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BEHEALTH

BENCHMARKING OF THE INTERNATIONAL AND EUROPEAN UNION QUALITY ASSURANCE FRAMEWORKS IN NURSING

CATHOLIC UNIVERSITY IN RUŽOMBEROK, Slovakia
and partners

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1 INTRODUCTION

The new era, Health Quality 5.0, for which we are preparing health personnel, must enable and be embedded in an integrated, coordinated and people-centred health system supported by a learning health system and new Quality Assurance (QA) approaches.

The work of health professionals is expanding in scope, scale, and urgency to respond to large-scale global changes and challenges, including risks to safe, accessible, and quality health care, as well as a crisis in workforce resilience and the erosion of public trust. Furthermore, the rapidly changing environment and the shift from face-to-face encounters to new communication technologies and social networks threaten students' well-being and mental health (Haidt & Allen, 2020).

Educators who prepare health professionals must be ready to address these challenges and meet the additional demands of equity and co-produced, inclusive services. Therefore, the current digital transition and a future aligned with the shift from digitalisation to personalisation require a new quality assurance and improvement system. In any healthcare system, nurses are the backbone, playing a critical role that extends far beyond the general perception of their responsibilities. From bedside nursing in hospitals to community health education and leadership roles, nurses contribute significantly to population health and well-being (Melariri, Osoba, Williams, & Melariri, 2022). Therefore, quality assurance in professional nursing education is essential for maintaining population health and socio-economic development.

The BEHEALTH project aims to support Vocational Education and Training (VET) and Work-Based Learning (WBL) providers in nursing education in evaluating and improving their quality assurance practices. The project aims to provide the target group with innovative 360-degree control tools integrated into a novel Intelligent Mentoring Tool (IMT) that will enable them to assess their QA policy in line with European Union (EU) standards and guide them to tailored action plans for improvement, with the active involvement of all interested parties. Feedback from IMT will serve multiple stakeholders, such as mentors, mentees, educators/trainers and administrators.

As the Erasmus+ BEHEALTH project covers VET and WBL in nursing at different International Standard Classification of Education (ISCED) and European Qualifications Framework (EQF) levels of education, the teachers and mentors are qualified educators and healthcare professionals, the mentees are nursing students, and the administrators are people who manage the Internal Quality Assurance System (IQAS) and supervise the study programme.

This document serves as the basis for developing the 360-degree control tools and an Intelligent Mentoring Tool. It defines basic terminology and outlines quality assurance practices and frameworks for VET and WBL in nursing education.

The BEHEALTH project team mapped and analysed information about QA practices and frameworks for VET and WBL in nursing at the Global, European, and National levels in Slovakia, Hungary, Cyprus, Turkey, Greece, and Ireland. They also summarised knowledge for QA frameworks for organisations offering nursing qualifications and WBL in nursing.

2 METHODOLOGY

The systematic literature review, mapping and comparison were used as the critical qualitative research methodology. We also used conceptual images and tables as visual tools to organise and display knowledge.

We then continued to analyse the data through a systematic research process, through content and thematic analysis. Finally, we compared the NVET and NWBL frameworks, guidelines, and standards in relation to each other across the geographical area of the Erasmus+ BEHEALTH project partners (Slovakia, Hungary, Cyprus, Turkey, Greece and Ireland).

The Erasmus+ BEHEALTH project partners based their collaborative research on consensus. Team members and their associated partners used their expertise to discuss the findings, ensuring the results were reliable and comprehensive. Team members' expertise was used to validate the findings, ensuring the results were robust and comprehensive.

3 CONCEPTIONS OF NURSING VET AND WBL QUALITY ASSURANCE

3.1 What Does Vocational Mean in Nursing?

A nurse's license is defined by nursing education. Nurses with any level of training are still nurses, but their scope of practice differs. Vocational education focuses heavily on practical skills. The "vocational" in vocational nursing means that training has a specific occupational focus. The curriculum excludes courses that do not improve nursing skills. Students learn nursing theory in the context of hands-on practice (Cybertext, 2024).

3.2 What Does WBL in Nursing Education Mean?

The characteristics of WBL encompass consolidation of expertise at work with formal knowledge, learner-managed rather than academic-managed learning, and university educators working in partnership with clinical staff to deliver learning (Attenborough, Abbott, Brook, & Knight, 2019); (Wexhe, 2019). Work-based learning is any training programme students or employees complete while working. This approach contrasts with traditional learning methods, which tend to take place in a classroom, laboratory setting, or even at home through remote learning. Workplace learning schemes tend to be vocational, with learners immersing themselves in the workplace to learn a job and gain a qualification to help them take the first steps in their career (Indeed, 2024).

Types of nursing work-based learning schemes according to (Indeed, 2024) (Yap & Melder, 2018) (Atkinson, 2016):

- **Clinical Rotations:** Students gain hands-on experience in different healthcare settings under the supervision of experienced nurses and mentors.
- **Preceptorship Programs:** A one-on-one mentorship where a practising nurse (preceptor) guides and supports a nursing student or new graduate in a clinical setting.
- **Apprenticeships:** Structured programs combining on-the-job training with classroom instruction, often leading to certification or licensure.
- **Internships:** Short-term work experiences that allow students to apply classroom knowledge in real-world healthcare environments.
- **Service Learning:** Combines community service with academic coursework, allowing students to address community health needs while learning.
- **Simulation-Based Learning:** Utilises high-fidelity mannequins and virtual reality to replicate clinical scenarios, providing a safe environment for students to practice and refine their skills.

Neither global nor EU laws directly regulate VET and WBL. However, several international agreements, recommendations, and frameworks have influenced VET and WBL programmes (UNESCO, 2003) (Cedefop, 2015).

3.3 What Does VET Quality Assurance in Nursing Education Mean?

Quality Assurance in Nursing Vocational Education and Training (NVET) ensures that the educational programs and training for aspiring nurses meet high standards of quality and effectiveness. It involves systematic processes to ensure education meets specific requirements and prepares students for future roles as competent, skilled nurses. Key aspects are as follows:

- **Accreditation and Compliance**: Programs must adhere to regulations and standards set by accrediting bodies and relevant authorities.
- **Curriculum Development**: Updating and refining the curriculum to incorporate the latest healthcare practices, technologies, and scientific advancements.
- **Assessment and Evaluation**: Regularly evaluate students and programs to ensure learning objectives and competencies are achieved.
- **Pedagogical Staff Qualification**: Ensuring teachers and mentors are highly qualified and possess the necessary expertise and experience.
- **Student Feedback and Continuous Improvement**: Incorporating feedback from students to make ongoing improvements to the educational programs.

These aspects ensure that nursing VET programs produce graduates ready to meet the profession's challenges with the necessary skills and knowledge. Recommendations from the United Nations Educational, Scientific and Cultural Organisation (UNESCO) and the International Labour Organization (ILO) have set out guidelines for improving VET systems, which include the integration of WBL into vocational education curricula (ILO, 2003):

- **European Union (EU) Policies**: The EU promotes work-based learning through various directives and recommendations. Key documents include the "Bruges Communiqué" and the "Riga Conclusions," emphasising WBL's role in lifelong learning and skills development.
- **Sustainable Development Goals** (SDGs): The United Nations' SDG 4 on Quality Education highlights the importance of inclusive and equitable quality education and the promotion of lifelong learning opportunities, which can encompass VET and WBL.
- **Global Employment Agenda**: The ILO's Global Employment Agenda underscores the necessity of aligning education and training with labour market demands to foster employment.

Although each country's implementation of these guidelines may vary, the emphasis is universally on ensuring that VET and WBL programs are inclusive, relevant to industry needs, and contribute to personal and professional development (UNESCO, 2021).

3.4 What Does WBL Quality Assurance in Nursing Education Mean?

Work-Based Learning (WBL) Quality Assurance in Nursing Education refers to the processes and systems put in place to ensure that nursing education programs, which include practical, hands-on learning experiences in real-world healthcare settings, meet high standards of quality and effectiveness. This involves (Work-based Learning Toolkit, n.d.):

- Setting clear learning objectives and outcomes: Ensuring that the practical experiences align with the theoretical knowledge and skills that nursing students need to acquire.
- Monitoring and evaluating: Regularly assessing the quality of both the educational institutions and the workplace settings where students gain practical experience.
- Collaboration: Working closely with healthcare providers, educational institutions, and regulatory bodies to maintain and improve the quality of nursing education.
- Feedback and improvement: Using feedback from students, educators, and healthcare professionals to continuously improve the WBL programs.

The goal is to ensure nursing students are well prepared for their professional roles and that the care they provide meets required standards.

3.5 Nursing Qualification Frameworks

European Qualifications Framework (EQF) is an 8-level, lifelong learning, outcomes-based framework for all types of qualifications that serves as a translation tool between different National Qualifications Frameworks (NQFs). European countries have different national qualification systems. The EQF makes it much easier to understand and compare qualification levels across countries and education and training systems. The EQF covers all types of qualifications ranging from those acquired at the end of compulsory education (Level 1) to the highest qualifications, such as a Doctorate (Level 8). The EQF uses learning outcomes as its main principle and clarifies what a person knows, understands, and can do (Oxbridge, 2018). EQF also supports learning, work and cross-border mobility.

EU 27 member states are Austria, Belgium, Bulgaria, Cyprus, Croatia, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, and Sweden. All 27 EU countries are also European Economic Area (EEA) members, and additional members are Iceland, Liechtenstein and Norway. Albania, Bosnia and Herzegovina, Georgia, Moldova, Montenegro, North Macedonia, Serbia, Turkey, and Ukraine are EU candidate countries. Table 1 describes EQF levels compared with achieved education and nursing qualifications.

Table 1 – EQF Levels, Education Qualifications and Nursing Qualifications

EQF Level	Education qualifications	Nursing qualifications
1	No specific qualification is needed, but basic skills and literacy are needed	Basic healthcare assistant
2	Secondary education	Nursing assistant
3	Upper secondary education	Licensed practical nurse
4	Upper secondary education	Registered nurse (entry-level)
5	Short-cycle tertiary education	Registered nurse (some experience)
6	Bachelor's degree	Bachelor's degree in nursing
7	Master's degree	Master's degree in nursing
8	Doctoral degree	Doctoral degree in nursing

Note: An entry-level registered nurse (EQF Level 4) might start with upper secondary education rather than short-cycle tertiary education. However, to progress to become an experienced registered nurse (EQF Level 5), one needs to undertake short-cycle tertiary education to meet the requirements.

The National Qualifications Frameworks for VET qualifications for nurses in Slovakia, Hungary, Cyprus, Greece, and Turkey have eight levels. The Irish Qualifications Framework (NFQ) has ten levels. The Irish Qualifications Framework levels can be mapped to the EQF levels, but the EQF covers several European countries, while the NFQ is specific to Ireland. Both the EQF and the NFQ aim to improve the recognition and transparency of qualifications, but the EQF focuses on cross-border mobility, while the NFQ focuses on the Irish national context. Table 2 compares Nursing Vocational Education and Training (NVET) with National Qualification Frameworks. The Erasmus+ BEHEALTH project concerns EQF levels 4, 5, 6, and 7.

Table 2 – Comparison of the EQF for NVET with NQF in Slovakia, Hungary, Cyprus, Greece, Turkey and Ireland with Levels of National Nursing Qualifications

EQF Level	Nursing qualifications	SkQF Slovakia	HuQF Hungary	CyQF Cyprus	HQF Greece	TQF Turkey	NFQ Ireland
4*	Registered nurse (entry-level)	Level 4 Diplomas from Vocational Training Programs	Level 4 Vocational Training Certificates	Level 4 Post-secondary Certificates and Diplomas	Level 4 Vocational Training Diplomas	Level 4 Vocational Training Diplomas	Level 5 Vocational Training Certificates or Leaving Certificate (Higher)
5	Registered nurse (some experience level)	Level 6 Higher Vocational Certificate in Nursing	Level 5 Nursing Assistant Diploma	Level 5 Higher Education Institution (HEI) Diploma in Nursing	Level 5 Higher Technician Certificate in Nursing	Level 5 Vocational Nursing Certificate	Level 6 Advanced Certificate or Higher Certificate in Nursing
6	Bachelor's degree in nursing	Level 6 Bachelor's degree in nursing diploma					Level 7 Ordinary Bachelor's Degree or Level 8 Honours Bachelor's Degree, Higher Diploma
7	Master's degree in nursing	Level 7 Master's degree in nursing diploma					Level 9 Master's Degree, Postgraduate Diplomas

Note:

- SkQF Level 4: These programs are designed to provide practical skills and knowledge required for nursing roles https://www.cedefop.europa.eu/en/tools/nqfs-online-tool/countries/slovakia-2020.
- HuQF Level 4: These certificates are awarded after completing vocational education programs focusing on nursing skills and competencies https://www.hungarianqualification.eu/qualification_frameworks/eqf.
- CyQF Level 4: These programs usually last for one to three years and provide the necessary training for nursing roles: https://studyincyprus.org.cy/study/cyprus-qualifications-framework.
- TQF Level 4: These diplomas are obtained after completing vocational education programs that focus on nursing skills and knowledge https://www.etf.europa.eu/sites/default/files/document/Turkey.pdf.
- HQF Level 4: These diplomas are awarded after completing programs that provide practical skills and theoretical knowledge required for nursing roles https://proson.eoppep.gr/en.
- NFQ Level 4: These certificates are awarded after completing vocational education programs that focus on nursing skills and competencies https://www.qqi.ie/what-we-do/the-qualifications-system/national-framework-of-qualifications.

3.6 Concepts of Nursing VET and WBL Quality Assurance

We can find a link between EQF and NQF. For automatic recognition of professional qualifications:

- **For registered Nurses at EQF level 4** (entry-level), around 4600 hours of theoretical and clinical training is required (around 2,000 to 2,500 hours of practical training) (Kielo-Viljamaa, 2024).
- **For registered Nurses at EQF level 5** (some experience level), the minimum training requirements are at least **2 years of full-time study**. A total of **3,000 hours** of training covering the subjects mentioned in Annex V, point 5.2.1 of the Directive (EU, 2005) on the recognition of professional qualifications (2005/36/EC). In addition, registered nurses must demonstrate at least 2 years of professional experience within the last 5 years.
- **For a Bachelor's degree in nursing at EQF level 6**, the minimum training requirements are at least **3 years of full-time study, a total of 4,600 hours** of training covering the subjects mentioned in Annex V, point 5.2.1 of the (EU, 2005). Additionally, Bachelor's degree holders in nursing must demonstrate at least **3 years of professional experience within the last 5 years**.
- **For a Master's degree in nursing at EQF level 7**, at least 5 years of full-time study, a total of 6,000 hours of training covering the subjects mentioned in Annex V point 5.2.1 of the (EU, 2005) . Additionally, Master's degree holders in nursing must demonstrate at least 5 years of professional experience within the last 5 years.

Registered nurses in Erasmus+ BEHEALTH partner countries:

- **SkQF Level 5-6-7**: registered nurses must have their qualifications recognised by the Slovak Chamber of Nurses and Midwives (SKSaPA). This involves submitting academic transcripts, proof of completed clinical hours, and other relevant documents. Proficiency in the Slovak language is mandatory.
- **HuQF Level 5-6**: Nurses must register with the National Directorate General for Hospitals to obtain a unique registration number. This registration is necessary to practice nursing in the country. The HuQF outlines the skills and knowledge required for different qualification levels.
- **CyQF Level 6**: nurses must apply to the National Assistance Centre for the Recognition of Professional Qualifications. They need to provide evidence of their qualifications, such as diplomas and certificates, and meet specific criteria, including age and good character. The Cyprus Council of Recognition of Higher Education Qualifications (KY.S.A.T.S.) evaluates the qualifications.
- **TQF Level 6**: nurses are typically registered after completion of higher education qualifications, such as a Bachelor's degree, by the Turkish Ministry of Health. TQF Level 7 typically corresponds to Master's degrees and postgraduate diplomas, which are not usually required for initial nurse registration but can be pursued for advanced practice roles or specialisations.
- **HQF Level 6-7:** nurses are typically registered after completion of higher education qualifications, such as a Bachelor's degree in Nursing or a Master's degree, by the Hellenic Regulatory Body of Nurses (HRBN).
  HQF level is above the standard requirement for initial nurse registration.
- **NFQ Level 6-7:** nurses must be registered with the Nursing and Midwifery Board of Ireland (NMBI). They need to provide proof of their qualifications and meet the requirements set by the NMBI to practice nursing in the country.

3.7 Knowledge, Skills, Responsibilities and Competencies

This subchapter summarises in Table 3 the requirements for knowledge, skills and competencies of graduates of study programs at EQF levels 4, 5, 6 and 7. The quality of a nursing program can significantly affect students' mental health, so we also included factors that may affect students' mental health.

Table 3 – Summary of knowledge, skills and competencies of study program graduates

EQF	Knowledge	Skills	Responsibilities and Competencies
Level 4 Registered nurse (entry-level)	– Factual and theoretical knowledge in broad contexts within nursing. – Understanding of basic medical and nursing principles, procedures, and practices.	– Cognitive skills: Ability to generate solutions to specific problems in nursing. – Practical skills: Competence in performing routine nursing tasks and procedures.	– Self-management: Ability to work autonomously within predictable guidelines. – Supervision: Supervising routine work of others and taking responsibility for evaluating and improving activities.
Level 5 Registered nurse with some experience equal to SkQF, HuQF, CyQF, TQF, HQF and NFQ	– Specialised Knowledge: Comprehensive, specialised, factual, and theoretical knowledge in nursing. – Awareness of Boundaries: Understanding the limits of one's knowledge and recognising when to seek further information or assistance.	– Cognitive Skills: Ability to develop creative solutions to abstract problems. – Practical Skills: Proficiency in performing complex nursing procedures and patient care tasks.	– Management and Supervision: Ability to manage and supervise work or study activities in contexts where there is unpredictable change. – Self-Management: Exercise self-management within guidelines, adapting behaviour to solve problems. – Autonomy: Applying knowledge and skills autonomously and with responsibility. – Review and Development: Reviewing and developing oneself's performance and that of others.
Level 6 Bachelor's degree in Nursing equivalent to SkQF, HuQF, CyQF, TQF, HQF and NFQ	– Core Nursing Principles: Understanding health care principles, nursing ethics, and patient care techniques. – Medical Sciences: Knowledge of anatomy, physiology, pharmacology, pathology, and microbiology. Behavioral Sciences: Principles of psychology, sociology, and communication.	– Clinical Skills: Performing nursing procedures, patient assessments, administering medications, and providing acute care. – Technical Skills: Using medical equipment, technology, and documentation tools effectively. – Interpersonal Skills: Effective communication with patients, families, and healthcare teams, as well	Responsibilities: – Patient Care: Ensuring high-quality care, patient safety, and adherence to care protocols. – Professional Conduct: Upholding ethical standards, maintaining confidentiality, and adhering to legal regulations. – Continuing Education: Engaging in lifelong learning and staying updated with medical advancements.

EQF	Knowledge	Skills	Responsibilities and Competencies
		as empathy and cultural competence.	Competences: – Critical Thinking: Analysing complex patient situations, making informed decisions, and problem-solving. – Collaboration: Working effectively in multidisciplinary teams and contributing to a collaborative healthcare environment. – Leadership: Demonstrating leadership skills, managing patient care, and mentoring junior staff or students.
Level 7 Master's degree in Nursing equal to SkQF, HuQF, CyQF, TQF, HQF and NFQ	– Advanced Nursing Principles: In-depth understanding of advanced nursing theories, research methodologies, and evidence-based practice – Specialised Medical Sciences: Advanced knowledge in areas such as oncology, cardiology, and critical care nursing. – Healthcare Systems: Understanding of healthcare policies, management, and leadership in nursing.	– Advanced Clinical Skills: Proficiency in complex nursing procedures, patient assessments, and specialised care techniques. – Teaching Skills: Skills to educate and mentor nursing students and colleagues.	Responsibilities: – Patient Care: Providing high-level care to patients, ensuring their safety and well-being. – Ethical Practice: Upholding ethical standards and advocating for patient rights. – Professional Development: Engaging in continuous professional development and contributing to the nursing profession. Competencies: – Critical Thinking: Analysing complex patient situations, making informed decisions, and implementing advanced care plans. – Leadership: Demonstrating leadership in clinical settings, managing teams, and influencing healthcare policies. – Collaboration: Working effectively in multidisciplinary teams and contributing to a collaborative healthcare environment.

Note:

- **Level 6:** Graduates from this program are well-prepared to work in various healthcare settings, including hospitals, clinics, and community health services, ensuring they provide holistic and patient-centred care.
- **Level 7:** Graduates from this program are well-prepared to work in various healthcare settings, including hospitals, clinics, and community health services, ensuring they provide holistic and patient-centred care.

4 ANALYTICAL FRAMEWORKS AND QUALITY ASSURANCE PRACTICE

The analytical frameworks are based on a legal foundation and quality assurance standards for NVET (Figure 2) and NWBL (Figure 3) at Global, European and Local levels of Erasmus+ BEHEALTH partner countries. The quality assurance practice explains the approach and the stakeholders' roles in providing education. These frameworks will support further analysis and the production of project results.

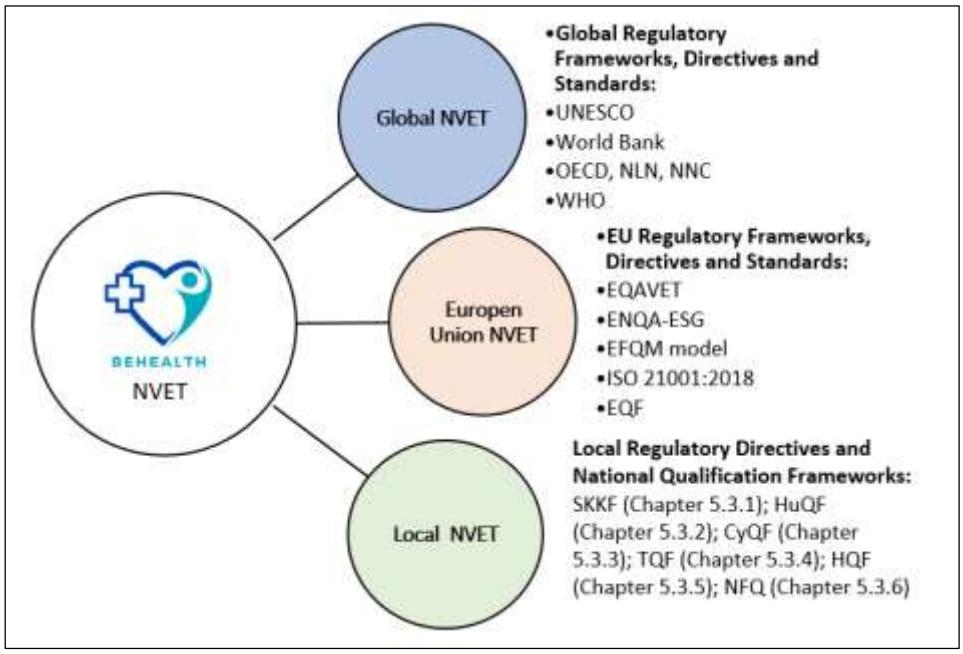

Figure 2 – NVET Regulatory Frameworks, Directives and Standards Structured According to the Different Institutions at the Global, European Union, and National Levels

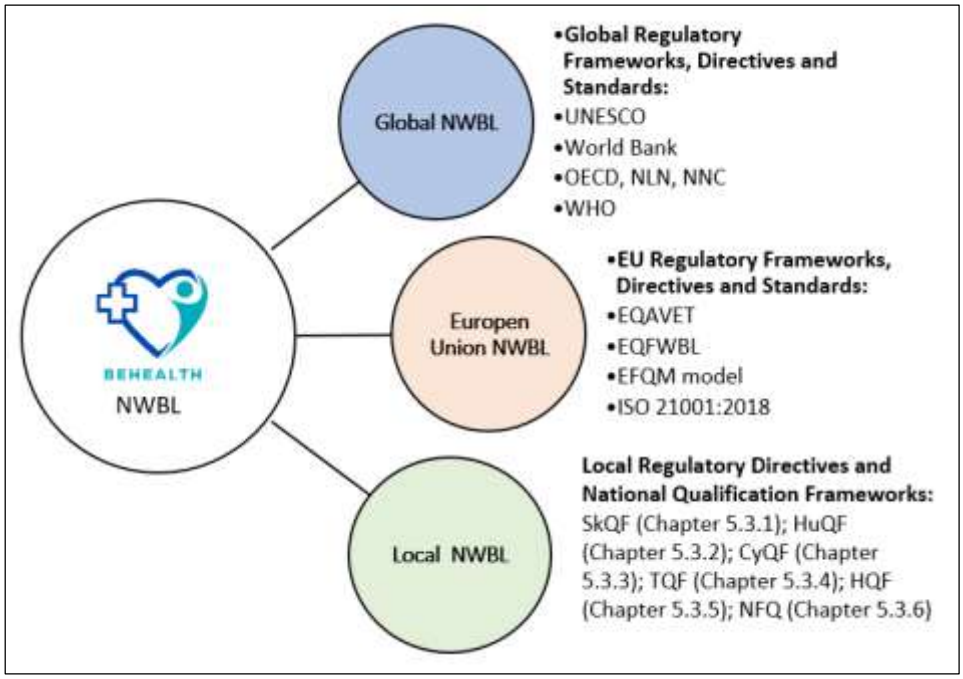

Figure 3 – NWBL Frameworks, Directives and Standards Structured According to the Different Institutions at the Global, European Union, and National Levels

4.1 Global Level

The starting point for research at the Global level was regulatory frameworks and quality assurance standards for VET and WBL.

The basic framework for quality assurance in NVET and NWBL is at the Global level and is described in the following structure: Key Frameworks, Quality Assurance Cycle, Indicators and Descriptors, Application Areas, and Benefits.

4.1.1 Global Regulatory Frameworks for NVET

Global regulatory frameworks for VET aim to standardise and improve the quality of VET systems worldwide. One prominent example is the UNESCO Strategy for Vocational Education and Training, implemented from 2022 to 2029 (UNESCO, 2022). This strategy supports member states in enhancing the relevance of their VET systems and equipping youth and adults with the skills required for employment, decent work, entrepreneurship, and lifelong learning (Keating, Berland, Capone, & Chickering, 2021).

Nursing vocational education and training (NVET) is a critical component of the global healthcare system, especially given the increasing demand for skilled nurses worldwide. Several international agendas and initiatives aim to standardise and improve the quality of nursing education:

- **United Nations Educational, Scientific and Cultural Organization (UNESCO)**:
  - Strategy for NVET: This strategy supports member states in enhancing the relevance of their NVET systems, including nursing education, to equip youth and adults with the skills required for employment and lifelong learning.
  - Recommendation on NVET: This recommendation guides the implementation of inclusive and equitable quality education, promoting lifelong learning opportunities for all, including nursing education.
- **National League for Nursing (NLN)** Core Competencies for Nurse Educators: The NLN has established core competencies for nurse educators to ensure robust nursing education. The Nurses International – Open Educational Resources (NI-OER) initiative aligns freely available content with these competencies to develop specific nurse competencies and attain nursing education equity in low- and middle-income countries.
- **Nursing Now Campaign (NNC)**: This campaign aims to raise the profile and status of nurses globally and influence policy, employment conditions, and education. NNC run in collaboration with the World Health Organization (WHO), and the International Council of Nurses (ICN),

These frameworks and initiatives help ensure that NVET programs are aligned with global standards, contributing to the development of a well-prepared nursing workforce capable of meeting the complex healthcare needs of populations worldwide.

4.1.2 Global Regulatory Frameworks for NWBL

Work-based learning (WBL) in nursing is a valuable approach that integrates practical, hands-on experience with theoretical learning. It allows nursing students and professionals to apply their classroom knowledge in real-world healthcare settings, enhancing their skills and competencies.

Key aspects of Nursing WBL:

- **Practical Experience**: WBL provides nursing students with opportunities to work in clinical settings, such as hospitals and clinics, where they can gain practical experience under the supervision of experienced nurses and healthcare professionals (Ekong, 2021).
- **Collaboration**: Effective WBL involves collaboration between learners, employers, and academic institutions. This tripartite relationship ensures that the learning experience aligns with the learners' educational goals and the healthcare organisation's needs (Finn, 2020).
- **Continuous Professional Development**: WBL supports lifelong learning and continuous professional development for nurses (Ekong, 2021). It helps them stay updated with the latest practices, technologies, and standards in healthcare.
- **Improved Patient Care**: By applying theoretical knowledge in real-world settings, nurses can improve their clinical skills and provide better patient care (Ekong, 2021). WBL also helps in developing critical thinking, problem-solving, and decision-making skills.
- **Enhanced Job Satisfaction**: Engaging in WBL can increase nurses' job satisfaction and retention rates by providing them with opportunities for growth and development (Jackson & Burton, 2008).

4.1.3 Global Quality Assurance Standards for NVET and NWBL

The World Health Organization (WHO) has established global standards for the initial education of professional nurses and midwives. These standards ensure nursing education programs provide high-quality training that meets global benchmarks. The guidelines cover various aspects of education, including curriculum development, staff qualifications, student assessment, and overall institutional quality that equips nurses with the necessary skills and knowledge to deliver effective healthcare (WHO, 2010).

Other global frameworks and initiatives that aim to enhance the quality of nursing education at the global level:

- **International Council of Nurses**: The ICN provides guidelines and standards for nursing education, practice, and research. Their "ICN Code of Ethics for Nurses" and "Standards for Nursing Education" are widely recognised and adopted by nursing institutions worldwide.
- **Nursing and Midwifery Global Standards**: These standards, developed by the WHO, provide a comprehensive framework for the initial education of professional nurses and midwives, ensuring that nursing programs meet high-quality criteria.
- **European Union (EU) Directives**: The EU has established directives and frameworks to harmonise nursing education across member states. One example is the "Directive 2005/36/EC on the Recognition of Professional Qualifications," which aims to facilitate the mobility of healthcare professionals within the EU.
- **International Network for Quality Improvement in Healthcare (INQua)**: INQua provides a platform for sharing best practices and standards in healthcare education, including nursing. Their "International Accreditation Standards for Healthcare Education" help ensure nursing programs meet global quality benchmarks.

  These frameworks and initiatives work together to ensure nursing education programs worldwide align with high standards, promoting the development of a competent, well-prepared nursing workforce. According to (Baker, Cary, & Bento, 2021), 91% of countries report that standards for the duration and content of nursing education exist, and 89% of countries indicate they possess accreditation for education institutions (WHOa, 2024).

However, considerable variation persists in the level and quality of education for registered nurses within the six World Health Organization (WHO) regions.

The goal of the global standards is to establish educational criteria and assure outcomes that: a) are based on evidence and competency; b) promote the progressive nature of education and lifelong learning; c) ensure the employment of competent practitioners who, by **providing quality care**, promote positive health outcomes in the populations they serve.

Based on the knowledge and expertise of education and practice leaders in nursing and midwifery, five key areas for global standards have been identified: programme graduates, programme development and revision, programme curriculum, academic staff, and programme admission.

- **Competency-Based Frameworks**: Focus on developing core competency that emphasises safety, ethical practice, and interdisciplinary collaboration. Table 4 describes the Quality Assurance Frameworks in NVET at the Global Level.

Table 4 – Concept Map for the Quality Assurance Frameworks and Practices in NVET at the Global Level

Concept map for Global Level		
Key Frameworks	UNESCO-UNEVOC	Promotes international cooperation in VET
	World Bank	Supports VET quality through funding and policy advice
	OECD*	Provides guidelines and benchmarks for VET quality assurance
	WHO*	Prepares nursing graduates for diverse healthcare environments
	WFME	Logic model and data collection are helpful for medical schools planning an institutional self-review and to accrediting authorities wanting to guide schools under their purview
Quality Assurance Cycle P-I-E-R	Planning	Setting objectives and strategies
	Implementation	Applying international best practices
	Evaluation	Assessing global VET systems and outcomes
	Review/Revision	Updating frameworks based on evaluation results
Indicators and OECD Descriptors	Indicators (Table 8)	Metrics to measure global quality and performance
	Descriptors	Qualitative descriptions to guide global evaluation
Application Areas	Learning Environments	School-based, work-based learning, apprenticeships, formal, informal, and non-formal provision
	Learning Contexts	Digital, face-to-face, and blended learning
	VET Providers	Public and private sector
	VET Awards and Qualifications	All levels of the global qualifications framework
Benefits	Continuous Improvement	Ensures ongoing enhancement of global VET systems and providers
	Sustainable Competitiveness	Supports economic growth and social fairness
	Resilience	Enhances the ability to adapt to changes and challenges

Note: *Many EU countries incorporate OECD and WHO standards to prepare nursing graduates for diverse healthcare environments.

4.2 European Union Level

The starting point for EU Regulatory Frameworks for NVET and NWBL research was regulatory frameworks and the above-mentioned OECD and WHO quality assurance standards for VET and WBL. Institutions that ensure accreditation of educational programmes and internal quality assurance indicators are also complemented at the EU level.

The literature review shows that the following frameworks and standards are used in Europe for VET (including Higher Education Institutions (HEI) VET and WBL: EQAVET – European Quality Assurance in Vocational Education and Training (EQAVET, 2024), (EQAVET, 2025), (EFQM, 2020) and (AUPAN, 2020) model, (ISO, 2015), (ISO, 2018) and (ENQA-ESG, 2015) standards.

- **European Quality Assurance Framework for Vocational Education and Training** (EQAVET, 2024) includes ten indicators and indicative descriptors:
  1. Relevance of quality assurance systems for VET providers
  2. Investment in the training of teachers and trainers
  3. Participation rate in VET programmes
  4. Completion rate in VET programmes
  5. Placement rate of graduates from VET programmes
  6. Utilisation of acquired skills at the workplace
  7. Unemployment rate in the country
  8. Prevalence of vulnerable groups
  9. Mechanisms to identify training needs in the labour market
  10. Schemes used to promote better access to VET and provide guidance to (potential) VET learners

  The same indicators can be used to measure the quality of provision at the system and provider level. The EQAVET provides a structured and systematic approach to quality assurance in VET, incorporating tools, benchmarks, and indicators that promote continuous improvement.

- **European Association for Quality Assurance in Higher Education** (ENQA) **Standards and Guidelines for Quality Assurance in the European Higher Education Area** (ESG) 2015 includes ten standards for the Internal Quality Assurance System:
- Policy for Quality Assurance: Institutions should have a policy for quality assurance that is made public and forms part of their strategic management.
- Design and Approval of Programs: Programs should be designed to meet the objectives set for them, including intended learning outcomes.
- Student-Centred Learning, Teaching, and Assessment: Institutions should ensure that the programs are delivered in a way that encourages students to take an active role in creating the learning process.
- Student Admission, Progression, Recognition, and Certification: Institutions should consistently apply pre-defined and published regulations covering all phases of the student "life cycle.
- Teaching Staff: Institutions should assure themselves of the competence of their teachers.
- Learning Resources and Student Support: Institutions should ensure that the resources available for the support of student learning are adequate and appropriate.
- Information Management: Institutions should ensure that they collect, analyse, and use relevant information for the effective management of their programs and other activities.
- Public Information: Institutions should publish information about their activities, including programs which are clear, accurate, objective, up-to-date, and readily accessible.
- Ongoing Monitoring and Periodic Review of Programs: Institutions should monitor and periodically review their programs to ensure that they achieve the objectives set for them.
- Cyclical External Quality Assurance: Institutions should undergo external quality assurance in line with the ENQA-ESG 2015 on a cyclical basis.

Both frameworks can be adapted in VET nursing education for organisations offering nursing qualifications and Work-Based Learning. More information on the WBL adoption can be found in (EQAVET, 2024) and in the European Quality Framework for Apprenticeships and Work-Based Learning (EQFAWBL) (Council of the European Union, 2018), while EQFAWBL key elements include:

- **Structured Partnerships**: Involving social partners, businesses, vocational education and training institutions, and local authorities.
- **Quality Assurance**: Ensuring apprenticeships are not geared towards low-skilled jobs and poor training.
- **European Alliance for Apprenticeships**: Promoting the supply, quality, and image of apprenticeships.

  Building blocks of EQAVET for WBL are: (1) Design work-based learning, (2) Improve the quality, (3) Respond to learners' needs, (4) Communicate, (5) Train the staff, (6) Assess the learners (WBL-Q, 2020).

EQAVET 2022, EQFAWBL, and ENQA-ESG 2015 provide a structured, systematic approach to Quality Assurance in VET and WBL, incorporating tools, benchmarks, and indicators that promote continuous improvement. Their common core features are:

- **The PDCA Cycle** (Plan-Do-Check-Act): Ensures iterative quality improvements by embedding QA at every stage of VET delivery.
- **Indicators and Benchmarks**: Focus on employability rates, learner satisfaction, and alignment with labour market needs.
- **Stakeholder Engagement**: Promotes collaboration among training providers, employers, and policymakers.

EQAVET, EQFAWBL and ENQA-ESG in the Nursing Education Context extensively utilise this framework to standardise clinical training, ensure competency-based learning, and evaluate program effectiveness. Key benefits include improved comparability of qualifications across EU member states and support for interoperability between theoretical instruction and clinical practice. They also provide indicators and descriptors to support quality assurance in NVET and NWBL. Quality assurance institutions and agencies use the ENQA-ESG as a reference document for internal purposes and external quality assurance systems in higher education institutions providing nursing VET and WBL. From the above frameworks and indicators, we have selected EQAVET (2022), ENQA-ESG (2015) and EQFAWBL 2018 (Council of the European Union, 2018) as the most commonly used frameworks and standards for NVET and NWBL in Europe and in the partner countries of the Erasmus+ BEHEALTH project. The concept map for Quality Assurance Frameworks in NVET at the EU Level is described in Table 5.

Table 5 – Concept Map for Quality Assurance Frameworks and Practices in NVET and NWBL at the EU Level

Concept Map for EU Level			
Key Frameworks	OECD	Purpose Components Flexibility	Support quality assurance in VET across the EU
	WHO		
	EFQM		
	ISO 21001		
	EFfQEA		

Concept Map for EU Level			
	EAfA EQFfAaWBL EQChoIaA **EQAVET*** **ENQA-ESG*** **EQFAWBL***		
Quality Assurance Cycle	Deming P-D-S-A – EQAVET – ENQA-ESG	Plan	Setting objectives and strategies
		Do	Executing the planned activities
		Study	Assessing the outcomes and processes
		Act	Making necessary adjustments based on the evaluation
Indicators and Descriptors (Table 9, 10)	EQAVET ENQA-ESG (Table 10)	Indicators	Metrics to measure quality and performance
		Descriptors	Qualitative descriptions to guide evaluation
Application Areas	Learning Environments Learning Contexts VET Providers VET Awards and Qualifications		School-based, work-based learning, apprenticeships, formal, informal, and non-formal provision
			Digital, face-to-face, and blended learning
			Public and private sector
			All levels of the European Qualifications Framework
Benefits	Continuous Improvement Sustainable Competitiveness Resilience		Ensures ongoing enhancement of VET systems and providers
			Supports economic growth and social fairness
			Enhances the ability to adapt to changes and challenges

Note: * Common frameworks for NVET and NWBL in Europe

4.3 National Level

The starting point for research at the National level was regulatory frameworks and the above-mentioned EQAVET and ENQA-ESG quality assurance standards for VET and WBL. Institutions that ensure accreditation of educational programmes and internal quality assurance indicators also complement this at the local level. The basic framework for quality assurance in nursing VET and WBL is at the national level described in the following structure:

- National Regulatory Framework for NVET and NWBL
- Quality Assurance Accreditation Institution at the National Level for NVET and NWBL
- Quality Assurance Standards for NVET and NWBL NQF levels 4, 5, 6 and 7
- Quality Assurance NVET and NWBL Indicators for Slovakia, Hungary, Cyprus, Turkey, Greece, Ireland

4.3.1 Slovakia

Regulatory Frameworks:

- **For NVET (TQF level 4, 5):** Act on VET/2015 on Vocation Education and Training and on amendments and supplements to other laws.

- **For NVET (SkQF level 6, 7)**: Slovak Qualification Framework; Act no 131/2002 Z. z. on Universities and on Amendments to Certain Acts Ministry of Health of the Slovak Republic (dual oversight for study programme accreditation); System of fields of the MERDYS.

- **For NWBL**: Government Regulation No. 112/2023 Coll. on professional competence to perform the health profession, the method of further education of health workers, the system of specialisations and the system of certified work activities, as amended by later regulations.

Quality Assurance Accreditation Institution:

- **For NVET (SkQF level 4, 5)**: MERDYS; State Institute of Vocational Education (SIVE); State School Inspectorate (SSI).
- **For NVET (SkQF level 6, 7):** SAAHE (SAAVS); Ministry of Health of the Slovak Republic.
- **For NWBL**: Accreditations in the field of lifelong learning https://www.minedu.sk/akreditacie-v-oblasti-celozivotneho-vzdelavania/; Accreditation Commission of the Ministry of Health of the Slovak Republic for Continuing Education of Healthcare Professionals.

Quality Assurance Standards:

- **For NVET (SQF level 4, 5)**: Quality assurance in primary and secondary education (Eurydice, 2024); Minimum standards for continuing education of health professionals for the profession – Nurse
- **For NVET (SkQF level 6, 7)**: ENQA-ESG, 2015
- **For NWB:** EQAVET for WBL

Responsible Authorities :

- **For NVET (SkQF level 4, 5)**:
  - Ministry of Health of the Slovak Republic for the professional component of education preparation for health professions at secondary medical schools
  - State School Inspectorate
- **For NVET (SkQF level 6, 7)**:
  - SAAHE *for Study Program Development and Modification*
  - HEI providing NVET study programme
- **For NWBL**
  - Ministry of Health
  - Slovak Chamber of Nurses and Midwives (SKSaPA)
  - National Institute of Education and Youth (NIVAM)

Parties involved in the SP Development and Modification:

- HEI Internal Quality Assurance Committee
- Representatives of the study programme
- Representatives of employers
- Representatives of students

Quality Assurance Approaches and Methods:

- **For VET (SkQF level 4, 5)**: External evaluation by the State School Inspectorate, External evaluation by the National Institute of Education and Youth (NIVAM), Testing of secondary school students, and External evaluation at the international level.
- **For VET (SkQF level 6, 7)**: Internal evaluation; External evaluation
- **For WBL:** According to EQAVET for WBL

4.3.2 Hungary

Regulatory Frameworks:

- **For NVET (HuQF level 5)**: Act CLXXXVII of 2011 on Vocation Training
- **For NVET (HuQF level 6, 7)**: Act CCIV of 2011 on National Higher Education
- **For NWBL,** both the above:
  Act LXXX of 2019 on Vocational Training – for compulsory dual training in secondary NWBL
  Act CCIV of 2011 on National Higher Education – for tertiary NWBL
  - **In secondary WBL**, the training centre contracts with a health service provider. The dual training site (health service provider – WBL site) is registered by the MESZK (Hungarian Chamber of Health Professionals). Theoretical vocational education takes place at the vocational training institute. After completing the basic sectoral education, the VET student must take a basic sectoral examination organised by the vocational training institution. After this exam, the health service provider provides the practical knowledge. During WBL, the student *has a regular employment contract* with the health care provider.
  - **In tertiary WBL**, theoretical vocational education takes place at the university, and practical knowledge is provided by various healthcare institutions cooperating with the university, but the student has no employment contract with the healthcare providers.

Quality Assurance Accreditation Institution:

- **For NVET (HuQF level 5)**: MESZK (Hungarian Chamber of Health Professionals)
  IKK (Innovative Training Support Centre non-profit limited company)
- **For NVET (HuQF level 6, 7):** MAB (Hungarian Higher Education Accreditation Commission)
- **For NWBL,** the above:
  - **in secondary WBL**: MESZK and IKK
  - **in tertiary WBL**: MAB https://www.mab.hu/en/home-page/

Quality Assurance Standards:

- **For NVET (HuQF level 5)**: EQAVET (available in Hungarian from https://net.jogtar.hu/jogszabaly?docid=A1900080.TV)
  There are two options:

  a) The training centre has no quality management system

  The legislation allows the dual training centres to meet the quality standards the Chamber of Commerce set out. Therefore, the dual training centre must demonstrate that it meets the criteria at the time of registration. The quality criteria system drawn up by the Chamber of Commerce, hereinafter referred to as the KAMSZER (Chamber Quality Criteria), applies to all

dual training centres, irrespective of size or organisation, which adopt it and do not operate a quality management system.

b) the training centre has its own quality management system

If the training centre wishes to engage in vocational training according to the Register of Specialised Training, it must declare - as part of the application for registration – what quality management system it operates or plans to introduce. The training centres are inspected every 3 years.

- **For NVET (HuQF level 6, 7)**: ENQA-ESG, 2015 available from MAB: https://www.mab.hu/eljarasok/ EN: https://www.mab.hu/en/home-page/. According to agency standards, internal quality assurance and professional conduct are mandatory every 5 years to meet ESG standards.
- **For NWBL**, both the above**:**
  – EQAVET for **secondary WBL**: KAMSZER standards
  – ENQA-ESG, 2015 **for tertiary WBL**: MAB

Responsible Authorities for Study Program Development and Modification:

- **For NVET** (**HuQF level 5): IKK**
- **For NVET (HUQF level 6, 7):** Kulturális és Innovációs Minisztérium (Ministry of Culture and Innovation)
- **For NWBL**, both the above**:**
  – **for secondary NWBL** IKK (https://szakkepzes.ikk.hu)
  – **for tertiary NWBL** Kulturális és innovációs Minisztérium (Ministry of Culture and Innovation)

Parties involved in the SP Development and Modification:

- Internal Quality Assurance Committee
- Representatives of employers
- Representatives of students

Quality Assurance Approaches and Methods:

- **For VET (HuQF level 5):**
  – The basic principles for developing a quality assurance system are outlined in the Guide to the Preparation of a Training Programme published by MKIK (Hungarian Chamber of Commerce and Industry)
  Recommended criteria include, e.g. student satisfaction, constant training, and educators' qualifications.

  – Act LXXX of 2019 on Vocational Education and Training 12/2020 (II. 7.) Government Decree on the Implementation of the Vocational Education and Training Act

  The state vocational training administration body may examine the fulfilment of the requirements for the accredited vocational training examination centre's licence and for the performance of the professional and qualification examination activities, without prior notice, throughout the period of the licence, starting from the date of its acquisition. The administration body works on the basis of a yearly plan.

- **For VET (HuQF level 6, 7)**: the quality assurance methods are publicly available in English at https://www.mab.hu/en/home-page/

- **For WBL**, both the above:
  – **for secondary WBL** https://kemkik.hu/dualis-kepzohelyek-nyilvantartasa-ellenorzese https://net.jogtar.hu/jogszabaly?docid=A2000012.KOR
  – **for tertiary WBL** https://www.mab.hu/en/home-page/

4.3.3 Cyprus

Regulatory Frameworks:

- **For NVET (CyTQF level 5)**: CYQF is fully aligned with the European Qualifications Framework for lifelong learning (2008/C 111/01
- **For NVET (CyQF level 6, 7)**: European Qualifications Framework for lifelong learning (2008/C 111/01
- **For NWBL**: Cyprus Agency of Quality Assurance and Accreditation Higher Education

Quality Assurance Accreditation Institution:

- **For NVET (CyQF level 5)**: HRDA (Human Resources Development Authority of Cyprus), System of Assessment and Certification of Training Providers (AxioPistoSyn)
- **For NVET (CyQF level 6, 7):** The Cyprus Agency of Quality Assurance and Accreditation in Higher Education (CYQAA) registered with the ENQA
- **For NWBL**: Cyprus Agency of Quality Assurance and Accreditation Higher Education

Quality Assurance Standards:

- **For NVET (TQF level 5)**: System of Assessment and Certification of Training Providers (AxioPistoSyn), and Cyprus Agency of Quality Assurance and Accreditation Higher Education
- **For NVET (CyQF level 6, 7)**: ENQA-ESG, 2015, Cyprus Agency of Quality Assurance and Accreditation Higher Education
- **For NWB:** EQAVET**,** Cyprus Agency of Quality Assurance and Accreditation Higher Education

Responsible Authorities for Study Program Development and Modification:

- **For NVET** (**CyQF level 5):** Cyprus Ministry of Education, Sport and Youth, Human Resources Development Authority of Cyprus (HRDA)**:** Cyprus Agency of Quality Assurance and Accreditation in Higher Education
- **For NVET (CyQF level 6, 7**
- **For NWBL:** Cyprus Agency of Quality Assurance and Accreditation Higher Education

Parties involved in the SP Development and Modification:

- Cyprus Agency of Quality Assurance and Accreditation Higher Education
- Human Resources Development Authority of Cyprus (HRDA)

Quality Assurance Approaches and Methods:

- **For VET (CyQF level 5):** External evaluation by the Ministry of Education of Cyprus and External evaluation by the Human Resources Development Authority of Cyprus
- **For VET (CyQF level 6, 7)**: External evaluation by Cyprus Agency of Quality Assurance and Accreditation Higher Education

- **For WBL:** According to EQAVET for WBL and external evaluation by the Cyprus Agency of Quality Assurance and Accreditation Higher Education

4.3.4 Turkey

Regulatory Frameworks:

- **For NVET (TQF level 4):** Vocational Education Law (No. 3308) (https://mevzuat.meb.gov.tr/)
- **For NVET (TQF level 6, 7):** Higher Education Law (No. 2547) (https://tyc.gov.tr/yeterlilik/hemsirelik-lisans-diplomasi-TR00306232.html)
- **For NWBL:**
  - HUÇEP (https://www.yok.gov.tr/Documents/Kurumsal/egitim_ogretim_dairesi/Ulusal-cekirdek-egitimi-programlari/hemsirelik_cekirdek_egitim_programi.pdf) Practical training is included in both secondary and tertiary levels under these laws
  - Certification (Emergency Care Nursing Certified Training Program) (https://shgmesdb.saglik.gov.tr/TR-63589/sertifikali-egitim-programlari.html)

Quality Assurance Accreditation Institution:

- **For NVET (TQF level 4):**
  - MYK (Vocational Qualifications Authority): (https://tyc.gov.tr/) https://www.myk.gov.tr/
  - MoNE (Ministry of National Education): (https://tyc.gov.tr/) https://www.myk.gov.tr/
- **For NVET (TQF level 6, 7):** YÖK (Council of Higher Education): https://www.yok.gov.tr/

- **For NWBL:**
  - Secondary WBL: MoNE (https://www.meb.gov.tr/)
  - Tertiary HEI WBL: YÖK (https://www.yok.gov.tr/); https://europa.eu/europass/eportfolio/api/europass-auth/authenticate?redirect_uri=https://europa.eu/europass/eportfolio/screen/mfa?lang=en

Quality Assurance Standards:

- **For NVET (TQF level 5):** EQAVET standards adapted by MYK and MoNE.
- **For NVET (TQF level 6, 7):** ENQA-ESG standards applied via YÖK.
- **For NWBL:**
  - EQAVET principles applied for secondary WBL via MoNE
  - ENQA-ESG principles applied for tertiary WBL via YÖK

Responsible Authorities for Study Program Development and Modification:

- **For NVET (TQF level 5):** EQAVET standards adapted by MYK and MoNE.
- **For NVET (TQF level 6, 7):** ENQA-ESG standards applied via YÖK.
- **For NWBL:**
  - EQAVET principles applied for secondary WBL via MoNE.
  - ENQA-ESG principles applied for tertiary WBL via YÖK.

Parties involved in the SP Development and Modification:

- Internal Quality Assurance Committee
- Representatives of employers
- Representatives of students

Quality Assurance Approaches and Methods:

- **For VET (TQF level 5):**
  - Annual internal evaluations by MoNE.
  - External evaluations guided by MYK and EQAVET.
- **For VET (TQF level 6, 7):** YÖK monitors QA standards through internal and external evaluations.
- **For WBL:**
  - Secondary WBL: Guided by EQAVET standards implemented via MoNE.
  - Tertiary WBL: Evaluated through ENQA-ESG standards applied by YÖK.

4.3.5 Greece

Regulatory Frameworks:

- **For NVET (HQF level 5)**: Governance of Vocational Education, Training and Lifelong Learning - Law 4763/2020 (Available in GR) – restructuring of the National VET system and Lifelong learning.
- **For NVET (HQF level 6, 7)**: Hellenic Authority for Higher Education (HAHE)
- **For NWBL**: National Ministry of Education in cooperation with the national Ministry of Labour.

Quality Assurance Accreditation Institution:

- **For NVET (HQF level 5)**: National Agency for the Accreditation of Qualifications and Vocational Guidance – EOPPEP [https://www.eoppep.gr/index.php/en/]
- **For NVET (HQF level 6, 7)**: Hellenic Authority for Higher Education (HAHE) [https://www.ethaae.gr/en/] – legal supervision by the Ministry of Education
- **For NWBL:** National Agency for the Accreditation of Qualifications and Vocational Guidance - EOPPEP [https://www.eoppep.gr/index.php/en/]

Quality Assurance Standards:

- **For NVET (HQF level 5)**: Evaluation procedures performed by EOPPEP [https://www.eoppep.gr/index.php/en/], Law 3879/2010, Law 3848/2010, Ministerial Decision 20082/23.10.2012, Law 4485/2017, Ministerial Decision 26381/20-02-2017, Law 4610/2019. *(requirements and upgrading of competences of teachers and trainers in VET and LLL)*
- **For NVET (HQF level 6, 7)**: ENQA-ESG, **2015**
- **For NWB: EQAVET for WBL**

Responsible Authorities for Study Program Development and Modification:

- **For NVET (HQF level 5)**: Ministry of Education (General Secretary for VET, LLL and Youth) [https://www.gov.gr/en/upourgeia/upourgeio-paideias-kai-threskeumaton]
- **For NVET (HQF level 6, 7)**: Ministry of Education
- **For NWBL:** Ministry of Education

Parties involved in the SP Development and Modification:

- Ministry of Education
- Central Council for VET (KSEEK) - relevant Ministries, employers' and employees' associations

- Regional Councils for linking VET with the local labour market (SSPAE)
- Central Scientific Committee (KEE)

Quality Assurance Approaches and Methods:

- **For VET (HQF level 5)**: The national quality assurance system for VET is tasked to EOPPEP, which is aligned with the EQAVET quality cycle.
- **For VET (HQF level 6, 7)**: Internal evaluation by each institution, External evaluation by the Hellenic Authority for Higher Education (HAHE).
- **For WBL:** EQAVET for WBL

4.3.6 Ireland

Regulatory Frameworks:

- **For NVET (NFQ level 5)**: Nurses and Midwives Act 2011 as amended https://www.irishstatutebook.ie/eli/2011/act/41/enacted/en/html, Further Education and Training Act 2013 https://www.irishstatutebook.ie/eli/2013/act/25/enacted/en/html, Nurses and Midwives Act (Education and Training) Rules No. 218/2018 https://www.irishstatutebook.ie/eli/2018/si/218/made/en/print
- **For NVET (NFQ level 6):** Nurses and Midwives Act 2011 as ammended https://www.irishstatutebook.ie/eli/2011/act/41/enacted/en/html, Nurses and Midwives Act (Education and Training) Rules No. 218/2018 https://www.irishstatutebook.ie/eli/2018/si/218/made/en/print
- **For NVET (NFQ level 7, 8, 9)**: Higher Education Authority Act 2022 https://www.irishstatutebook.ie/eli/2022/act/31/enacted/en/html Quality and Qualifications Ireland (QQI) https://www.qqi.ie/
- **For NWBL**: Nursing and Midwifery Board of Ireland (NMBI) https://www.nmbi.ie

Quality Assurance Accreditation Institution:

- Vocational Education and Training Quality Review and Accreditation https://www.ecctis.com/TVET/TVET%20Quality%20Review%20And%20Accreditation%20scheme.aspx
- Further Education and Skills Service (SOLAS): https://www.solas.ie/
- **For NVET (NFQ level 5, 6)**: Nursing and Midwifery Board of Ireland (NMBI) https://www.nmbi.ie/NMBI/media/NMBI/NMBI-Nurse-Registration-Programmes-Standards-and-Requirements-Fifth-Edition_1.pdf?ext=.pdf
- **For NVET (NFQ level 7, 8, 9):** Quality and Qualifications Ireland (QQI) https://www.chea.org/international-directory/quality-and-qualifications-ireland
- **For NWBL**: Education and Training Boards (ETBs) https://www.etbi.ie/further-education-training-support/workbased-learning/

Quality Assurance Standards:

- **For NVET (NFQ level 5, 6)**:
- **For NVET (NFQ level 7, 8, 9)**: ENQA-ESG, 2015 https://www.enqa.eu/wp-content/uploads/2015/11/ESG_2015.pdf

- **For NWB:** IQAVET https://www.qqi.ie/, Education/Standard 8: quality assurance and enhancement mechanisms https://www.nmbi.ie/Education/Education-Bodies/Approvals-Nursing-Programmes/Quality-Assurance

Responsible Authorities for Study Program Development and Modification:

- **For NVET (NFQ level 5, 6):** Nursing and Midwifery Board of Ireland (NMBI)
- **For NVET (NFQ level 7, 8, 9):** Higher Education Institutions (HEIs)
- **For NWBL:** Nursing and Midwifery Board of Ireland (NMBI), Quality and Qualifications Ireland (QQI), Education and Training Boards (ETBs) https://healthservice.hse.ie/about-us/onmsd/careers-in-nursing-and-midwifery/regulations-standards.html

Parties involved in the SP Development and Modification:

- Internal Quality Assurance Committee
- Representatives of employers
- Representatives of students

Quality Assurance Approaches and Methods:

- **For VET (NFQ level 5, 6):**
  - Publicly Funded VET: Delivered primarily by regional Education and Training Boards (ETBs) under the guidance of SOLAS.
  - Quality Assurance: Managed by Quality and Qualifications Ireland (QQI), which ensures compliance with standards and guidelines.
  - Performance Measures: Includes completion rates, placement rates, and investment in staff development
- **For VET (NFQ level 7, 8, 9)**:
  - External Quality Assurance: Conducted by QQI, which validates programs and ensures they meet the required standards.
  - Award Standards: Developed by QQI, involving subject matter experts, providers, and industry stakeholders.
- **For WBL:**
  - Quality Assurance Mechanisms: Focus on specific learning objectives and predefined learning outcomes.
  - Internal Evaluation: Includes self-assessment tools, in-company visits, and monitoring of learning outcomes.
  - External Quality Assurance: Conducted by external bodies to verify the quality of education and training providers

4.4 Summary of the Quality Assurance Frameworks for NVET and NWBL in Slovakia, Hungary, Cyprus, Turkey, Greece and Ireland

A summary of the Quality Assurance Frameworks for NVET and NWBL in Slovakia, Hungary, Cyprus and Greece is in Table 6. For Turkey and Ireland, the only difference is in Purpose, Components and Flexibility descriptions listed in (Table 7) and for Ireland in (Table 8).

Table 6 – Concept Map for Quality Assurance Frameworks and Practices in NVET and NWBL at the Local Level in Slovakia, Hungary, Cyprus and Greece Level

Concept Map for Slovakia, Hungary, Cyprus and Greece Local Level			
Key Frameworks and Recommendations	NQFs: • SkQF • HuQF • CyQF • HQF EQAVET WBL ENQA-ESG	Purpose	Support quality assurance in NVET NWBL across Slovakia, Hungary, Cyprus and Greece
		Components	Quality assurance cycle (planning, implementation, evaluation, review/revision), indicators, and descriptors
		Flexibility	Adaptable to different NVET and NWBL systems and providers
Deming Quality Assurance Cycle P-D-C-A or P-I-E-R	Plan	Planning	Setting objectives and strategies
	Do	Improvement	Executing the planned activities
	Study	Evaluation	Assessing the outcomes and processes
	Act	Review/Revision	Making necessary adjustments based on the evaluation
Indicators and Descriptors EQAVET (Table 10) ENQA-ESG (Table 11)	Indicators		Metrics to measure quality and performance
	Descriptors		Qualitative descriptions to guide evaluation
Application Areas	Learning Environments		School-based, work-based learning, apprenticeships, formal, informal, and non-formal provision
	Learning Contexts		Digital, face-to-face, and blended learning
	NVET and NWBL Providers		Public and private sector
	NVET or NWBL Awards and Qualifications		All levels of the National Qualifications Framework
Benefits	Continuous Improvement		Ensures ongoing enhancement of NVET and NWBL systems and providers
	Sustainable Competitiveness		Supports economic growth and social fairness
	Resilience		Enhances the ability to adapt to changes and challenges

Table 7 – Concept Map for Quality Assurance Framework in NVET at the Turkish Level

Concept Map for Turkey Local Level			
Key Frameworks	NQF: – TQF EQAVET ENQA-ESG	Purpose	Ensure quality and international recognition of qualifications
		Components	National Qualifications System, National Occupational Standards, Accredited Education, Mutual Recognition of Vocational Qualifications
		Flexibility	Adaptable to different VET systems and provider

Table 8 – Concept Map for Quality Assurance Framework in NVET at the Ireland level

Concept Map for Ireland Local Level			
Key Frameworks	NQF: – NFQ EQAVET ENQA-ESG	Purpose	External quality assurance of all post-compulsory education and training
		Components	National Framework of Qualifications (NFQ), standards for awards, maintaining and developing NFQ
		Flexibility	Adaptable to different VET systems and providers

4.5 Quality Assurance Indicators for NVET and NWBL

Quality Assurance Indicators described for NVET, according to (OECD, 2022), help institutions maintain and improve the quality of education they provide (Table 9) and NWBL, according to EQAVET (Table 10).

Table 9 – Global level Quality Assurance Indicators and Descriptors According to (OECD, 2022)

Indicator	**Description**
Student Achievement	Includes metrics like test scores, graduation rates, and student progression.
Teaching Quality	Evaluations of teaching practices, teacher qualifications, and professional development opportunities.
Curriculum Relevance	How well does the curriculum meet the needs of students and the job market?
Student Feedback	Collecting and analysing student feedback about their learning experiences.
Resource Allocation	Ensuring that resources (like funding, facilities, and materials) are used effectively and efficiently.
Internal Evaluations	The institution conducts regular self-assessments to identify areas for improvement.
External Evaluations:	Reviews by external bodies to provide an unbiased assessment of the institution's quality.

Table 10 – EU level Quality Assurance Indicators and Descriptors for NWBL Based on (EQAVET, 2024a), (WBL-Q, 2020)

Indicators	**Descriptors**
Input Indicators	These measure the prerequisites for work-based learning, such as company support, financial resources, and training program design.
Process Indicators	These focus on implementing work-based learning, including organising the learning process, using digital technologies, and assessing learners.
Output Indicators	These measure work-based learning outcomes, such as learning achievements and dropout rates.
Outcome Indicators	These assess the long-based learning, such as improved employability and job performance.

According to (ENQA-ESG, 2015), various methods of collecting information may be used. Students and staff must be involved in providing and analysing data and planning follow-up activities. The information gathered depends, to some extent, on the type and mission of the institution. The following are of interest (Table 11).

Table 11 – Quality Assurance Indicators and Descriptors at the EU and Erasmus+ Project Partners Level based on to (ENQA-ESG, 2015)

Indicators	**Descriptors**
Institutional Context	The institution's mission, vision, values, and strategic objectives.
Governance and Management	Structures and processes for decision-making and management
Academic Standards, Quality of Teaching and Learning	Ensuring high standards in curriculum design, teaching, and learning outcomes
Student Support, Progression and Achievements	Providing adequate support for student's academic and personal development
Resource Management and Utilisation	Efficient use of resources to support the institution's mission and objectives
Internal Quality Assurance	Processes for monitoring and improving the quality of education and services
External Quality Assurance	Processes for external evaluation and accreditation
Information Provision and Marketing	Transparency and accuracy in providing information to stakeholders
Cooperation	Collaboration with other institutions and stakeholders to enhance quality

Note: These indicators help ensure that HEIs NVET and NWBL maintain high-quality standards and continuously improve their offerings.

5 CONCLUSION

This working document is the first Result of the Erasmus+ BEHEALTH project and draws together conclusions based on the information collected as part of this study.

When selecting the frameworks, we assumed that the information obtained from the 360-degree control tool questionnaire should be linked to the institution's internal quality assurance system and, thus, to the study program quality control through feedback.

Based on the analysis of the findings from the previous sub-chapters, we found that common frameworks suitable for all six Erasmus+ BEHEALTH project countries are:

- EQF, 2017 European qualitfication framework,
- EQAVET, 2022 framework for NVET and NWBL,
- EQAVET, 2025 framework for NWBL,
- ENQA-ESG, 2015 standard as a framework for EQF levels 4, 5, 6 and 7.

The EQAVET and ENQA-ESG frameworks emphasise the importance of **feedback and evaluation mechanisms in quality assurance processes**.

- A common feature is also the Deming P-D-S-A Cycle (**Plan-Do-Study-Act**) for quality assurance models and using **Key Performance Indicators** to improve the study programme's quality.
- Feedback from various stakeholders, including students, is needed to assess and improve the quality of NVET and NWBL study programmes.
- **EQAVET framework for EQF levels 4 and 5:** The quality assurance system of secondary medical schools and/or specialist training centres must meet national criteria and be registered in a national database.
- **ENQA-ESG 2025 framework for EQF levels 6 and 7:** All Erasmus+ BEHEALTH partner countries have an independent National Accreditation Agency accredited by ENQA, and HEIs providing VET and/or WBL use the ENQA-ESG, 2015 standards for their internal quality assurance system. In this case, EQA-ESG 2015 standard no. 1.6 "Learning resources and student support" and Standard 1.7 "Information management" should ensure that relevant information is collected, analysed, and used to manage study programmes and other activities effectively. Reliable data is key to informed decision-making and identifying what works well or needs attention. Effective processes for collecting and analysing information about study programmes and other activities are part of an internal quality assurance system.
- **EQAVET framework for WBL:** All Erasmus+ BEHEALTH partner countries are guided by Building Blocks, which provide guidance and set out activities to help VET providers develop and support a quality assurance approach for WBL in line with the EQAVET framework.

The research findings show that institutions lack a perspective that is relevant to the different levels of NVET and NWBL at EQF levels 4, 5, 6 and 7 and allows nursing students to express their feelings related to their well-being and level of mental health in relation to the study programme.

ABBREVIATIONS AND DEFINITIONS

Abbreviations

CyQF – Cyprus Qualifications Framework

EFQM – European Foundation for Quality Management

EHEA – European Higher Education Area

ENQA – European Association for Quality Assurance in Higher Education

ENQA – European Association for Quality Assurance in Higher Education

EOPPEP (ΕΟΠΠΕΠ) – National Organization for Certification of Qualifications & Vocational Guidance

EEA – European Economic Area

EQAVET – European Quality Assurance in Vocational Education and Training

EQF – European Qualifications Framework

EQFAWBL – European Quality Framework for Apprenticeships and Work-Based Learning (Council of the European Union, 2018)

EFfQEA – European Framework for Quality and Effective Apprenticeships

EAfA – ETUC and the European Alliance for Apprenticeships

EQFfAaWBL – European Quality Framework for Apprenticeships and Work-Based Learning

EQChoIaA – European Quality Charter on Internships and Apprenticeships

ESG – Standards and guidelines for quality assurance in the European Higher Education Area

EU – European Union

HEI – Higher Education Institution

HQF – Hellenic Qualifications Framework

HuQF – Hungarian Qualification Framework

ICM – International Council of Nurses

IMT – Intelligent Mentoring Tool

INQua – International Network for Quality Improvement in Healthcare

ISCED – International Standard Classification of Education

MERDYSR – Ministry of Education, Research, Development and Youth of the Slovak Republic

MESZK – Hungarian Chamber of Health Professionals

MHSR – Ministry of Health of Slovak Republic

NAA – National Accreditation Agency

NFO – National Qualification Framework

NFQ – Irish National Framework of Qualifications

NI-OER – Nurses International – Open Educational Resources

NLN – National League for Nursing

NMBI – Nursing and Midwifery Board of Ireland

NVET – Nursing Vocational Education and Training

NWBL – Nursing Work Based Learning

OECD – Organisation for Economic Cooperation and Development

PDCA **–** Plan-Do-Check-Act

QA – Quality Assurance

QQI – Quality and Qualifications Ireland

SAAHE – Slovak Accreditation Agency for Higher Education(SAAVS – Slovenská akreditačná agentúra pre vysoké školstvo)

SDG – Sustainable Development Goals

ŠIOV – State Institute of Vocational Education (Štátny inštitút odborného vzdelávania)

SkQF – Slovak National Qualification Framework

SKSaPA – Slovenská komora sestier a pôrodných asistentiek (Slovak Chamber of Nurses and Midwives)

SOLAS – The Further Education and Training Authority in Ireland

SSI – State School Inspectorate

TQF – Turkish Qualification Framework

UNESCO – United Nations Educational, Scientific and Cultural Organization

VET – Vocational Education and Training

VQA – Vocational Qualifications Authority of Turkey

WBL – Work Based Learning

WFME – World Federation for Medical Education

WHO – World Health Organisation

YÖK – Yükseköğretim Kurulu (Council of Higher Education – CoHE)

Definitions

360-degree feedback is an assessment system or process in which employees receive confidential, anonymous evaluations from those around them. This typically includes managers, peers, and direct reports and is used for development, modified from (Custom Insight, 2024). In the Erasmus+ BEHEALTH project, the 360-degree control tool is used. This tool includes the perspectives of healthcare educators and clinical instructors, nursing students, graduates, patients, nurses, and graduates' employers. Feedback is used to improve the quality of the study programme.

Benchmarking is the process of measuring products, services, and processes against those of organisations known to be leaders in one or more aspects of their operations. Benchmarking can also help organisations identify areas, systems, or processes for improvement—either incremental (continuous) improvements or dramatic (business process re-engineering) improvements (ASQ, 2024a).

ESG standards provide the framework for internal and external quality assurance. They were adopted at the EHEA Ministerial Conference in 2015 (ENQA-ESG, 2015).

Learning outcomes are knowledge, skills, and competencies that a learner is expected to acquire and demonstrate upon completing a learning process. These outcomes should be clear, measurable, and aligned with the objectives of the educational program (ENQA, 2016).

Mental health is a state of mental well-being that enables people to cope with the stresses of life, realise their abilities, learn well and work well (WHO, 2022).

National Qualification Framework (NQF)—EU Member States and 11 other countries have committed to implementing the European Qualification Framework (EQF) to make it more effective in facilitating employers', workers', and learners' understanding of national, international, and third-country qualifications (Europass EU, 2024).

Nursing education refers to formal learning and training in the science of nursing (Encyclopedia.com, 2018).

Nursing encompasses autonomous and collaborative care of individuals of all ages, families, groups and communities, sick or well, and in all settings. It includes promoting health, preventing illness, and caring for ill, disabled and dying people (WHOa, 2024).

Qualification is the formal outcome of an assessment and validation process obtained when a competent body determines that an individual has achieved learning outcomes to given standards (EU, 2018).

Quality Assurance (QA) is a part of quality management focused on providing confidence that quality requirements will be fulfilled. The confidence provided by quality assurance is twofold—internally to management and externally to customers, government agencies, regulators, certifiers, and third parties (ASQ, 2024b). In nursing education, QA is a systematic review of nursing educational programs to ensure that acceptable standards of education, scholarship, and infrastructure are maintained (Selvi, 2018). QA is a dynamic process providing the nursing education institute/campus with tools to measure current performance levels and facilitate continuous improvement.

Self-assessment is a comprehensive, systematic, and regular review of an organisation's activities and further proposes these results referenced against the accepted model modified according to (UNSD, 2024).

Vocational Education and Training is the training in skills and teaching of knowledge related to a specific trade, occupation or vocation in which the student or employee wishes to participate (Eurostat, 2024).

Well-being is the state of being happy, healthy, or prosperous. It includes having good mental health, high life satisfaction, a sense of meaning or purpose, and managing stress (Psychology Today, 2024).

Work-based learning is a popular approach to professional development where students or employees learn in the workplace rather than in a classroom or traditional training environment (Indeed, 2024).

REFERENCES

ASQ. (2024a). *Quality Resources*. Retrieved from Benchmarking: https://asq.org/quality-resources/benchmarking?srsltid=AfmBOopCDSCc2skcYRheHjDx4wguivg6Y-40enmVt69ffFRWKyWZBZg8

ASQ. (2024b). *Quality Resources*. Retrieved from Quality Assurance vs Control: https://asq.org/quality-resources/quality-assurance-vs-control?srsltid=AfmBOorlMCEpEJXX9rF4CGtPHQt7IsTdKLJsJdMExu22xX2W-0o-0_vr

Atkinson, G. (2016). *Work-based learning and work-integrated learning: fostering engagement with employees.* Adelaide: NCVER. Retrieved from https://www.ncver.edu.au/__data/assets/pdf_file/0017/60281/Work-based-learning.pdf

Attenborough, J., Abbott, S., Brook, J., & Knight, A. (2019). Everywhere and nowhere: Work-based learning in healthcare education. *Nurse Education in Practice, 8*, pp. 132-138. doi:https://doi.org/10.1016/j.nepr.2019.03.004

AUPAN. (2020). *CAF -Common Assessment Framework.* Retrieved from https://www.eupan.eu/caf/

Baker, C., Cary, A., & Bento, M. (2021). Global standards for professional nursing education: The time is now. *Journal of Professional Nursing, 37*(1), 86-92. doi:https://doi.org/10.1016/j.profnurs.2020.10.001

Cedefop. (2015). *Work-based learning in continuing vocational education and training: policies and practices in Europe.* Luxembourg: Publications Office of the European Union. Retrieved from https://www.cedefop.europa.eu/files/5549_en.pdf

Council of the European Union. (2018, 5 2). Council Recommendation of March 2018 on a European Framework for Quality and Effective Apprenticeships (2018/C 153/01). *Official Journal of the European Union, 153*(1). Retrieved from https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=oj:JOC_2018_153_R_0001

Custom Insight. (2024). *What is 360 degree feedback?* Retrieved from https://www.custominsight.com/360-degree-feedback/what-is-360-degree-feedback.asp

Cybertext. (2024). *What Does Vocational Mean in Nursing? .* Retrieved from https://cybertex.edu/what-does-vocational-mean-in-nursing/

EFQM. (2020). *The EFQM - Hamdan Education Model.* Brussels: EFQM. Retrieved from https://shop.efqm.org/publications/efqm-assessbase

Ekong, E. (2021). The Process, Structure and Contribution of Work-Based Learning (WBL) to Nursing or Health. *Texila International Journal of Nursing*, 1-22.

Encyclopedia.com. (2018). *Nursing education*. Retrieved from https://www.encyclopedia.com/medicine/divisions-diagnostics-and-procedures/medicine/nursing-education

ENQA. (2016). *Use of the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG).* Retrieved from https://enqa.eu/wp-content/uploads/2016/09/Use-of-the-ESG.pdf

ENQA-ESG. (2015). *Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG).* Retrieved from https://www.enqa.eu/wp-content/uploads/2015/11/ESG_2015.pdf

EQAVET. (2024). *European Reference Framework for quality assurance in vocational education and training.* EQAVET Virtual Library. Retrieved from https://employment-social-affairs.ec.europa.eu/policies-and-activities/skills-and-qualifications/working-together/eqavet-european-quality-assurance-vocational-education-and-training/eqavet-framework_en

EQAVET. (2024a). *European Quality Assurance in Vocational Education and Training*. Retrieved from https://employment-social-affairs.ec.europa.eu/policies-and-activities/skills-and-qualifications/working-together/eqavet-european-quality-assurance-vocational-education-and-training_en

EQAVET. (2025). *Quality Assurance for Work-Based Learning in Line with the EQAVET Framework.* Retrieved from https://www.oph.fi/sites/default/files/documents/quality-assurance-for-work-based-learning-in-line-with-the-eqavet-framework.pdf

EU. (2018). *The European Qualifications Framework: supporting learning, work and cross-border mobility.* Retrieved from https://ehea.info/Upload/TPG_A_QF_RO_MK_1_EQF_Brochure.pdf

Europass EU. (2024). *Compare national qualifications frameworks across Europe. Information about national qualifications frameworks and qualification levels.* Retrieved from Compare Qualifications: https://europass.europa.eu/en/compare-qualifications

Eurostat. (2024). *Glossary:Vocational education and training (VET)*. Retrieved from https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Vocational_education_and_training_(VET)

Eurydice. (2024). *Quality assurance in pre-primary education and early care.* Retrieved from Quality assurance: https://eurydice.eacea.ec.europa.eu/national-education-systems/slovakia/quality-assurance-pre-primary-primary-and-secondary-education

Finn, F. (2020). Investigating Work-based Learning Influences, Outcomes and Sustainability: A Conceptual Model . *Work Based Learning e-Journal, 9*(1).

Haidt, J., & Allen, N. (2020). Scrutinizing the effects of digital technology on mental health. *Nature*(578), 226-227. doi:doi: https://doi.org/10.1038/d41586-020-00296-x

ILO. (2003). *Technical and vocational education and training for the twenty-first century: UNESCO and ILO Recommendations.* Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000220748

Indeed. (2024). *What is work-based learning? With definition and examples*. Retrieved from https://uk.indeed.com/career-advice/career-development/work-based-learning

ISO. (2015). *ISO 9001 Quality management systems — Requirements.* Geneva: ISO. Retrieved from ISO 9001 Quality management systems — Requirements.

ISO. (2018). *ISO 21001 Educational organizations — Management systems for educational organizations — Requirements with guidance for use.* Geneva: ISO.

Jackson, N., & Burton, J. (2008). Work-based learning and the development of the NHS workforce. In Y. J. Cater, *Medical Education and Training: From theory to delivery* (pp. 287–300). doi:https://doi.org/10.1093/med/9780199234219.003.0020

Keating, S., Berland, A., Capone, K., & Chickering, M. (2021). Global Nursing Education: International Resources Meet the NLN Core Competencies for Nurse Educators. *OJIN: The Online Journal of Issues in Nursing, 26*(1), Manuscript 8. Retrieved from https://doi.org/10.3912/OJIN.Vol26No01Man08

Kielo-Viljamaa, E. (2024). Different Levels of Nursing Education in Europe. In E. Kielo-Viljamaa, M. Stolt, & R. Suhonen, *Wound Care Education in Nursing: A European Perspective.* Springer, Cham. doi:https://doi.org/10.1007/978-3-031-53230-6_4

Melariri, H., Osoba, T., Williams, M., & Melariri, P. (2022). An assessment of nurses' participation in Health Promotion: a knowledge, perception, and practice perspective. *J Prev Med Hyg., 63*(1), 27-34. doi:10.15167/2421-4248/jpmh2022.63.1.2209

OECD. (2022). *Education evaluation and quality assurance*. Retrieved from https://www.oecd.org/en/topics/education-evaluation-and-quality-assurance.html

Oxbridge. (2018). *The European Qualifications Framework (EQF): What it is, and what does it mean?* Retrieved from https://oxbridgehomelearning.uk/blog/eqf-european-qualifications/

Psychology Today. (2024). *What Is Well-Being? Definition, Types, and Well-Being Skills*. Retrieved from https://www.psychologytoday.com/intl/blog/click-here-for-happiness/201901/what-is-well-being-definition-types-and-well-being-skills

Selvi, S. (2018). Quality Assurance in Nursing Care. *Int. J. Nur. Edu. and Research, 6*(1), 57-60. doi:10.5958/2454-2660.2018.00014.5

UNESCO. (2003). *Technical and vocational education and training for the twenty-first century: UNESCO and ILO Recommendations.* Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000220748

UNESCO. (2021). *UNESCO Strategy for TVET (2022-2029): transforming TVET for successful and just transitions: discussion document.* https://unevoc.unesco.org/pub/unesco_strategy_for_tvet_2022-2029_discussion_document.pdf: UNESCO. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000245239

UNESCO. (2022). *Transforming Technical and Vocational Education and Training for successful and just transitions UNESCO strategy 2022-2029.* Paris: UNESCO. Retrieved from https://unevoc.unesco.org/pub/unesco_strategy_for_tvet_2022-2029.pdf

UNSD. (2024). *CheckList*. Retrieved from Quality Assurance: https://unstats.un.org/UNSDWebsite/data-quality/check-list

WBL-Q. (2020). *WBL-Q Methodology*. Retrieved from https://www.wbl-quality.eu/wbl-q-methodology/

Wexhe. (2019). *Quality Assurance and work-based learning. A report for the WEXHE alliance.* Retrieved from https://www.enqa.eu/wp-content/uploads/2019/09/WEXHE-report_ENQA.pdf

WHO. (2010). *Guidelines on Quality Assurance and Accreditation of Nursing and Midwifery Educational Institutions.* Retrieved from https://iris.who.int/bitstream/handle/10665/205195/B4527.pdf

WHO. (2022). *Mental Health*. Retrieved from https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response

WHOa. (2024). *Nursing and midwifery*. Retrieved from Nursing and midwifery

Work-based Learning Toolkit. (n.d.). *Evaluation and Quality Assurance*. Retrieved from https://www.wbl-toolkit.eu/index.php?id=336

Yap, G., & Melder, A. (2018). *Nurse education models and frameworks: A Scoping Review.* Melbourne: Monash Health.

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