



Evaluation Report

External evaluation of the "Network of Excellence in Applied Research in Vocational Education and Training" - NEARVET Project

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NEARVET Project Reference Number: 101087579

CONTENT

1. Summary	3
2. Background: The NEARVET Project	4
3. Evaluation design	4
3.1. <i>Evaluation Methods</i>	5
3.1.1. Desk Research and document review	5
3.1.2. Key informant interviews.....	5
3.1.3. Online participation at following events.....	6
3.1.4. Meetings for briefing evaluators.....	6
4. Evaluation Results	6
4.1. <i>Applied research in VET lacking clear definition: Challenge and opportunity</i>	6
4.2. <i>Impact validation</i>	7
4.2.1. Methodological Concept as foundation for NEARVET products and development.....	7
4.2.2. Highly valuable content in the Digital Hub	8
4.2.3. Lasting effects through stimuLating innovation.....	10
4.2.4. Innovation Trthrough shift of focus and mindset	11
5. Conclusio and recommendations	13
5.1. <i>Extending and deepening the work</i>	13
5.2. <i>Strengthening dissemination and Communities of Practice</i>	13
5.3. <i>Maintain the Digital Hub</i>	14
5.4. <i>NEARVET: "Challenging but fruitful"</i>	14
6. Annex	15
6.1. <i>Core set of Interview questions</i>	15
6.2. <i>Evaluators BAckground</i>	16
6.2.1. Andrea Egger, MA (Social Scientist in applied social research).....	16
6.3. <i>Agnes Duerr, BA BSc MA (Social Scientist in applied social research)</i>	17

1. SUMMARY

Vocational Education and Training (VET) organisations in Europe partly lack a clear understanding and systematic approach to applied research. In this context, the Network of Excellence for Applied Research in VET (NEARVET) with 12 partners from 6 European countries has established a clear methodological framework, determining the nature of applied research in VET by focusing on the stakeholder interests and deriving research practitioners' needs. A "researcher" could be anyone who seeks to solve a problem or answer a question in context of VET by using scientific research methods or conceptual work. The focus of research is driven by different stakeholders and contexts. Due to NEARVET topology it can be initiated by individual employers or employer clusters to address company-specific concerns (recruitment, skills forecasting, marketing, technology, operations, product or process innovation); by sector bodies, trade associations, or policy authorities to tackle broader social, economic, or educational challenges at regional or national levels; by VET managers and teachers seeking to improve curricula or further their own professional development; by VET students and trainees engaging in work-based or project-based learning; or by universities and other research institutions applying scientific, technological, or academic knowledge to VET settings. Focusing on applied research interests shifts the focus from academic discussion about "what applied research is or should be" to a practical discussion, where different stakeholders could authentically share their approaches, problems and ideas. This highly appreciated and valuable sharing was done in Community of Practice over the past two years (2023/24) at local and transnational levels in NEARVET. With this innovative approach the actual needs could be met exactly in rapidly evolving times. Surprisingly, despite the diversity of VET systems across European countries, the research practitioners' needs are often similar. Therefore, it was possible to set out a competence framework and finally develop learning methods. These are available in the Digital Hub on <https://nearvethub.projectlibrary.eu/>. 15 detailed modules provide learning materials, like info-videos, exercises, case studies, detail instructions and tests. As these learning materials were developed in a co-creation process with "practitioners" in the participating regions they are tailored to their learning requirements. Although not all methods and contents may be useful for each participant (teachers, instructors, managers from different stakeholders, students, administrative and HR-staff), the partners and involved companies used the online Digital Hub (or selected modules) intensively for competence development and self-learning for their specific eco-system: In Italy the networking modules are of great interest for companies and their VET-partners, in Germany the University of Applied Science used the AI modules intensively for training/self-learning of their research staff and in Sweden the module about building and managing a Digital Hub proves very useful. In all partner countries the Community of Practice brought valuable insights. Negotiating different national frameworks and partner expectations was both challenging and enlightening. It inspired many new ideas and changed perspectives on applied research as a participative highly effective process to foster innovation.

NEARVET's Methodological Concept as a starting point for further exploration and testing, the digital platform (Digital Hub) as useful resource, and certification mechanism as well as the durable network based on a Memorandum of Understanding are core legacies of the ambitious 2-year project. The project sparked ideas like micro-credentials for applied research, using CoP in national context for problem solving in VET, establishing Digital Hubs in specific VET contexts and many more. Partners envision a follow-up to expand concepts, work on innovative ideas and integrate project results in other countries to ensure that NEARVET's outcomes drive innovation in vocational education across Europe.

2. BACKGROUND: THE NEARVET PROJECT

The NEARVET project was designed and submitted to the call for proposals issued by the European Union's EACEA, under the Erasmus+ ERASMUS-EDU-2022-PI-FORWARD Call. The project lasted from January 2023 until December 2024.

NEARVET seeks to produce an innovative mechanism of systematic inquiry and development of Applied Research in VET, by drawing upon state-of-the-art methods in the co-creation and validation of applied research local innovation eco-systems. It addresses a question that is often left unaddressed - 'if applied research in VET is critical - who are the applied researchers?', therefore defining its target group within the European community of VET practitioners and companies.

The "Network of Excellence for Applied Research in VET" aims to enhance innovation in the (local) environment of VET providers and companies with a participative work program:

1. **Methodological Concept Development:** Identifying and creating valid applied research methods through using state-of-the-art, user-centred methods and andragogical philosophies.
2. **Competency Standards:** Defining essential competencies for effective applied research in VET, including standards and performance criteria for necessary knowledge and skills.
3. **Community of Practice:** Establishing a network for VET practitioners, stakeholders, and employers to facilitate knowledge exchange and innovation, reinforcing VET's role in EU research and development.
4. **Practical Resources:** Co-creating resources and methods accessible via a the NEARVET Digital Hub platform
5. **Legacy and Sustainability:** Ensuring long-term impact by enabling resource transferability within European Countries and exploitation.

NEARVET stresses the importance of:

1. Improving skills of teachers, trainers, tutors, managers (etc).
2. Adapting to labour market changes, digitalization, globalization, and sustainable models.
3. Collaboration between education and business (SMEs, industry, sector organisations).
4. Continuous professional development for VET professional communities .

NEARVET therefore wants to align with European priorities on skill development and innovation, by focusing on continuous learning, digital adaptation, and partnerships between education and industry. The initiative seeks to emphasize lifelong learning, responding to digital transformation, and meeting labour market needs. By enhancing applied research in VET, NEARVET wants to support EU innovation and aims to make VET systems more responsive to SME needs and digital shifts.

3. EVALUATION DESIGN

EVACON, as an external evaluation organisation based in Austria, was invited to assess the current impact of the NEARVET project and to explore its potential for long-term outcomes. To avoid

redundancy with internal evaluation, project management and quality assurance, EVACON focuses on assessing the validity of impact and innovation with regard to transnational aspects:

- Innovation - the innovative nature of the project theme and products in line with the objectives of the call, with particular reference to the capacity of NEARVET to stimulate innovation in VET systems, the professional development of VET practitioners and their engagement as "agents of change" in transnational Communities of Practice, the stimulation of VET provision to engage in research, production and adaptation of learning provision to the needs of SMEs and economic systems.
- Validity - how valid and relevant are the project outcomes, in terms of short-term and measurable impacts, to the overall problem and challenges in VET reform that the NEARVET project set out to address; in terms of transnationality - the impact of the project on a transnational basis, including the dissemination of results and products.

Finally, the evaluators provide advice on the follow-up and legacy of the project.

3.1. EVALUATION METHODS

3.1.1. DESK RESEARCH AND DOCUMENT REVIEW

Within NEARVET intensive quality control and quality review took place, according to the call. Evaluators got access to all documents and materials and deliverables produced during the project phase. Researchers of EVACON reviewed the project documents. To validate the results EVACON team registered to the Digital Hub and tests about 40% of tools and methods.

For evaluation we reviewed the following documents:

- Project Call
- Application document
- Research Report based on 30 expert interviews and focus group
- Methodological Concept
- Blueprint and skills framework
- Needs assessment and learning modules (partly reviewed)
- Online Digital Hub (40%)
- Memorandum of Understanding

3.1.2. KEY INFORMANT INTERVIEWS

The evaluators conduct 9 online interviews with project partners including work-package-leaders, representatives of the Community of Practice (CoP) and industrial representatives. For each interview partner a specific set of open questions was prepared and sent out to interview participants in advance. Interview duration varied between 40 to 60 minutes. Interviews were recorded and verbatim transcription was analysed using topic analysis and comparison of statements with documents.

Interviewed persons:

- Ali Rashidi and Yuliia Kozhukhivska (Folkuniversitet, Sweden). Responsible for Blueprint, validation, and needs analysis.

- Efrosyni Savva (MMC Management Center LTD), project manager in MMC, responsible for competence framework development, NEARVET CoP, network actions and dissemination in Cyprus.
- Elena Grilli (MetropolisNet, a network of different organisations implementing local strategies for employment and social inclusion in European cities), NEARVET coordinator and responsible for Network foundation, Memorandum of Understanding and project legacy actions.
- Gigi Guizzo (Rinova Málaga S.L.), part of the team who elaborated the Methodological Concept and lead the transnational CoP development, as well as the design of the Open Applied Research Resources Space part of the Digital Hub.
- Paola Rossetti (Assolombarda Confindustria Milano, Monza e Brianza); Assolombarda represents more than 7,000 member enterprises with over 432,000 employees. Partner in the CoP and contributor to learning materials.
- Marianna Gevorski (University of Applied Sciences, Fachhochschule des Mittelstands GmbH, Germany). Responsible for primary research with VET, businesses, HE institutions; responsible for the Report on attention areas per user profile.
- Richard Parkes (Rinova Málaga S.L.). Responsible for the Methodological Concept paper.
- Vaso Anastasopoulou (Dimitra Ekpaideitiki Simvilitiki AE, Greece). Responsible for the online Digital Hub, final conference.

3.1.3. ONLINE PARTICIPATION AT FOLLOWING EVENTS

- Dissemination/learning event (preliminary to contract on September 17th, 2024; 10:00-11:30 CET, Germany)
- Final conference on December 12th, 2024 (15:00 - 20:00 CET)

3.1.4. MEETINGS FOR BRIEFING EVALUATORS

Briefing, update call and debriefing of evaluators by Rinova in November and December 2024.

4. EVALUATION RESULTS

4.1. Applied research in VET lacking clear definition: Challenge and opportunity

The *Call for Proposals* within the ERASMUS program highlights the important role of applied research in vocational education and training (VET). It emphasizes the need to clarify the mechanisms at play. Furthermore, the call references many tasks of VET that are addressed by other EU programs. Examples include "*The Council Recommendation on vocational education and training (VET)*", the "*Osnabrück Declaration on vocational education and training as an enabler of recovery and just transitions to digital and green economies*", and "*The European Skills Agenda*". The call repeatedly underscores the importance of applied research for fostering innovation in industry and technology, particularly in the context of SME and VET. Additionally, it stresses the significance of applied research for improving pedagogy and didactics in VET and building a bridge between these areas:

"By being actively engaged in applied research with local companies, VET providers become co-creators of local innovation ecosystems. They do so by contributing to the generation of new and improved products, services, and processes, but also through the supply of skilled,

innovative, and entrepreneurial VET graduates" (Call for Proposals, ERASMUS-EDU-2022-PI-FORWARD-LOT2, 25th November 2021).

To the understanding of the interviewed project partners, the call sought to explore applied research within VET (Vocational Education and Training), focusing on its practical implementation, innovation potential, and the interplay between research, labour markets, and training institutions. But it lacks clear definition of applied research, leaving applicants to navigate ambiguities about what constituted applied research in this context. In some of the partner countries, such as Cyprus, applied and industrial research are treated almost synonymously. This differs from other European partner countries where applied research in VET emphasizes solving real-world problems, such as addressing skill shortages, improving youth employability, or enhancing training program design. The unclear framing of applied research has led to many discussions within partnership, which in retrospect was considered very valuable by some partners, because it forced a very profound exchange. And, from evaluation perspective, it finally led to an elaborate and well-founded "Methodological Concept".

The previous mentioned goals are well addressed in NEARVET. They are systematically analysed in the Methodological Concept (p. 8). Already at this point, it becomes clear that NEARVET builds a bridge between the mentioned areas in the call, fostering innovation within professions and sectors and promoting innovation within VET system itself, including teaching methodologies, while simultaneously incorporating current topics such as digitalization. Furthermore, the thorough methodological groundwork was translated consistently into the Blueprint and competence framework for researchers. This Blueprint may be somewhat restrictive but arguably necessary for developing learning content and methods for research. They are presented in an online learning platform, a Digital Hub, for "researchers". According to the broad definition, researchers could be experienced researchers, students as well as teachers, internship supervisors or other persons involved in VET. So NEARVET manages remarkably well to address the diverse areas mentioned in the call and integrates them all into the final Digital Hub. It provides applied research methods for tailoring VET to the target groups and needs of the market, methods to improve didactics, methods for networking, knowledge exchange and co-creation, and introduces methods like design thinking as teaching and experimentation tools for vocational training.

4.2. IMPACT VALIDATION

VET applied research has been a missing piece in innovation system in many European Countries.¹ VET organisations in Europe may partly still lack a clear understanding and systematic approach to applied research. The value and further potential of NEARVET is, that it addresses this lack.

4.2.1. METHODOLOGICAL CONCEPT AS FOUNDATION FOR NEARVET PRODUCTS AND DEVELOPMENT

As mentioned, the Methodological Concept holds significant importance and provides the foundation for the outputs within NEARVET. In the outputs' conception it had substantial impact as it lays the groundwork by clearly presenting the results of literature and research on VET systems and applied research in partner countries across approximately 100 pages. It connects these findings with EU

¹ Beddie, F., & Simon, L. (2017). *Developing VET applied research: Steps towards enhancing VET's role in the innovation system* (Research summary).

programs, policies, and key documents. The concept also integrates and interprets the insights gathered from expert interviews and focus groups across the partner countries. It highlights the challenges related to the skills, knowledge, and mindsets required by VET teachers, sector managers, businesses, employers, and academic institutions to conduct and supervise applied research projects in VET. This includes the applied research skills needed by academic staff, VET graduates, and other relevant stakeholders (Methodological Concept, p. 13).

The final Blueprint for NEARVET is based on the development framework of the Australian National Centre for Vocational Education Research (NCVER), which was created as a tool for VET educators and professionals to define the range of skills involved in applied research in VET. The framework is structured around a core set of domains, each broken down to encompass the skills and other factors necessary to be 'literate' in applied research (Methodological Concept, p. 70). Competencies for applied research in VET in EU² were derived, and the Digital Hub with 15 thematic fields (modules) was established. The Communities of Practice were utilized for this purpose, as they provided a broad range of expertise in VET across various stakeholders. The evaluators would particularly like to draw attention to the conclusions made in the Methodological Concept and address critical points regarding further development, such as the question of how academically trained one must be to participate in or conduct applied research (see Conclusion 4, p. 78). NEARVET appears to clearly promote the development of a basic scientific understanding, curiosity among learners, and a focus on solution-oriented approaches and scientific methods within applied research projects where they are needed. Interviewed partners also repeatedly mention that research cannot be conducted by individuals alone but often requires expertise from various disciplines, meaning a consortium of researchers—though it certainly includes apprentices, VET students, teachers, and training coordinators in companies, among others.

4.2.2. HIGHLY VALUABLE CONTENT IN THE DIGITAL HUB

In terms of impact validation, particular attention should be paid to the Digital Hub, which is a vast, practical and well-designed resource providing high quality content for a wide audience, including trainers, learners and administrators. Its comprehensive approach and accurate information make it a valuable tool for introducing applied research methods and improving practice in VET. One challenge is that the broad scope of the Digital Hub can make it less clear at first glance for whom specific resources are intended - be it trainers, learners or administrators. While this flexibility allows for broad application, evaluators felt that more explicit guidance or role-specific pathways could help users to quickly identify content relevant to their needs or more exactly their learning perspective. This was originally intended by the methodological approach in Conclusion 2 (Methodological Concept, p. 76)³ regarding the NEARVET Blueprint, but may not be applicable to the Digital Hub, or at least this was not clear to the evaluators who tested the Digital Hub. The Digital Hub uses another common strategy to guide learners efficiently through the many hours of training: A self-assessment allows learners to evaluate their skills in advance and find out where they may need to improve. Additionally in a final

² Within the partnership there seem to be an ongoing discussion, how much the Australian concept needs to be adapted for EU context.

³ "The NEARVET Blueprint and its competency framework will need to be explicit about the different range of actors and how they are involved in the applied research in VET process (researchers, VET teachers, VET managers, employer representatives, trade association and others acting as organisers and intermediaries; VET (including higher VET) students), including different 'types' of applied research projects and assignments. It will need to ensure that it targets skills, knowledge and competencies that differentiate between those actors and their contexts." Methodological Concept, p. 76.

assessment learners can proof their new skills. The partners using the Digital Hub for training in their ecosystem or country, seem to give advice to their learners or "translate" use cases for the learning modules to their clients and partners, as could be seen in the following examples from Germany, Italy and Sweden:

- In Germany, the research team at the participating higher VET institution (University of Applied Sciences) particularly appreciates the AI tools for research presented in the Digital Hub in modules 9 and 10. These modules explain how to use reliable and accurate data sources, such as web analytics, surveys and feedback, to gain a better understanding of what needs to be improved. They demonstrate a sophisticated understanding of artificial intelligence and emerging technologies in order to implement them strategically in research and educational practice. They train the ability to develop applied research through the use of digital and social media services, to identify and use the most appropriate digital tools, and to promote a critical interpretation of the use of AI-based digital services for applied research in VET. VET researchers at the Fachhochschule (University of Applied Science) have benefited from these modules, as have the evaluators. While the first modules of the Digital Hub tend to provide a basic understanding, some modules go into more depth or deal with very new or specific methods, so that even experienced researchers can learn new methods.
- In Italy, Assolombarda (representing industrial partners) has invested additional resources in developing and promoting the networking themes of the Digital Hub in the region. The organisation's primary interest lies in strengthening links between VET schools and industry to support hands-on training and innovation projects, to improve the labour-market and innovation relevance of VET programs and to introduce applied research more systematically into vocational education. The methods for building cooperation between schools and enterprises (Module 8) and for promoting problem-solving skills that can be applied in real-life situations (Modules 12 and 13) were of high value to the stakeholders in this Italian region and were the main benefits of the Digital Hub for them. Furthermore, a key finding for the regional VET stakeholders was that teachers themselves need to be 'applied researchers' in order to create realistic and innovative learning environments. And according to their feedback, NEARVET provided guidance, best practice and tools to help teachers integrate research and industry perspectives more effectively into the classroom.
- In Sweden, where VET is continuously measured against market needs (the needs of enterprises in the regions) and applied research in this context is omnipresent, the topic of creating and managing hubs⁴ as innovation ecosystems was new for some VET fields (not IT). For this reason, Module 14 (Creating and managing centres and innovation ecosystems to develop innovative solutions and improve students' skills to meet the current needs of the labour market) was highly appreciated and will be promoted in the future.

The three examples illustrate just some of the benefits of the Digital Hub. Each participating organisation, represented by one interviewee, mentioned different use cases and benefits. In Greece, the whole range of content was appreciated and the possibility of certification was very much welcomed by users, whereas in other countries specific content seems to be favoured. In general,

⁴ Not to be confused with the Digital Hub in the project. Here "hub" means a (C-)VET-business-hub: <https://nearvethub.projectlibrary.eu/courses/many-desktop-publishing-packages/lessons/create-and-manage-hubs/>

NEARVET's approach to research methods mainly assumes business-driven funding of applied research, which proved to be an advantage for dissemination.

The evaluators would like to add some thoughts from their point of view (as researchers in VET) after testing the online learning parts of the Digital Hub. The presentation of the learning resources on the website (<https://nearvethub.projectlibrary.eu/>) is very attractive from their point of view, well structured, easy to navigate and, most importantly, free to access without any registration (in December 2024). The progression from basic to advanced topics, such as statistical terminology or tools such as Google Analytics, is ambitious and informative, but could benefit from preparatory explanations for those without previous experience in these areas. The Digital Hub effectively provides a solid basic understanding, although there is potential to enhance this by exploring concepts such as the distinction between causation and correlation, and the differences between empirical approaches and conceptual strategies in problem-solving and applied research. The evaluators are aware that 'research literacy' has been challenged in the methodological approach: "[...] is it necessary to consider that such skills and knowledge [about scientific research methods] are not necessary for many who to lead, instigate or contribute to applied research in VET - and that applied research may be better served by bringing in such expertise where the assignment or project calls for it?" (Conclusion 4, Methodological Concept p. 78). In the view of the evaluators, basic scientific skills such as the above-mentioned differences could be addressed in a common Digital Hub for different stakeholders, whereas specific methods might not be, as different professions work together in applied research. The Digital Hub also successfully introduces key concepts and methods, but could further address applied research topics specific to technical and scientific VET fields, such as experimental approaches or prototyping. This addition would enrich the provision for practitioners in these fields. Further participatory development, ideally again in COPs involving universities, will show which direction is successful. Feedback from users suggests that the inclusion of tailored examples or a clearer structure could improve the practicality of some methods in real-world settings. In addition, adjustments to the target audiences could make it an even more effective resource for its diverse audiences.

It should be added that at the time of testing the Digital Hub, additional content such as the "Open Applied Research Resources Space" were still under development, and have not been thoroughly tested. However, this space promises to be a valuable source for additional learning content. It responds to the need identified by the partnership to offer free supporting material for applied researchers who wish to expand their horizon on the topic of "applied research".

4.2.3. LASTING EFFECTS THROUGH STIMULATING INNOVATION

All interviewed representatives felt the project team "ran out of time" to test ideas thoroughly, suggesting an additional year would have allowed more extensive piloting and refinement. While the interviewed Work Package (WP) leaders partly self-critically describe their efforts as a "first attempt," others and external evaluators see well-developed and useful outputs. Although some methods in the Digital Hub might quickly become outdated, the methodological framework, the selected topics and much of the content will most likely be sustainable. In a dynamic exchange, the content could be continuously updated. In this regard, significant interest is expressed, particularly by employers and their representatives (Italy, Sweden, Greece) as well as from partners of higher VET institutions (Greece, Sweden, Germany, Cyprus).

Teachers and instructors gain access to methods and competency frameworks that bridge the gap between education and industry, enabling them to collaborate with companies on real research and development projects. The representative of Assolombarda reports, that the results of NEARVET will be incorporated into the regional development of VET. In Greece and Cyprus similar results are reported.

With the transnational CoPs NEARVET has had a significant transnational impact, fostering cross-border collaboration and knowledge exchange among participating countries. Overall, the project has provided a lot of "food for thought" and "new horizons have been opened and expanded", as partners put it. New ideas within NEARVET as well as beyond were generated. This can be seen as a significant impact and an important step in driving further innovation. NEARVET fosters the exchange of proven approaches and builds a shared vocabulary for "applied research in VET", boosting the innovation capacity of both (high-)VET providers and businesses.

NEARVET uses the Memorandum of Understanding to encourage (political) decision-makers and stakeholders to carry forward, adapt or apply the project results. Bringing together diverse actors (companies, VET providers, research institutions) can strengthen EU-wide knowledge transfer. Especially the Italian partner regards international dimension as central to driving innovation in the national context. The organisation Assolombarda intends to practically implement NEARVET's results in regional VET initiatives and reform projects.

From the evaluators' perspective, NEARVET has a great potential to drive innovation for SMEs because it:

- has an inclusive definition of research and therefore encourages many people to take responsibility for applied research,
- disseminates new methods for applied research (how to use AI, social media, learning analytics⁵),
- stimulates cooperation building between companies and schools ("How to" in Digital Hub modules),
- addresses the needs of stakeholders (SMEs) and the labour market,
- encourages (and shows how to use) project-based learning, design thinking and other innovation stimulating methodologies to educators, trainers and teachers,
- uses CoP to address real world problems,
- spreads a positive spirit through activating methods such as research competitions, and
- establishes a vivid network through partner activities.

Of course, it is only in the long term that we will see sector-specific business innovation as a result of the applied research stimulated by NEARVET.

4.2.4. INNOVATION THROUGH SHIFT OF FOCUS AND MINDSET

Already in the call, the important role of applied research in innovations within industry and technology, particularly in the context of SMEs and VET (Vocational Education and Training), is highlighted. According to partners from Spain, early in the project, the partnership realized that, beyond *what* applied research is, they needed to identify *who does* applied research in VET. This shift

⁵ This has to be updated regularly in the NEARVET Digital Hub.

fueled discussions in the CoPs and influenced the Methodological Concept. Some of the interviewees found it notable that universities often claim a "higher" level of authority in research, sometimes underestimating non-academic or hands-on approaches in VET. In NEARVET, partners explored ways to validate these more practical, field-based forms of research and highlight their importance. Several interviewees mentioned that applied research in VET "does not take place in a vacuum". This means, as explained in the Methodological Concept *"it occurs due to a range of drivers from different perspectives, needs or challenges, which lead to specific applied research assignments or projects being undertaken. In practical terms, this could be addressed by a structure that elaborates and aligns the Blueprint according to a taxonomy that is based upon these drivers and/or those that are, as a result, likely to initiate them:*

- *Applied research in VET – that is initiated by individual or ‘clusters’ of employers or companies to address an issue specific to their firm or firms (micro-level) in recruitment, skills forecasting, marketing, technology, operations, product or process innovation;*
- *Applied research in VET – that is initiated by sector bodies and trade associations (meso-level) or public policy and planning authorities (macro level) concerning regional or national issues of social, economic or educational concern;*
- *Applied research in VET – that is initiated by VET managers and VET teachers, in order to inform or improve the VET curriculum (e.g. design, organisation, recruitment, drop out, relevance to the labour market) or to support their own CVET or CPD;*
- *Applied research in VET – that is initiated by VET students or trainees, particularly (but not necessarily exclusively) at Higher VET level, in the context of undertaking work-based learning or work-experience that is focused on problem-solving or project-based learning (PBL);*
- *Applied research in VET – that is initiated by applied research interests (from universities or other research institutions) such as the application of scientific, technological or other academic research results" (p. 76 f.)*

NEARVET uses the expertise of the field in CoPs, to gain insights in applied research in VET in partner countries, went into "deep exchange and exploration" of the topic, according to interviews with partners who also participated in CoPs. Their research findings indicate that the focus of applied research in VET varies significantly across European countries, reflecting their distinct priorities and challenges. In some countries, applied research emphasizes the development of innovative teaching and learning methods or the design of new vocational training programs. In contrast, in Greece, research predominantly targets the evaluation and improvement of existing VET programs and examines their impact on the labour market. In Cyprus (and partly in Spain), the country report indicates that, unlike the approaches in other countries, applied research and industrial research are viewed as (almost) synonymous. Furthermore, the research highlights that national contexts influence the scope of applied research. In countries with high youth unemployment rates, the priority is often on developing strategies to enhance youth employability, whereas in others, the focus shifts towards mitigating skills shortages in specific industries. The products, especially the methods and exercises in the learning environment in the Digital Hub, reflect these differences and address the local needs of research practitioners.

Finally, to answer the question of "who are the researchers?" in NEARVET, the researchers could be "everyone involved in VET." The research subjects can vary and include research on VET, research within VET, and research for VET, as well as the stimulation of problem-solving for industrial/sector

research. This shift of perspective was crucial in the partnership and stimulated the development of methods for the Digital Hub addressing the different backgrounds in this transnational setting.

5. CONCLUSIO AND RECOMMENDATIONS

NEARVET, with its comprehensive requirements, has taken an approach not only to clarify the mechanisms of applied research in the field but also to define them to some extent, for example through the Blueprint, based on comparative research between partner countries, and the Methodological Concept. The differences in conditions and functioning between the participating countries presented a challenge. However, the project showed that practitioners' needs are often similar across countries, revealing common shared needs. The detailed and well-founded exploration of the topic in the Methodological Concept provides not only theoretical foundations but also innovative conclusions, offering numerous starting points for the design, application, function, and further development of VET. Some of these have already been implemented in the Blueprint, Digital Hub and other NEARVET products, but there are many more approaches that could be further developed and tested, as the interviews revealed. By shifting the focus from "what is applied research" to "who are applied researchers," as well as by challenging existing hierarchies, an innovative approach was adopted. "The project has definitely left its marks." – one partner puts it and highlights the sustainable impact the project already had in practice. Based on the review of documents, outputs, and interviews with partners, several recommendations can be made to further enhance its impact and leverage its potential:

5.1. EXTENDING AND DEEPENING THE WORK

A two-year timeframe for a project in Europe's complex and diverse VET system with a claim to innovation was challenging and fruitful, although some thematic issues, such as the translation from Methodological Concept to learning methods, would have benefited from more in-depth work. Additional time would help to refine the conceptual approach. A next phase or follow-up project could allow for more extensive piloting, particularly using the Digital Hub's resources for enterprise-led R&D tasks in VET. Future extensions could test the approach more widely, possibly involving additional countries through the Memorandum of Understanding and direct partner networks. Future work could also focus on local CoPs to ensure a direct, practical impact on enterprises, policy and VET institutions.

5.2. STRENGTHENING DISSEMINATION AND COMMUNITIES OF PRACTICE

The Methodological Concept should be emphasized as a comprehensive and highly valuable resource whose potential should be further explored and exploited. It is recommended to publish the Methodological Concept, or parts of it - in particular the conclusions drawn from the adaptation of the Australian version - and to disseminate it within relevant (European) organisations. This could serve as a basis for future projects. Dissemination to policy makers in the form of an article would be ideal. The coordinator suggests different formats to reach new stakeholders, ensuring that the methodological approach is well translated into accessible formats for each group. Building on the success of the NEARVET Action Research Competition, she also suggests involving more companies in the Community of Practice, so that the NEARVET approach can robustly integrate real, current business problems.

Additionally, it is recommended to engage with vocational education research at universities and public institutions. In Germany, the Federal Institute for Vocational Education and Training is a leading body in VET research. The biannual Austrian Vocational Education Research Conference⁶, for example, serves as an important platform for researchers in the German-speaking countries to exchange ideas on this topic. The Methodological Concept or the Digital Hub could be presented at such conferences to extend the Network of Excellence.

The foundation for fruitful exchange lies in the creation of a community, which NEARVET has already successfully established both locally and transnationally. Moving forward, expanding this network will help make the Communities of Practice more interactive and dynamic. Communities of Practice, which connect various stakeholders serve as a driver for innovation. This approach is highly promising, as mentioned by several project partners, that they want to continue CoP for target problem solving.⁷

5.3. MAINTAIN THE DIGITAL HUB

The Digital Hub has already demonstrated its value as a comprehensive resource collection. A further recommendation involves the continued development of the Digital Hub, specifically regarding its engagement with targeted stakeholder groups. However, the challenge remains that it is not yet clear which resources and materials are most useful for which stakeholders. To address this, a filtering mechanism is needed—an intermediary that can clearly identify and categorize which materials are intended for which specific audience. This would help ensure that the right resources reach the right people effectively. In the context of the Digital Hub, the effectiveness of challenge-based/problem-based learning in activating learners should also be emphasized. This learning strategy should be maintained and further strengthened. Sustaining and regularly updating the Digital Hub is crucial. Partners or an appointed "owner" might keep resources fresh, add advanced modules, and manage certification processes. Some partners highlighted the importance of the potential of micro-credentials for individuals at all levels, addressing the need for certificates that can be earned "on the move" – as partners describe it. These credentials should complement longer, more foundational education, ensuring that additional qualifications remain relevant and up to date as they are obtained. While there is already a certification for the overall program, further development could be made in terms of micro-credentials.

5.4. NEARVET: "CHALLENGING BUT FRUITFUL"⁸

Overall, NEARVET has been effective in clarifying and defining who can be applied researchers in VET and in highlighting common needs across countries. The project has already fostered innovation by shifting its focus to the applied researchers themselves - a change of perspective that has generated new ideas and thoughts within NEARVET and beyond, broadening the horizons of partners. Innovative outcomes have been achieved in relation to the Communities of Practice and the Digital Hub, with potential for further development, particularly in terms of strengthening the network locally and

⁶ The community, consisting of a few hundred members, addresses various topics, including (C-)VET, evaluation, societal challenges such as ecological sustainability, the availability of training places, migration, inclusion, transitions from school to vocational education and from VET to employment, mismatch, and labour market segregation. The conference also covers vocational training methods, the interface between vocational schools and companies, dropouts, curriculum development, the creation of new professions, and more.

⁷ CoPs dissolve when the common problem is solved, unless they move on to another topic.

⁸ Quote from interview

transnationally to engage more practitioners. Continued dissemination of the methodological approach and engagement with VET (and VET research) institutions will further enhance the impact and sustainability of the project.

6. ANNEX

6.1. CORE SET OF INTERVIEW QUESTIONS

1. Please specify your role in the NEARVET project.

General understanding of the project and validity

2. According to you, what do you think was the aim of the project call? (What should be improved or developed by the project?)
3. To what extent did the project address these goals and aims?
 - a. (*If adequate:* The project call addressed the structures and mechanisms for applied research in VET: To your understanding, what does that mean?)
 - b. (*If adequate:* How did the project address this? What else did the project address (skills and mindset of VET teachers and SME and VET managers, students of VET-pedagogic; foster collaboration between VET-schools and SME through offering applied research ...)
4. What is the research subject of applied research in VET in the NEARVET-project? (Is the research subject the VET system, the pedagogics? Is the research subject "subject-specific" in contexts of the vocational specialisation", such as materials research, applied physics, ...) (To my understanding, NEARVET focuses on the first interpretation, VET system and VET itself as research subjects. And NEARVET worked on improving VET pedagogics to have more creative, innovative and entrepreneurial VET graduates. Is this correct? To you want to add something?)

In NEARVET there was a shift of focus: Rather than asking *what* applied research is or should be in this field, it asks, *who* are the applied researchers? This shift in focus emphasizes the individuals actively working in the field who ultimately drive innovation. What do you think after two years working in NEARVET:

5. What insights were gained with this unusual question and approach? (What was your personal insight?)
6. To what extent are the insights helpful for the system and for those, who " do" or " could do" applied research, the wide community? (Companies, VET-provider, students, teachers, apprentices ...)
7. Considering the different outputs and work packages: How do they stimulate innovation in the VET systems and professional development of VET practitioners? (Do they also engage professionals as "agents of change" in transnational Communities of Practices?)
8. How did the project (products, community support) engage VET provision in context of research? In context of production and adaptation of learning provisions towards needs of SME's and economic systems? What should be further developed?

Evaluation questions in terms of validity, legacy and exploitation:

9. To your opinion: What are the important results of NEARVET? Do you see any (measurable) impacts?

10. What is the specific potential of NEARVET products and outcomes?
11. How successful is (and can be on the long run) NEARVET in advancing applied research as an innovation driver for VET? Looking back, how suitable and relevant were the individual project strands?
12. Do you see impacts to the reform that the NEARVET project set out to address / or to the overall challenges in VET in general? (Learning, Curriculum development...)
13. Are there areas that suggest themselves for further evolution?
14. How can the exploitation of insights, products be enhanced (to fostering innovation through applied research)?

Transnationality: (Lead-Partner)

15. Which additional countries were involved? What are the impacts on a transnational basis?

Dissemination:

16. There are different products in the project, the Digital Hub, the Community of Practice, the methodological concept and some more. Do you have some additional ideas, how to disseminate this to stakeholders, that can benefit from it?
17. *(For lead partner of dissemination only: Could you describe the dissemination efforts? Who/how many could be reached? Post hoc, do you think the dissemination strategy to inform key stakeholders of activities and results was effective? Are there any organisations or stakeholders, that could be interested or benefit, that were not in your focus?)*
18. How does NEARVET go forward to policy makers and stakeholders on policy level? (E.g. to adopt, adapt or apply the project outcomes and impact upon the policy-informing ambitions?) What else could be done or would be important?

6.2. EVALUATORS BACKGROUND

6.2.1. ANDREA EGGER, MA (SOCIAL SCIENTIST IN APPLIED SOCIAL RESEARCH)

Andrea Egger is a certified occupational psychologist, systemic coach and social researcher. She has conducted and supported 150 evaluations, applied social research projects, comparative studies and development projects over the past two decades in the field of labour market policy. Her work primarily addresses career orientation, vocational training, and education, and (re)integration into the workforce. Therefore she recently founded EVACON Evaluation&Consulting, a research and consulting company located in Vienna, where she focuses on program and project evaluation. Her methodological portfolio ranges from empirical (statistical) methods to qualitative social research methods. She has participated in various dissemination and development projects within the Erasmus+ framework as well as contract work for the European Commission. Most recently, she supported ESF+ in creating a guide for implementing cross-cutting objectives of anti-discrimination, equality, and ecological sustainability in Austria. She is currently evaluating the "Values and Orientation Courses" of the Austrian Integration Funds, analysing the employment histories of rehabilitants on behalf of the

Burgenland Public Employment Service and analysing the impact and potential of New Work on a public service organisation in Austria within a team of economic and social scientists.

6.3. AGNES DUERR, BA BSC MA (SOCIAL SCIENTIST IN APPLIED SOCIAL RESEARCH)

Agnes Dürr is a sociologist (MA) and has a BSc in psychology. She works as social scientist and university lecturer at the University of Vienna at the Department of Sociology and part time at EVACON. Her research focus on integration, world of work and family research. She has conducted several applied research projects with Andrea Egger.



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