To conduct the research, official reports and publications from leading national and European educational organizations, as well as academic publications and analytical reports, were used. Among the key data sources, materials from organizations such as: the European Centre for the Development of Vocational Training (Cedefop, 2017; Cedefop, n.d.; Cedefop, 2023; Cedefop, 2019; The Netherlands, n.d.); the Education Information Network in Europe (Eurydice, 2023; Onderwijsinspectie, n.d.); the Organisation for Economic Co-operation and Development (OECD, n.d.; Onderwijsinspectie, n.d.); the Inspectorate of Education of the Netherlands (Eurydice, 2023; Onderwijsinspectie, n.d.; DeFabrique, n.d.; Cedefop, n.d.; Netherlands Court of Audit, 2023; Erasmus University Rotterdam, n.d.); the Foundation for Cooperation in Vocational Education, Training, and the Labor Market (MBO Amersfoort, n.d.; Cedefop, 2023; Gatsby Foundation, 2024; Eurydice, 2023); the Accreditation Organization of the Netherlands and Flanders (Eurydice, 2023; NVAO, n.d.; The Hague University of Applied Sciences, n.d.; Utrecht University, n.d.) and other academic and analytical sources were processed.

Results and Discussion. The VET system in the Kingdom of the Netherlands is multifaceted and multifunctional, ensuring the training of specialists at various levels and through different educational pathways. Specifically, VET offers four levels of education, corresponding to EQF levels 1-4 (MBO Amersfoort, n.d.; Cedefop, 2023): Level 1 (initial): one-year programs designed for young people who did not obtain a certificate in previous education. They prepare specialists for the labor market or allow them to progress to a Level 2 course (Cedefop, 2023; Eurydice, 2023); Level 2 (basic): courses lasting 1-2 years that train specialists in professions such as hairdresser or mechanic. This level is considered the "official" minimum qualification level for the labor market (Cedefop, 2023; Eurydice, 2023); Level 3 (professional): programs lasting 2-3 years, where students learn to independently perform various tasks in their chosen professional field, for example, nursing assistant or mechanic (Cedefop, 2023; Eurydice, 2023); Level 4 (specialized): the highest level within VET, lasting 3-4 years (or 1 year for specialized training after VET). Graduates of this level can continue their studies in higher professional education (HBO) (MBO Amersfoort, n.d.; Cedefop, 2023; Eurydice, 2023) (Table 1).

The VET system offers two equivalent educational pathways that enable students to obtain the same diplomas based on a combination of theoretical learning in VET institution classrooms with practical training at enterprises (MBO Amersfoort, n.d.; Cedefop, 2023; Eurydice, 2023; Nuffic, n.d.). According to the first option (school-based learning pathway – BOL), students spend most of their study time in a VET institution, and between 20% and 59% at enterprises. This educational pathway is predominantly chosen by young students (MBO Amersfoort, n.d.; Cedefop, 2023; Eurydice, 2023). The second option of the educational pathway (work-based learning pathway / dual pathway – BBL) is known as the apprenticeship system, according to which students combine workplace learning (at least 60% of study time) with classes in VET institution classrooms, often 4 days of work at an enterprise and 1 day of theoretical study at a VET institution. Enrollment requires a contract with a company, and therefore this educational pathway is primarily chosen by adults for professional development (MBO Amersfoort, n.d.; Cedefop, 2023; Eurydice, 2023).

Table 1

STRUCTURE OF LEVELS AND EDUCATIONAL TRACKS OF VET IN THE KINGDOM OF THE NETHERLANDS

Level	EQF Correspondence	Duration of Study	Main Purpose / Objective	Characteristics of BOL (practical training, classroom)	Characteristics of BBL (practical training, classroom)	Examples of Professions/Qualifications
Level 1 (Entry level)	EQF 1	1 year	Preparation for the labor market or transition to Level 2	20-59% practical training, mostly youth	≥60% practical training, 1 day at school, often adults	Construction assistant, care assistant
Level 2 (Basic vocational training)	EQF 2	1-2 years	Preparation for skilled worker professions (official minimum for the labor market)	20-59% practical training, mostly youth	≥60% practical training, 1 day at school, often adults	Hairdresser, mechanic, security guard
Level 3 (Professional training)	EQF 3	2-3 years	Independent execution of tasks in the chosen field	20-59% practical training, mostly youth	≥60% practical training, 1 day at the institution, often adults	Nurse assistant, chief mechanic, carpenter
Level 4 (Middle-management and specialist training)	EQF 4	3-4 years (or 1 year for a specialist)	Independent execution of all tasks, access to HBO (higher professional education)	20-59% practical training, mostly youth	≥60% practical training, 1 day at the institution, often adults	Store manager, rehabilitation technician, dental nurse

Sources: (MBO Amersfoort, n.d.; Cedefop, 2023; Eurydice, 2023; Nuffic, n.d.)

In the Netherlands, various types of VET institutions function: Regional Training Centers (ROCs): 41 large multi-sector centers offering a full range of courses for both young students and adults (MBO Amersfoort, n.d.; Cedefop, 2023; Eurydice, 2023); Agricultural Professional Colleges (AOCs): 16 colleges specializing in "green" VET, including professions in services, nature, and environment, etc. (MBO Amersfoort, n.d.; Cedefop, 2023; Eurydice, 2023); 11 specialized professional colleges that offer VET programs in specific professional fields (MBO Amersfoort, n.d.; Cedefop, 2023; Eurydice, 2023). In addition, there are private educational institutions that train specialists in accredited courses and professional qualifications (Eurydice, 2023).

The Education and Vocational Training Act (WEB), introduced in 1996, significantly reformed the VET system in the Netherlands, influencing its organizational structure and the quality of educational program content (Cedefop, n.d.). This law led to a significant reduction in the number of VET institutions (from 350 to less than 100 in 10 years) and to the centralization of management primarily by regional training centers (Cedefop, n.d.). This structural improvement aimed to increase the efficiency of standardization and optimize the VET system. The optimization of institutions and the unification of educational pathways in accordance with the qualification framework ensured the creation of VET standards, regardless of the forms of learning, which increased the effectiveness of qualification recognition. This demonstrates strategic efforts to create a more streamlined and controlled quality system that can better adapt to labor market needs and provide clear conditions for student progress. WEB also granted vocational colleges a high degree of autonomy in developing educational programs, provided that competencies demanded by the labor market are considered (Cedefop, n.d.). The Act also established the "tripartite goal" of VET: preparation for the labor market, further education, and preparation for full participation in society (Cedefop, n.d.). Furthermore, Dutch language, mathematics, English language (for the fourth level), and civics were defined as mandatory general competencies for all specialists (Cedefop, n.d.; Eurydice, 2023).

The VET quality assurance system in the Netherlands is characterized by a division of responsibility between educational institutions and external supervisory organizations. This approach is based on the principle of institutional self-regulation, where educational institutions bear primary responsibility for the quality of VET they provide, while the Minister of Education, Culture, and Science is responsible for quality at the systemic level (Eurydice, 2023). In ensuring VET quality in the Netherlands, the **Inspectorate of Education** plays a crucial role as a key external body responsible for overseeing compliance with legislation, financial policy, and the overall quality of the education system, including VET (Eurydice, 2023; Onderwijsinspectie, n.d.). The Inspectorate has a special inspection system for VET, "Inspection framework VET-education" (Onderwijsinspectie, n.d.; Onderwijsinspectie, n.d.), which is regularly updated (Cedefop, 2023), and also publishes "inspection cards" of VET institutions that reflect the effectiveness of their activities (Eurydice, 2023). It encourages VET institutions to improve quality beyond basic standards (Gatsby Foundation, 2024). The Inspectorate's cooperation with research institutes, such as the Erasmus School of Economics, is aimed at improving inspection methods and, ultimately, the quality of Dutch education (Erasmus University Rotterdam, n.d.).

Table 2

KEY BODIES AND THEIR ROLE IN ENSURING VET QUALITY IN THE KINGDOM OF THE NETHERLANDS

Body/Institution	Area of Responsibility	Key Functions/Powers	Key Legislative Acts/Documents
Ministry of Education, Culture and Science	Overall quality of education at the systemic level	Policy development, legislation, funding, approval of qualification profiles	Wet educatie en beroepsonderwijs (WEB), Higher Education and Research Act (WHW)
Inspectorate of Education	Supervision of compliance with legislation, financial regularity, and overall VET quality	Monitoring the quality of teaching and examinations, publishing inspection reports, promoting improvement	Education Inspection Act (WOT)

SBB (Cooperation Organisation for Vocational Education, Training and the Labour Market)	Link between VET and the labor market, quality of practical training	Development of qualification files, accreditation of companies for practical placements, collection of labor market information, support for instructors	Wet educatie en beroepsonderwijs (WEB)
NVAO (Netherlands-Flanders Accreditation Organisation)	Accreditation of programs and quality assurance systems in higher education (HBO, universities)	Assessment of the quality of educational programs, institutional audits, maintenance of a register of accredited programs	Higher Education and Research Act (WHW)

Sources: (MBO Amersfoort, n.d.; Cedefop, n.d.; Cedefop, 2023; Eurydice, 2023; Onderwijsinspectie, n.d.; NVAO, n.d.; The Hague University of Applied Sciences, n.d.; Utrecht University, n.d.)

A key role in ensuring the quality of student internships and maintaining qualification standards is played by the tripartite organization (Samenwerkingsorganisatie Beroepsonderwijs Bedrijfsleven – SBB), established in 2015, which unites VET institutions and labor market representatives. SBB is responsible for developing and maintaining the VET qualification framework, including qualification standards, accrediting and coordinating companies that provide workplaces for student practical training, which is a legal requirement for companies offering internships to VET students (Cedefop, 2023; Eurydice, 2023; Gatsby Foundation, 2024; Cedefop, n.d.). In addition, SBB collects labor market information and provides data on employment prospects for VET program graduates, and also organizes training and competence development for workplace instructors (Cedefop, n.d.; Cedefop, 2023). The Inspectorate of Education oversees SBB's fulfillment of its statutory duties (Eurydice, 2023).

The VET quality assurance system is based on the "Plan-Do-Check-Act" (PDCA) sequence of stages and takes into account the requirements of the European Quality Assurance in Vocational Education and Training (EQAVET) framework, as most of its descriptors and indicators are integrated into the Dutch qualification system (Gatsby Foundation, 2024; EQAVET, 2025; EQAVET, 2023). The influence of EQAVET on the Dutch system is considered "insignificant" in terms of direct policy implementation, but it serves as a "guideline" and contributes to raising the profile of quality assurance and international cooperation (Gatsby Foundation, 2024; EQAVET, 2023). The multi-stage approach to VET quality assurance in the Netherlands balances institutional self-regulation with external oversight, demonstrating the system's complexity. The clear division of functions between the Inspectorate (systemic compliance and improvement) and SBB (labor market alignment and quality of practice) (Cedefop, 2023; Gatsby Foundation, 2024; Eurydice, 2023) indicates a sophisticated system designed to adhere to both educational standards and ensure the practical relevance of VET. This approach reflects that VET quality is multifaceted and requires specialized oversight of different areas (e.g., pedagogical quality vs. workplace relevance). The system strives for comprehensive quality assurance by distributing responsibility and fostering cooperation among key stakeholders. In this context, as Radkevych V.O. (2023) rightly points out, private companies help VET institutions create educational and training programs that can reduce bureaucracy, allow students to learn at their own convenient time and pace, and ensure the development of competencies necessary for remote work. Partnership in VET stimulates the development of new forms of learning, such as distance education and integrative courses, which are more effective and convenient for students. In the Netherlands, in particular, the number of educational programs aimed at preparing students for work in innovative technological fields

(software development, cybersecurity, big data, etc.) is increasing.

In view of the above, a leading trend in VET quality assurance for specialists in the Netherlands is the alignment of VET with labor market needs and graduate employment (Table 3). The Dutch VET system is the main supplier of personnel to the labor market (MBO Amersfoort, n.d.). VET graduates demonstrate a high employment rate for the 20-34 age group, which is higher than the EU average (Cedefop, 2019). The Netherlands faces a chronic shortage of skilled workers (200,000) in the technology, healthcare, and construction sectors, leading to increased salaries for VET graduates, sometimes even higher than university graduates (Holland Times, 2025). SBB plays a key role in aligning labor market needs with educational programs, maintaining the relevance of qualifications, and accrediting companies for practical training (MBO Amersfoort, n.d.; Cedefop, 2023; Gatsby Foundation, 2024). At the same time, there are problems of dropout among certain VET students due to incorrect course selection, which indicates the need for improved vocational guidance for applicants (Eurydice, 2023). There is also a decrease in the percentage of VET graduates who directly continue their studies at universities (Cedefop, 2023; Cedefop, 2019). The high employment rate and rising salaries of VET graduates demonstrate a strong functional dependence between VET outcomes and labor market demand. However, the existing "poor image" of VET in the country (Cedefop, 2017) and problems with course selection (Eurydice, 2023) indicate a gap between objective market value and subjective public perception of VET. This means that VET quality assurance must go beyond educational programs and learning outcome assessment, encompassing the entire student learning journey: from vocational guidance to tracking their professional career.

In ensuring the quality of VET for specialists in the Netherlands, a significant trend is the development of professional competence and lifelong learning. Competency-based education is a leading paradigm for innovation in Dutch VET, aimed at reducing the gap between VET and the labor market (Cedefop, n.d.; BWPat, n.d.). The emphasis is shifting from simply obtaining a diploma to developing "abilities" and continuous skill development, which is an important prerequisite for the employment of VET graduates (BWPat, n.d.). This reflects a transition from a traditional, input-oriented VET model to an outcomes-oriented and adaptive model. Lifelong learning (LLL) addresses the need for specialists to continuously develop skills throughout their professional careers (OECD, n.d.; RSIS International, n.d.; Eurydice, 2023). The "Lifelong Learning Catalyst" (LLO Katalysator) initiative (2022-2027) is a significant step in this direction, aimed at creating an independently functioning LLL ecosystem that unites VET institutions, businesses, and government to respond to the needs of a rapidly changing labor market (Eurydice, 2023; Cedefop, n.d.). This demonstrates a proactive and adaptive strategy of the Dutch VET system aimed at maintaining its relevance in a dynamic global economy.

The transition to a sustainable economy requires robust and high-quality VET, which highlights the trend towards the development of "green" skills for specialists (OECD, n.d.). Dutch agricultural VET institutions actively integrate "green" innovations into their curricula through "hubs" (Cedefop, 2024). These allow VET students to participate in research projects funded by the "KIEM-groen" subsidy scheme, fostering the creation of applied knowledge and the development of research skills (Cedefop, 2024). "Green" skills encompass both professional and key competencies, such as critical thinking and teamwork, necessary for modern production (SGI Europe, n.d.). The creation of "hubs" is an innovative and proactive model for integrating research and the development of "green" skills directly into VET. This elevates the role of VET: from a simple transfer of skills to a center of applied research and innovation, directly impacting the quality and relevance of VET.

Among the contemporary trends in quality assurance of VET for specialists are the digital transformation of VET and the use of AI. This is driven by the growing demand for digital skills across all industries, making the integration of digital competencies into VET educational and

training programs critically important (Cedefop, n.d.). Dutch VET institutions actively collect and use quantitative and qualitative data to improve quality assurance systems (EQAVET, 2025). However, the "Plan-Do-Check-Act" (PDCA) sequence of stages is often not followed due to time constraints and the complexity of the necessary actions (EQAVET, 2025). This indicates that, although data collection occurs, its transformation into actionable improvements in VET quality is complicated. Therefore, the Npuls Program was initiated, which will run until 2031 to facilitate knowledge exchange and the development of digital innovations throughout the education system, including VET, with a particular emphasis on the application of AI (UvA, 2024). It should be noted that AI is currently widely used in the Netherlands to transform diagnostic processes in various fields of activity, increasing accuracy and efficiency, which requires professional training of future specialists to work with advanced technologies (St. Matthew's University, n.d.). At the same time, there are certain challenges and risks associated with the use of AI in VET, namely: the ability of adaptive systems to recognize individual student needs, the need to train teachers in evaluating algorithmic learning materials, the changing role of teachers, and issues of personal data confidentiality, etc. (Autoriteit Persoonsgegevens, n.d.). This indicates the existence of a systemic challenge where technological progress outpaces the development of human potential, organizational culture, and pedagogical models necessary for applying AI to improve VET quality. Therefore, without significant investment in the development of digital literacy of VET teachers and a culture of lifelong learning, the full potential of digitalization and AI in the Dutch VET system cannot be realized.

A key trend in VET quality assurance for specialists in the Netherlands is inclusivity and equal opportunities for VET attainment. The Dutch government is investing significant funds (€1 billion for 2024-2027) to promote equal opportunities for individuals to acquire vocational qualifications (Eurydice, 2023; Netherlands Court of Audit, 2024). The "Appropriate education" (Passend Onderwijs) policy, implemented since 2014, obliges VET institutions to provide appropriate learning environments for all interested individuals, including those with special educational needs (Government of the Netherlands, n.d.; Xpat, n.d.). Despite these opportunities, existing conditions, such as migration background and parents' education level, still affect access to quality educational services (Netherlands Court of Audit, 2024). There are also disparities in the levels of support from VET institution management and staff for such individuals, as well as cases of discrimination against them during internships at enterprises (Netherlands Court of Audit, 2024; Government of the Netherlands, 2023). To overcome these challenges, the Dutch government has formulated an action plan to reduce the number of early school leavers in VET institutions to 18,000 by 2026 (Eurydice, 2023). Although significant financial and legislative commitments demonstrate a strong political intention to ensure inclusivity, the persistence of inequality in vocational qualification attainment and reports of discrimination indicate a gap between educational policy formulation and its effective implementation on the ground. This means that the quality assurance of inclusivity must go beyond merely checking for policy existence, actively monitoring student experiences and the effectiveness of support systems.

In VET quality assurance, an important trend is the professional development of teachers and their involvement in pedagogical activities. The Netherlands faces a shortage of 13,500 teachers, which significantly impacts VET quality (Erasmus University Rotterdam, n.d.). This shortage leads to increased workload, burnout, and a desire to leave the profession (Erasmus University Rotterdam, n.d.). Professional development is proposed as a strategy for teacher retention, which can increase job satisfaction (Erasmus University Rotterdam, n.d.). Since 2023, VET teachers can apply for Comenius Teaching Fellow grants to participate in educational innovation projects (Cedefop, 2024). However, problems with exam quality in VET have persisted for years, highlighting the need for further professionalization of teachers in this area (Cedefop, n.d.). The acute shortage of teachers

poses a direct and significant threat to the quality of Dutch VET. Although grants are positive policy measures, their effectiveness in attracting and retaining talent depends on addressing the underlying causes of dissatisfaction, such as workload and the perception of the value of the teaching profession. The quality of VET is inextricably linked to the quality and well-being of its teachers.

Internationalization of VET, as a modern trend, contributes to improving its quality by enhancing employability, personal development, and intercultural competencies of VET graduates (MBO Raad, n.d.; Nuffic, n.d.). It should be noted that Dutch public organizations such as: the Association of VET Colleges (MBO Raad) and the Dutch Organization for Internationalization in Education (Nuffic) actively promote internationalization, supporting student and teacher mobility (e.g., through the Erasmus+ program) and strengthening the position of Dutch VET at the European level (MBO Raad, 2023; Nuffic, n.d.). The Netherlands has almost reached the EU target for VET student mobility abroad (8% by 2025) (Nuffic, n.d.). The expansion of internationalization demonstrates a forward-looking approach to VET quality, recognizing that "international competencies" are important for employment in a globalized labor market. This impacts VET quality by emphasizing skills such as adaptability and cultural diversity.

A significant impact on VET quality assurance is exerted by the trend: increasing public funding for VET (0.76% of GDP, above the EU average), including structural funding and significant amounts from the National Lifelong Learning Fund (LLO). The government invests hundreds of millions of euros in VET modernization (Eurydice, 2023; Cedefop, 2023). Expenditures per student are also relatively high (Cedefop, 2019). Despite investments, there are concerns about overall budget cuts and the efficiency of fund utilization (Zorgtoeslag, n.d.). Official Development Assistance (ODA) funding for vocational and higher education will be gradually discontinued. This applies only to international projects, not internal VET funding (DonorTracker, n.d.). Significant public investment in VET indicates a strong political commitment to its quality and societal role. However, public debates regarding the distribution and efficiency of funding suggest a tension between perceived need and resource optimization. This means that, while funding is available, the impact of transparent and effective monitoring on VET quality outcomes is crucial for public and political support.

In the context of VET quality assurance, a contemporary trend is the development of a VET quality culture and an internal quality assurance system. VET institutions bear primary responsibility for the quality of vocational training of specialists, based on the principle of self-regulation (Eurydice, 2023). A VET quality culture is defined as collective ownership and systematic efforts to improve VET quality, which includes a willingness to learn, feedback, and mutual responsibility (QQI, n.d.). Pedagogical teams are a central part of VET quality assurance, requiring open dialogue with stakeholders such as representatives of enterprises, organizations, institutions, and parents (EQAVET, n.d.; QQI, n.d.). Student satisfaction surveys are an important tool for gathering feedback (Eurydice, 2023). The emphasis on "VET quality culture" and institutional self-regulation is a complex approach to VET quality assurance that goes beyond external compliance to foster internal motivation for improvement. However, the identified challenge regarding VET quality assurance indicates that implementing a VET quality culture requires significant attention to engaging teachers in pedagogical activities, their professional development, and demonstrating the direct value of VET quality assurance for their daily practice.

Table 3

KEY TRENDS AND CHALLENGES IN ENSURING VET QUALITY IN THE KINGDOM OF THE NETHERLANDS

Тенденція	Короткий опис тенденції/політики	Пов'язані виклики/проблемні аспекти	Ключові успіхи/ініціативи
Trend	Brief Description of Trend/Policy	Associated Challenges/Problematic Aspects	Key Successes/Initiatives
Digital Transformation of VET and AI Integration	Integration of digital skills and AI into educational and training programs. Use of data to improve Quality Assurance (QA).	Insufficient use of data to improve the "Check/Act" phase, low digital literacy among teachers, ethical risks of AI, changing role of the teacher.	Npuls program, use of data for monitoring, integration of AI in diagnostics (veterinary medicine).
Development of Professional Competence and Lifelong Learning	Shift from qualifications to competencies, emphasizing "abilities." Continuous skill development throughout one's career.	Adapting programs to rapid changes, ensuring flexibility and accessibility of LLL (Lifelong Learning).	"LLO Katalysator" initiative, flexible programs for adult upskilling/reskilling.
Alignment of VET with Labor Market Needs and Graduate Employment	Adaptation of programs to economic needs, high employment rate of graduates.	Negative internal image of VET, incorrect course selection by students, reduced progression to higher education.	High employment rate, rising salaries in deficit sectors, SBB's role in coordination.
Ensuring Inclusivity and Equal Opportunities in VET Access	Policies supporting vulnerable groups, ensuring equal access and support.	Impact of socio-economic background on outcomes, discrimination during internships, disparities in support.	Significant government investments, "Appropriate Education" policy, plans to reduce early dropout.
Development of "Green" Skills	Integration of environmental sustainability and relevant competencies into VET.	Defining and implementing both professional and key "green" skills.	Creation of "hubs" in agricultural VET institutions, research projects on "green" technologies.
Professional Development of Teachers and Their Engagement in Pedagogical Activity	Upskilling teachers, engaging them in innovation.	Teacher shortages, increased workload, burnout, issues with exam quality.	Comenius Teaching Fellow grants, "upskilling" concept, professionalization programs.
Internationalization of VET	Promoting international mobility of students and teachers, developing intercultural competencies.	Stabilization of mobility growth, need for further encouragement.	Active support from MBO Raad and Nuffic, participation in the Erasmus+ program, development of "international competencies."
Growth in State Funding for VET	Significant government investments in VET.	Public concerns about the effectiveness of fund utilization, potential budget cuts.	High expenditure on VET and per student, structural funding, investments from the Growth Fund.

Sources: (Eurydice, 2023; Holland Times, 2025; Cedefop, 2017; OECD, n.d.; Erasmus University Rotterdam, n.d.; Netherlands Court of Audit, 2024; Cedefop, 2023; Government of the Netherlands, 2023; Cedefop, 2019; EQAVET, 2025; St. Matthew's University, n.d.; Autoriteit Persoonsgegevens, n.d.; Cedefop,

n.d.; BWPat, n.d.; RSIS International, n.d.; MBO Amersfoort, n.d.; Nuffic, n.d.; SGI Europe, n.d.; Cedefop, 2024; Zorgtoeslag, n.d.; DonorTracker, n.d.; QQI, n.d.; EQAVET, n.d.; UvA, 2024; MBO Raad, n.d.)

Conclusions. The VET system in the Netherlands is clearly structured into four levels, corresponding to the European Qualifications Framework (EQF). This ensures transparency, standardization, and the possibility of transition between educational levels and the labor market. The Education and Vocational Training Act (WEB) contributed to the centralization of management and optimization of the VET institution network, which increased the system's efficiency. VET institutions implement two educational pathways (BOL and BBL) that combine theoretical learning with practical training. In particular, BBL allocates 60% of time to practical training, contributing to a high graduate employment rate. In the Netherlands, the SBB organization ensures cooperation between VET institutions, employers, and the government, developing qualification frameworks, accrediting companies for practical training, and analyzing labor market needs. The Dutch VET quality assurance system is based on the principle of self-regulation of VET institutions, complemented by external oversight from the Inspectorate of Education, which uses the Plan-Do-Check-Act (PDCA) sequence of stages and complies with EQAVET standards. The high dropout rate of students due to incorrect course selection indicates the need for improved vocational guidance. At the same time, the high graduate employment rate (85.4%) confirms the system's effectiveness.

Dutch "hubs" integrate research and "green" skills into VET programs, promoting innovation and sustainable development. They also actively implement digital technologies and AI into VET content through the Npuls program but face challenges in teacher training and adapting pedagogical models. This refers to the shortage of teachers in the Netherlands (13,500) and their burnout, which affects VET quality. The Netherlands invests significant funds in inclusivity and implements Comenius Teaching Fellow grants; however, problems with discrimination and inequality persist, requiring appropriate monitoring. The internationalization of VET is actively pursued through Erasmus+ programs and cooperation with Nuffic, which enhances students' intercultural competencies.

The contemporary trends in quality assurance of VET for specialists in the Kingdom of the Netherlands include: aligning VET with labor market needs and graduate employment; development of professional competence and lifelong learning; development of "green" skills; digital transformation of VET and the use of AI; inclusivity and equal opportunities in VET attainment; professional development of teachers and their engagement in pedagogical activities; internationalization of VET; increasing public funding for VET; and the development of a VET quality culture and internal quality assurance system.

Based on the analysis of trends in quality assurance of VET for specialists in the Kingdom of the Netherlands, which is characterized by multifacetedness, adaptability to the labor market, and a high level of institutional self-regulation, recommendations are proposed for improving the quality assurance system of vocational education in Ukraine:

- Improvement of educational program structure and content: Based on a clear structure of qualification levels harmonized with the European (EQF), optimize the network of vocational education institutions by consolidating small institutions into large specialized professional colleges and regional centers, similar to the Dutch ROCs, to increase management efficiency. Grant vocational education institutions autonomy in developing educational and training programs, provided that labor market needs are taken into account, which will contribute to the flexibility and relevance of vocational education.
- Development of a dual vocational education system: Create a legal framework for concluding agreements between vocational education institutions and employers; stimulate employers to participate in dual education through tax incentives or subsidies for companies providing internship placements; introduce flexible educational pathways for youth and adults, including short-term retraining programs for adults, similar to Dutch BBL programs.
- Establishment of a tripartite organization for coordinating labor market linkages: Create an analogue of SBB in Ukraine – a tripartite organization

that will unite representatives of vocational education institutions, employers, and the government. This organization will be responsible for developing and updating professional standards aligned with labor market needs, accrediting companies for student practical training, collecting labor market data, and forecasting personnel needs; introduce monitoring of graduate employment to assess the compliance of educational programs with market needs.

- Implementation of an internal and external vocational education quality assessment system: Introduce the Plan-Do-Check-Act (PDCA) sequence of stages into the quality assurance system of Ukrainian vocational education institutions, with clear stages of planning, implementation, verification, and improvement; create an independent oversight body similar to the Dutch Inspectorate of Education to monitor educational quality, financial activities, and compliance with legislation; develop "inspection cards" for vocational education institutions that will publicly reflect their effectiveness, promoting transparency and competitiveness; integrate EQAVET standards into the national quality assurance system for harmonization with European practices.
- Improvement of vocational guidance and reduction of vocational education dropout rates: Develop a vocational guidance system in general secondary and vocational education institutions, including counseling, testing, and familiarization with professions through practical classes; introduce mentorship programs for first-year students in vocational education institutions to help them adapt to their chosen specialty; create mechanisms for tracking graduates' career paths to assess the effectiveness of vocational guidance measures.
- Integration of "green" skills and research initiatives: Introduce "green" skills, especially for professions related to agriculture, energy, and ecology; establish research centers at vocational education institutions, similar to "hubs," to engage students in applied research; involve businesses in financing research projects in vocational education institutions, which will contribute to the introduction of innovations into vocational education content.
- Digital transformation and AI integration: Integrate digital competencies into all vocational education and training programs, including AI skills and data analysis; develop training programs for teachers to work with digital technologies and AI, with an emphasis on assessing algorithmic learning materials; create a platform for knowledge exchange between vocational education institutions regarding the use of digital technologies, similar to Npuls.
- Ensuring inclusivity and equal opportunities in vocational education attainment: Implement an inclusivity policy similar to "Appropriate education" that will ensure access to vocational education for students with special educational needs; create a monitoring system to identify cases of discrimination during study and practical training; develop support programs for students from vulnerable groups, including financial assistance and psychological support.
- Professional development of teachers: Introduce professional development programs for teachers of vocational education institutions, including training on pedagogical innovations and digital technologies; create grant programs for teachers who develop innovative teaching methods; reduce teacher workload through optimization of curricula and involvement of assistants.
- Internationalization of vocational education: Expand the participation of students and teachers of Ukrainian vocational education institutions in Erasmus+ programs; expand cooperation with European VET institutions for experience exchange and development of joint educational programs; integrate intercultural competencies into curricula to prepare students for work in a globalized labor market.

The implementation of the proposed recommendations in Ukrainian vocational education institutions will require legislative reform, stakeholder engagement, and investment in infrastructure and human capital. This will contribute to improving the quality of vocational education, its compliance with market needs, and its integration into the European educational space.

Prospects for further scientific research may focus on investigating: the effectiveness of measures to overcome inequality in educational opportunities; optimal models for integrating AI and digital skills; ways to enhance teacher and parent involvement in VET quality assurance processes, etc. Despite the significant amount of research, there is also a need for interdisciplinary studies to understand and overcome the underlying socio-cultural factors that shape educational choices and perceptions of VET in the Kingdom of the Netherlands.

List of references

Autoriteit Persoonsgegevens. (n.d.). *Algorithmic and AI risks in education*. Retrieved from https://www.autoriteitpersoonsgegevens.nl/en/themes/algorithms-ai/ai-algorithmic-risks-developments-in-the-netherlands/algorithmic-and-ai-risks-in-education.

BWPat. (n.d.). *Competence-based VET in the Netherlands: background and pitfalls*. Retrieved from https://www.bwpat.de/7eu/biemans_etal_nl_bwpat7.pdf.

Cedefop. (2017). *VET in the Netherlands: a strong reputation abroad, but a poor image at home*. Retrieved from https://www.cedefop.europa.eu/en/press-releases/vet-netherlands-strong-reputation-abroad-poor-image-home.

Cedefop. (2019). *VET in Europe database | Vocational education and training in Europe | Netherlands*. Retrieved from https://www.cedefop.europa.eu/en/tools/vet-in-europe/systems/netherlands-2019.

Cedefop. (2021). *The Vocational Education Act (Wet educatie en beroepsonderwijs: WEB)*. Retrieved from https://www.cedefop.europa.eu/files/netherlands_future_of_vet_vol.2.pdf.

Cedefop. (2023). *VET in Europe database | Vocational education and training in Europe | Netherlands*. Retrieved from https://www.cedefop.europa.eu/en/tools/vet-in-europe/systems/netherlands-u3.

Cedefop. (2024). *Netherlands: VET's first steps to becoming an equal partner in research and knowledge networks*. Retrieved from https://www.cedefop.europa.eu/en/news/netherlands-vets-first-steps-becoming-equal-partner-research-and-knowledge-networks.

Cedefop. (2025). *Meeting skill needs for the green transition: skills anticipation and VET for a greener future: Cedefop practical guide 4*. Publications Office of the European Union. DOI: 10.2801/6833866. Retrieved from https://www.cedefop.europa.eu/en/publications/4220.

Cedefop. (n.d.). *Timeline VET policies Europe: Lifelong learning catalyst (LLO katalysator)*. Retrieved from https://www.cedefop.europa.eu/en/tools/timeline-vet-policies-europe/search/43545.

DeFabrique. (n.d.). *The Inspectorate of Education*. Retrieved from https://defabrique.nl/en/case/the-inspectorate-of-education/.

DonorTracker. (n.d.). *Netherlands Education ODA*. Retrieved from https://donortracker.org/donor_profiles/netherlands/education.

Dutch Education Council. (2025). *In brief: Poverty and education*. Retrieved from https://www.onderwijsraad.nl/publicaties/adviezen/2025/04/16/in-brief-poverty-and-education.

EQAVET. (2023). *EQAVET Peer Learning Activity discusses Quality Assurance of digital tools and delivery in VET*. Retrieved from https://employment-social-affairs.ec.europa.eu/news/eqavet-peer-learning-activity-discusses-quality-assurance-digital-tools-and-delivery-vet-2023-11-28_en.

EQAVET. (2025). *How data is being used to improve quality assurance in vocational education in the Netherlands*. Retrieved from https://eqavet.nl/wp-content/uploads/2025/02/Research-report-Data-usage-in-quality-assurance-Workshop-report.pdf.

EQAVET. (n.d.). *External review studyvisit the Netherlands November2019*. Retrieved from https://eqavet.nl/wp-content/uploads/2020/03/External_review_studyvisit_the_Netherlands_November2019.pdf.

Erasmus University Rotterdam. (n.d.). *Collaboration with the Inspectorate of Education to improve schools*. Retrieved from https://www.eur.nl/en/ese/news/collaboration-inspectorate-education-improve-schools.

EUA. (n.d.). *Cross-border external quality assurance: practical experiences and recommendations*. Retrieved from https://www.eua.eu/publications/conference-papers/cross-border-external-quality-assurance-practical-experiences-and-recommendations.html.

EURES. (n.d.). *Labour market information Netherlands*. Retrieved from https://eures.europa.eu/living-and-working/labour-market-information-europe/labour-market-information-netherlands_en.

Eurydice. (2023). *Netherlands*. Retrieved from https://eurydice.eacea.ec.europa.eu/eurypedia/netherlands/

Future VET Skills. (n.d.). *Future VET Skills project*. Retrieved from https://future-vet-skills.com/.

Gatsby Foundation. (2024). *A comparative case study analysis of three European QA systems for VET*. Retrieved from https://www.gatsby.org.uk/uploads/education/latest/a-comparative-case-study-analysis-of-three-european-qa-systems-for-vet-2024.pdf.

Government of the Netherlands. (2023). *Working together on talent*. Retrieved from https://www.government.nl/binaries/government/documenten/reports/2023/02/14/working-together-on-talent/working-together-on-talent.pdf.

Government of the Netherlands. (2024). *Government-wide vision on generative AI of the Netherlands*. Retrieved from https://www.government.nl/binaries/government/documenten/parliamentary-documents/2024/01/17/government-wide-vision-on-generative-ai-of-the-netherlands/Government-wide+vision+on+generative+AI+of+the+Netherlands.pdf.

Government of the Netherlands. (n.d.). *Appropriate education*. Retrieved from https://www.government.nl/topics/appropriate-education.

Greenovet. (n.d.). *Embracing Vocational Excellence for a Green Europe*. Retrieved from http://www.greenovet.eu/pt/news/20/embracing-vocational-excellence-for-a-green-europe/.

Holland Times. (2025). *MBO-educated people can sometimes earn more than those at HBO level*. Retrieved from https://www.hollandtimes.nl/2025-edition-2-march-april/mbo-educated-people-can-sometimes-earn-more-than-those-at-hbo-level/.

MBO Amersfoort. (n.d.). *Brochure: This is VET in the Netherlands*. Retrieved from https://www.mboamersfoort.nl/media/oy0bmvxv/brochure_this_is_vet_in_the_netherlands_def_site.pdf.

MBO Raad. (2023). *Dutch MBO Council*. Retrieved from https://www.leadglocal.eu/partners/dutch-mbo-council.

MBO Raad. (n.d.). *Internationalisation*. Retrieved from https://www.mboraad.nl/internationalisation.

Netherlands Court of Audit. (2023). *Equality of opportunity in the MBO*. Retrieved from https://english.rekenkamer.nl/publications/reports/2023/09/12/equality-of-opportunity-in-the-mbo.

Netherlands Court of Audit. (2024). *Summary: Moving towards equality of opportunity in secondary vocational education ('MBO')*. Retrieved from https://english.rekenkamer.nl/binaries/rekenkamer-english/documenten/reports/2024/02/14/moving-towards-equality-of-opportunity-in-secondary-vocational-education-mbo/PAC21+Summary.pdf.

Nuffic. (n.d.). *Secondary vocational education in the Netherlands*. Retrieved from https://www.nuffic.nl/en/education-systems/the-netherlands/secondary-vocational-education.

NVAO. (n.d.). *Quality assurance system of the Netherlands*. Retrieved from https://www.nvao.net/en/quality-assurance-system-of-the-netherlands.

OECD. (n.d.). *Vocational education and training (VET)*. Retrieved from https://www.oecd.org/en/topics/vocational-education-and-training-vet.html.

Onderwijsinspectie. (n.d.). *Home*. Retrieved from https://english.onderwijsinspectie.nl/.

QQI. (n.d.). *Mbo Rijnland*. Retrieved from https://qsdocs.qqi.ie/Downloads/Mbo%20Rjinland.pdf.

RSIS International. (n.d.). *The temporal evolution of research trends in vocational training education: a bibliometric analysis*. Retrieved from https://rsisinternational.org/journals/ijriss/Digital-Library/volume-8-issue-12/4548-4564.pdf.

SGI Europe. (n.d.). *Green skills political EN*. Retrieved from https://sgieurope.org/files/FINAL-Green-skills-political-EN.pdf.

The Hague University of Applied Sciences. (n.d.). *Quality of our degree programmes*. Retrieved from https://www.thuas.com/about-thuas/organisation/quality/quality-our-degree-programmes.

The Netherlands. (n.d.). *VET in the Netherlands 2016*. Retrieved from https://archiv-nuv.npi.cz/uploads/EQAVET/soubory/VET_in_the_Netherlands_2016_en.pdf.

UCLanData. (n.d.). *The integration of Artificial Intelligence (AI) into healthcare has accelerated globally, yet its implications in veterinary education and clinical training remain underexplored*. Retrieved from https://uclandata.uclan.ac.uk/596/.

University of Utrecht. (n.d.). *Education - Faculty of Veterinary Medicine*. Retrieved from https://www.uu.nl/en/organisation/faculty-of-veterinary-medicine/education.

UvA. (2024). *Npuls: all about digital innovation in education*. Retrieved from https://www.uva.nl/shared-content/uva/en/news/news/2024/11/npuls-all-about-digital-innovation-in-education.html.

Xpat. (n.d.). *Special needs education Netherlands*. Retrieved from https://www.xpat.nl/uncategorized/special-needs-education-netherlands/.

Zorgtoeslag. (n.d.). *Reddit discussion on Dutch budget cuts*. Retrieved from https://www.reddit.com/r/Netherlands/comments/1ji1wp0/following_the_wrong_example_budget_cuts_threaten/

Радкевич, О. П. (2018). Законодавче забезпечення освіти та професійної підготовки в нідерландах. *Професійна педагогіка, 12*, 127-135. https://doi.org/10.32835/2223-5752.2016.12.127-135.

Радкевич, В.О., Бородієнко, О.В., & Кравець, С.Г. (2021). Професійна (професійно-технічна) освіта України в контексті євроінтеграційних процесів (порівняльний аналіз із країнами Європейського Союзу) : науково-аналітичні матеріали. Інститут професійно-технічної освіти НАПН України. Київ: ТОВ «ТРОПЕА». https://bit.ly/2URM9lW

Радкевич, В. (2023). Публічно-приватне партнерство у професійній освіті європейських країн: провідні тенденції розвитку. Професійна педагогіка, 2(27), 14-28. https://doi.org/10.32835/2707-3092.2023.27.14-28

Радкевич, В. (2022). Тенденції розвитку державно-приватного партнерства у сфері професійної освіти і навчання в країнах європейського союзу. Професійна педагогіка, 2(25), 4-13. https://doi.org/10.32835/2707-3092.2022.25.4-13

Translated & Transliterated

Autoriteit Persoonsgegevens. (n.d.). Algorithmic and AI risks in education. Retrieved from https://www.autoriteitpersoonsgegevens.nl/en/themes/algorithms-ai/ai-algorithmic-risks-developments-in-the-netherlands/algorithmic-and-ai-risks-in-education.

BWPat. (n.d.). Competence-based VET in the Netherlands: background and pitfalls. Retrieved from https://www.bwpat.de/7eu/biemans_etal_nl_bwpat7.pdf.

Cedefop. (2017). VET in the Netherlands: a strong reputation abroad, but a poor image at home. Retrieved from https://www.cedefop.europa.eu/en/press-releases/vet-netherlands-strong-reputation-abroad-poor-image-home.

Cedefop. (2019). VET in Europe database | Vocational education and training in Europe | Netherlands. Retrieved from https://www.cedefop.europa.eu/en/tools/vet-in-europe/systems/netherlands-2019.

Cedefop. (2021). The Vocational Education Act (Wet educatie en beroepsonderwijs: WEB). Retrieved from https://www.cedefop.europa.eu/files/netherlands_future_of_vet_vol.2.pdf.

Cedefop. (2023). VET in Europe database | Vocational education and training in Europe | Netherlands. Retrieved from https://www.cedefop.europa.eu/en/tools/vet-in-europe/systems/netherlands-u3.

Cedefop. (2024). Netherlands: VET's first steps to becoming an equal partner in research and knowledge networks. Retrieved from https://www.cedefop.europa.eu/en/news/netherlands-vets-first-steps-becoming-equal-partner-research-and-knowledge-networks.

Cedefop. (2025). Meeting skill needs for the green transition: skills anticipation and VET for a greener future: Cedefop practical guide 4. Publications Office of the European Union. DOI: 10.2801/6833866. Retrieved from https://www.cedefop.europa.eu/en/publications/4220.

Cedefop. (n.d.). Timeline VET policies Europe: Lifelong learning catalyst (LLO katalysator). Retrieved from https://www.cedefop.europa.eu/en/tools/timeline-vet-policies-europe/search/43545.

DeFabrique. (n.d.). The Inspectorate of Education. Retrieved from https://defabrique.nl/en/case/the-inspectorate-of-education/.

DonorTracker. (n.d.). Netherlands Education ODA. Retrieved from https://donortracker.org/donor_profiles/netherlands/education.

Dutch Education Council. (2025). In brief: Poverty and education. Retrieved from https://www.onderwijsraad.nl/publicaties/adviezen/2025/04/16/in-brief-poverty-and-education.

EQAVET. (2023). EQAVET Peer Learning Activity discusses Quality Assurance of digital tools and delivery in VET. Retrieved from https://employment-social-affairs.ec.europa.eu/news/eqavet-peer-learning-activity-discusses-quality-assurance-digital-tools-and-delivery-vet-2023-11-28_en.

EQAVET. (2025). How data is being used to improve quality assurance in vocational education in the Netherlands. Retrieved from https://eqavet.nl/wp-content/uploads/2025/02/Research-report-Data-usage-in-quality-assurance-Workshop-report.pdf.

EQAVET. (n.d.). External review studyvisit the Netherlands November2019. Retrieved from https://eqavet.nl/wp-content/uploads/2020/03/External_review_studyvisit_the_Netherlands_November2019.pdf.

Erasmus University Rotterdam. (n.d.). Collaboration with the Inspectorate of Education to improve schools. Retrieved from https://www.eur.nl/en/ese/news/collaboration-inspectorate-education-improve-schools.

EUA. (n.d.). Cross-border external quality assurance: practical experiences and recommendations. Retrieved from https://www.eua.eu/publications/conference-papers/cross-border-external-quality-assurance-practical-experiences-and-recommendations.html.

EURES. (n.d.). Labour market information Netherlands. Retrieved from https://eures.europa.eu/living-and-working/labour-market-information-europe/labour-market-information-netherlands_en.

Eurydice. (2023). Netherlands. Retrieved from https://eurydice.eacea.ec.europa.eu/eurypedia/netherlands/

Future VET Skills. (n.d.). Future VET Skills project. Retrieved from https://future-vet-skills.com/.

Gatsby Foundation. (2024). A comparative case study analysis of three European QA systems for VET. Retrieved from https://www.gatsby.org.uk/uploads/education/latest/a-comparative-case-study-analysis-of-three-european-qa-systems-for-vet-2024.pdf.

Government of the Netherlands. (2023). Working together on talent. Retrieved from https://www.government.nl/binaries/government/documenten/reports/2023/02/14/working-together-on-talent/working-together-on-talent.pdf.

Government of the Netherlands. (2024). Government-wide vision on generative AI of the Netherlands. Retrieved from https://www.government.nl/binaries/government/documenten/parliamentary-documents/2024/01/17/government-wide-vision-on-generative-ai-of-the-netherlands/Government-wide+vision+on+generative+AI+of+the+Netherlands.pdf.

Government of the Netherlands. (n.d.). Appropriate education. Retrieved from https://www.government.nl/topics/appropriate-education.

Greenovet. (n.d.). Embracing Vocational Excellence for a Green Europe. Retrieved from http://www.greenovet.eu/pt/news/20/embracing-vocational-excellence-for-a-green-europe/.

Holland Times. (2025). MBO-educated people can sometimes earn more than those at HBO level. Retrieved from https://www.hollandtimes.nl/2025-edition-2-march-april/mbo-educated-people-can-sometimes-earn-more-than-those-at-hbo-level/.

MBO Amersfoort. (n.d.). Brochure: This is VET in the Netherlands. Retrieved from https://www.mboamersfoort.nl/media/oy0bmvxv/brochure_this_is_vet_in_the_netherlands_def_site.pdf.

MBO Raad. (2023). Dutch MBO Council. Retrieved from https://www.leadglocal.eu/partners/dutch-mbo-council.

MBO Raad. (n.d.). Internationalisation. Retrieved from https://www.mboraad.nl/internationalisation.

Netherlands Court of Audit. (2023). Equality of opportunity in the MBO. Retrieved from https://english.rekenkamer.nl/publications/reports/2023/09/12/equality-of-opportunity-in-the-mbo.

Netherlands Court of Audit. (2024). Summary: Moving towards equality of opportunity in secondary vocational education ('MBO'). Retrieved from https://english.rekenkamer.nl/binaries/rekenkamer-english/documenten/reports/2024/02/14/moving-towards-equality-of-opportunity-in-secondary-vocational-education-mbo/PAC21+Summary.pdf.

Nuffic. (n.d.). Secondary vocational education in the Netherlands. Retrieved from https://www.nuffic.nl/en/education-systems/the-netherlands/secondary-vocational-education.

NVAO. (n.d.). Quality assurance system of the Netherlands. Retrieved from https://www.nvao.net/en/quality-assurance-system-of-the-netherlands.

OECD. (n.d.). Vocational education and training (VET). Retrieved from https://www.oecd.org/en/topics/vocational-education-and-training-vet.html.

Onderwijsinspectie. (n.d.). Home. Retrieved from https://english.onderwijsinspectie.nl/.

QQI. (n.d.). Mbo Rijnland. Retrieved from https://qsdocs.qqi.ie/Downloads/Mbo%20Rjinland.pdf.

RSIS International. (n.d.). The temporal evolution of research trends in vocational training education: a bibliometric analysis. Retrieved from https://rsisinternational.org/journals/ijriss/Digital-Library/volume-8-issue-12/4548-4564.pdf.

SGI Europe. (n.d.). Green skills political EN. Retrieved from https://sgieurope.org/files/FINAL-Green-skills-political-EN.pdf.

The Hague University of Applied Sciences. (n.d.). Quality of our degree programmes. Retrieved from https://www.thuas.com/about-thuas/organisation/quality/quality-our-degree-programmes.

The Netherlands. (n.d.). VET in the Netherlands 2016. Retrieved from https://archiv-nuv.npi.cz/uploads/EQAVET/soubory/VET_in_the_Netherlands_2016_en.pdf.

UCLanData. (n.d.). The integration of Artificial Intelligence (AI) into healthcare has accelerated globally, yet its implications in veterinary education and clinical training remain underexplored. Retrieved from https://uclandata.uclan.ac.uk/596/.

University of Utrecht. (n.d.). Education - Faculty of Veterinary Medicine. Retrieved from https://www.uu.nl/en/organisation/faculty-of-veterinary-medicine/education.

UvA. (2024). Npuls: all about digital innovation in education. Retrieved from https://www.uva.nl/shared-content/uva/en/news/news/2024/11/npuls-all-about-digital-innovation-in-education.html.

Xpat. (n.d.). Special needs education Netherlands. Retrieved from https://www.xpat.nl/uncategorized/special-needs-education-netherlands/.

Zorgtoeslag. (n.d.). Reddit discussion on Dutch budget cuts. Retrieved from https://www.reddit.com/r/Netherlands/comments/1ji1wp0/following_the_wrong_example_budget_cuts_threaten.

Radkevych, O. P. (2018). Zakonodavche zabezpechennia osvity ta profesiinoi pidhotovky v Niderlandakh [Legislative provision of education and vocational training in the Netherlands]. Profesina pedahohika, 12, 127-135. https://doi.org/10.32835/2223-5752.2016.12.127-135.

Radkevych, V. O., Borodiienko, O. V., & Kravets, S. H. (2021). Profesina (profesiino-tekhnichna) osvita Ukrainy v konteksti yevrointehratsiinykh protsesiv (porivnialnyi analiz iz krainamy Yevropeiskoho Soiuzu) : naukovo-analitychni materialy [Vocational (vocational-technical) education of Ukraine in the context of European integration processes (comparative analysis with the countries of the European Union) : scientific and analytical materials]. Institute of Vocational Education of the National Academy of Educational Sciences of Ukraine. Kyiv: TOV «TROPEA». https://bit.ly/2URM9lW

Radkevych, V. (2023). Publichno-pryvatne partnerstvo u profesiinii osviti yevropeiskykh krain: providni tendentsii rozvytku [Public-private partnership in vocational education of European countries: leading development trends]. Profesina pedahohika, 2(27), 14-28. https://doi.org/10.32835/2707-3092.2023.27.14-28.

Radkevych, V. (2022). Tendentsii rozvytku derzhavno-pryvatnoho partnerstva u sferi profesiinoi osvity i navchannia v krainakh Yevropeiskoho Soiuzu [Trends in the development of public-private partnership in vocational education and training in European Union countries]. Profesina pedahohika, 2(25), 4-13. https://doi.org/10.32835/2707-3092.2022.25.4-13.

DOI: https://doi.org/10.32835/2707-3092.2025.30.104-122

ТЕНДЕНЦІЇ ЗАБЕЗПЕЧЕННЯ ЯКОСТІ ПРОФЕСІЙНОЇ ОСВІТИ І ПІДГОТОВКИ ФАХІВЦІВ У КОРОЛІВСТВІ НІДЕРЛАНДИ

Алла Онищенко

доктор філософії, науковий співробітник, Інститут професійної освіти НАПН України, https://orcid.org/0000-0001-6098-8792, e-mail: aponyschenko@gmail.com

Реферат:

Актуальність статті зумовлена ключовою роллю професійної освіти і підготовки (далі-ПОП) у формуванні конкурентоспроможної робочої сили для стратегічно важливих секторів економіки Королівства Нідерланди. Негативне сприйняття ПОП всередині країни, попри її міжнародне визнання, створює виклики для залучення молоді та підтримання суспільної довіри до системи. Сучасні вимоги до інтеграції цифрових технологій, штучного інтелекту та забезпечення інклюзивності тощо зумовлюють необхідність постійного вдосконалення системи забезпечення якості ПОП. Дослідження цих та інших тенденцій є важливим для України, оскільки дає змогу адаптувати передовий досвід Нідерландів для підвищення ефективності національної системи забезпечення якості професійної освіти.

Метою статті є виявлення та аналіз основних тенденцій забезпечення якості ПОП фахівців у Королівстві Нідерланди, з'ясування можливостей їх урахування у вдосконаленні системи забезпечення якості професійної освіти в Україні.

Методи: вивчення наукових джерел, законодавчих, нормативно-правових документів, емпіричних даних щодо забезпечення якості ПОП фахівців у Королівстві Нідерланди – для з'ясування стану проблеми дослідження; теоретичний аналіз і синтез – для виявлення основних тенденцій забезпечення якості ПОП фахівців у Нідерландах; узагальнення та систематизація– для формування висновків і рекомендацій.

Результати: виявлено та проаналізовано: багаторівневу структуру ПОП фахівців у Королівстві Нідерланди (початковий, базовий, професійний, спеціалізований); дві освітні траєкторії (шкільно-орієнтована (BOL) – для молоді; робітничо-орієнтована (BBL) – для дорослих); типи закладів ПОП (регіональний навчальний центр (ROCs), сільськогосподарські коледжі, спеціалізовані професійні коледжі та приватні акредитовані заклади); законодавчу реформу у сфері ПОП; систему забезпечення якості ПОП (розподіл відповідальності між закладами ПОП (саморегуляція) та зовнішніми органами (Інспекція освіти), тристороння організація SBB); тенденції забезпечення якості ПОП фахівців.

Висновки: до сучасних тенденцій забезпечення якості ПОП фахівців у Королівстві Нідерланди віднесено: узгодження ПОП з потребами ринку праці (високий рівень працевлаштування випускників: 85,4%,з них 81% знаходять роботу впродовж трьох місяців); розвиток професійної компетентності та навчання впродовж життя (освіта орієнтована на компетентності, ініціатива LLO Katalysator (2022-2027 рр.) підтримує безперервне навчання); розвиток «зелених» навичок (інтеграція досліджень через «хаби» для розвитку екологічних компетентностей); цифрова трансформація ПОП та використання штучного інтелекту (ШІ) (програма Npuls до 2031 р. сприяє цифровізації); інклюзивність та рівні можливості здобуття ПОП (інвестиції €1 млрд на 2024-2027 рр. і політика «Appropriate education» спрямовані на забезпечення рівних можливостей); професійний розвиток викладачів та їхня залученість до педагогічної діяльності (нестача 13,500 тис. викладачів впливає на якість, а гранти Comenius Teaching Fellow спрямовані на їх утримання); інтернаціоналізація ПОП (програми Erasmus+ сприяють розширенню мобільності та розвитку міжкультурних компетентностей); зростання обсягів державного фінансування ПОП (високі державні витрати на ПОП – 0,76% ВВП, але є занепокоєння щодо ефективності розподілу коштів); розвиток культури якості ПОП та внутрішньої системи забезпечення якості (саморегуляція закладів ПОП, опитування студентів і співпраця зі стейкхолдерами формують культуру якості ПОП, але є необхідність залучення викладачів).

Ключові слова: *тенденції; професійна освіта і підготовка; система забезпечення якості; Королівство Нідерланди; рекомендації для України.*

Manuscript received: 06.02.2025
Accepted for publication after peer review: 21.04.2025
Published: 29.05.2025