



Philipp Grollmann & Christof Nägele (Eds.)

Report on the Workshop

**VET research in Europe: Topics, Structures and Cooperation**

Wednesday, 11 November

**European Vocational Skills Week 2020, Berlin, Germany**

organised by the

**European Research Network on Vocational Education and Training  
(VETNET)**

&

**Federal Institute for Vocational Education and Training  
(Bundesinstitut für Berufsbildung BIBB), Germany**

in cooperation with

**European Commission DG Employment, Social Affairs and Inclusion**

May 2021

<https://doi.org/10.5281/zenodo.5457059>

## **Abstract**

This report documents the course and results of an event jointly organised by VETNET and BIBB in cooperation with the European Commission DG Employment, Social Affairs and Inclusion. The event “VET research in Europe: topics, structures and cooperation” was organised on Wednesday, 11th 2020, as part of the European Vocational Skills Week in Berlin, Germany. Because of the COVID-19 pandemic, it was carried out online.

It was up to the participants to submit their contributions in written form or only as an overview of their presentation, e.g., as presentation. Workshop facilitators were asked to summarise the discussion in their workshops. In the first and second part, four contributions provide a stimulating input on relevant topics in and structures of VET research in different European countries. Based on the introduction and impetus presentations, the question on how to improve cooperation within the research community and between research and policy was discussed in 11 small groups and is documented by the moderators. At the end of the publications there are conclusions of the organisers on focal points of further developments and cooperation.

## Contents

<b>1</b>	<b>Scope and Aim of the Workshop</b>	<b>4</b>
1.1	Organisers and Presenters	4
1.2	Timetable of the Workshop	5
<b>2</b>	<b>Welcome Addresses and Introduction</b>	<b>6</b>
2.1	VET Research in Europe: Topics, Structures, and Cooperation	6
2.2	Introduction Into the Organsation, Aims and Scope of the Workshop	7
2.3	The Contribution of Research to Innovation in Vocational Education and training (VET) - The Role of VET Institutes	9
<b>3</b>	<b>Impetus Presentations</b>	<b>24</b>
3.1	Cooccurrence Keyword Analysis of Five Major VET-Journals: Clusters, Trends and Topics	25
3.2	Reflections on VET Research Based on Emerging Issues in Research on Vocational Education & Training	27
3.3	Social and Research Challenges of VET School Multifunctionality and Innovation	32
3.4	VET Research Panorama in Poland - Between Tradition and Double Transformation	36
<b>4</b>	<b>Reports From the Working Groups</b>	<b>40</b>
4.1	Notes from Group 1 - <i>Per Anderson</i>	40
4.2	Notes from Group 2 - <i>Eric Dumartin</i>	42
4.3	Notes from Group 3 - <i>Franz Kaiser</i>	44
4.4	Notes from Group 4 - <i>Andrea Laczik</i>	45
4.5	Notes from Group 5 - <i>Fernando Marhuenda Fluixa</i>	48
4.6	Notes from Group 6 - <i>Lázaro Moreno Herrera</i>	50
4.7	Notes from Group 7 - <i>Isabelle Le Mouillour</i>	51
4.8	Notes from Group 8 - <i>Paolo Nardi</i>	53
4.9	Notes from Group 9 - <i>Eoghan Ó Murchadha</i>	55
4.10	Notes from Group 10 - <i>Vidmantas Tutlys</i>	56
4.11	Notes from Group 11 - <i>Özlem Ünlühisarcıklı</i>	57
<b>5</b>	<b>Conclusions, further steps, and farewell</b>	<b>59</b>
5.1	Concluding Remarks: International Collaboration as a Key to Success for Vet Research	59
5.2	Concluding remarks: VETNET as a Catalyst to International Collaboration and Booster for the Development of VET Research	61
<b>6</b>	<b>Participants</b>	<b>62</b>

## **1 Scope and Aim of the Workshop**

The joint workshop during the EVSW 2020 of the European Research Network on Vocational Education and Training VETNET and the Federal Institute for Vocational Education and Training (BIBB), in cooperation with the European Commission, discussed VET research topics and structures and possibilities of cooperation between different actors.

Vocational education and training research (VET research) is very vivid in Europe and contributes to the development of VET systems, delivery forms, and the shaping of careers through VET. This workshop aims to get an overview of topics and structures of European VET research and asks about the cooperation between different actors in research and policy. Research activities in Europe vary due to differences in VET systems, different priorities and topical challenges. Consequently, the current topics discussed differ significantly between regions and countries. The great diversity of topics is only one aspect. There are also various disciplinary approaches and institutional setups for carrying out research and maintaining its relation to policy and practice. All this makes cooperation within research and between research and politics a challenge.

We invited experts that have given stimulating inputs on relevant topics and structures of VET research in different European countries. They raised issues on the development of VET systems and occupations/professions, the crucial role of companies and sectors in shaping VET – from curriculum design to training provision – and the role of VET educators in companies and schools and students/learners. Based on these impetus presentations, the question of how to improve cooperation within the research community and between research and policy was discussed in small groups. The aim was to define key elements of successful cooperation. It is essential to find ways to cooperate besides the different challenges imposed by the relevant topics and historically rooted structures of VET research.

The discussion was related to the previous VETNET meetings during the EVSW in Brussels, where the focus was on methods and theories, Vienna and Helsinki, where the focus was on how research and policy could jointly develop VET. These discussions are documented in yearly reports.

### **1.1 Organisers and Presenters**

Dr **Christof Nägele**, University of Applied Sciences and Arts Northwestern Switzerland FHNW, Chair of VETNET

Dr **Philipp Grollmann**, Federal Institute for Vocational Education, BIBB, Bonn

**David Kunst & Kinga Szebeni**, European Commission DG Employment, Social Affairs and Inclusion

Prof. Dr Dr hc. **Michael Gessler**, University of Bremen

Dr **Moso-Díez Mónica**, Head of the Centre for Knowledge and Innovation, Bankia Foundation for Dual Training

Dr **Marianne Teräs**, University of Stockholm

Dr **Andrzej Stępnikowski**, The Centre for VET Research & Development, Poland

## 1.2 Timetable of the Workshop

09:00 – 09:30	30'	Welcome address	Kinga Szebeni, EC
		Welcome and introduction and impetus presentations	Christof Nägele, VETNET Philipp Grollmann, BIBB
09:30 – 09:45	10'	Topics and structures	Michael Gessler
09:45 – 10:00	10'	Topics and structures	Marianne Teräs
10:00 – 10:05	5'	Short Break	
10:05 – 10:20	10'	Topics and structures	Mónica Moso-Díez
10:20 - 10:35	10'	Topics and structures	Andrzej Stępnikowski
10:35 – 10:45	15'	Coffee break, participants will be sent to their breakout session	
10:45 – 11:55	90'	Moderated group discussions	
11:55 – 12:00	5'	Short break	
12:00 – 12:35	15'	Reports from the group discussions	Moderators of the group-discussions
12:35 – 13:00	30'	Conclusions, further steps, and farewell	Christof Nägele, VETNET Hubert Ertl, BIBB

The workshop was open to all interested in the topic, registration before the event was compulsory.

## 2 Welcome Addresses and Introduction

The event started with introductions through the organisers. Organisers presented their views and findings on VET research and explained the background of the workshop. Then, Philipp Grollmann from BIBB presented some initial findings from a survey that BIBB has carried out among VET research institutions from European countries and beyond.

### 2.1 VET Research in Europe: Topics, Structures, and Cooperation

*Kinga Szebeni*, European Commission, Directorate General for Employment, Social Affairs and Inclusion, Unit E3 - Vocational training, Apprenticeships and Adult Learning.



#### EU Policy Framework



#### Council Recommendation on Vocational Education and Training

- VET is agile in adapting to dynamic labour market changes
- VET is attractive
- Flexibility and progression opportunities
- Equal opportunities
- VET is a driver for innovation and growth
- VET is underpinned by quality assurance
- Effective governance

#### Objectives

- Share of employed graduates should be at least **82%**
- **60%** of recent graduates from VET benefit from work-based learning experiences during their training
- **8%** of learners in VET benefit from learning mobility abroad



#### HOW? – ACTIONS AT EU LEVEL






#### Actions on EU level

- Supporting the Member States' efforts for the implementation of this Recommendation, strengthening capacity of vocational education and training institutions, including their digitalisation and environmental sustainability and **promoting research in VET** at both national and EU level through funding from the relevant Union funds and programmes



## 2.2 Introduction Into the Organisation, Aims and Scope of the Workshop

Christof Nägele, Chair of European Research Network on Vocational Education and Training (VETNET).

 <p style="text-align: center;"><b>VET research in Europe topics, structures and cooperation</b></p> <p style="text-align: center;">Workshop - 11 November 2020 – 09:00 – 13:00</p>	
<p style="text-align: center;"><b>Dr. Christof Nägele</b></p> <p>Chair of VETNET University of Applied Sciences and Art Northwestern Switzerland, School of Education</p>	 <p><b>VETNET</b></p> <p>Is an open network of researchers interested in exploring societal, policy, governance, organisational, institutional, pedagogical and individual factors that shape and explain both vocational education and training (VET) and learning across the lifespan.</p> <p><b>Goals</b></p> <ul style="list-style-type: none"> <li>• explore and shape the relationship between research, policy, governance and practice;</li> <li>• stimulate the multidisciplinary discussion in the European research area and beyond through mutual learning.</li> </ul> <p><small>You can find the regulations of VETNET here <a href="https://www.vetnet.org/about/vetnet-regulations/">https://www.vetnet.org/about/vetnet-regulations/</a></small></p>
<p><b>VET Research is...</b></p> <p>colourful, innovative, based on theory, based on practical problems, theory-building, demanding, practice-oriented, evidence driven, policy driven, ...</p> <p><b>What is VET research for you?</b> Please, write some keywords in the chat of Zoom...</p>	<p style="text-align: center;">VETNET EVSW Research Workshop</p> <p style="text-align: center;"><b>2016 &amp; 2017 Brussels / 2018 Vienna / 2019 Helsinki / 2020 Berlin</b></p> <div style="display: flex; justify-content: space-between;"> <div data-bbox="842 1160 997 1303"> <p><b>Research framework</b></p>  </div> <div data-bbox="1050 1160 1369 1294"> <p><b>Research Topics</b></p> <ul style="list-style-type: none"> <li>o Cross-country transfer in VET</li> <li>o History of VET</li> <li>o Lifelong learning</li> <li>o Transferable/transversal skills</li> <li>o VET attractiveness</li> <li>o Meaningful VET careers</li> <li>o VET governance</li> </ul> </div> </div> <p><small>You can find the regulations of VETNET here <a href="https://www.vetnet.org/about/vetnet-regulations/">https://www.vetnet.org/about/vetnet-regulations/</a></small></p>
<p style="text-align: center;">2016 &amp; 2017 Brussels / <b>2018 Vienna</b> / 2019 Helsinki / 2020 Berlin</p> <p><b>VET across the lifespan</b></p> <ul style="list-style-type: none"> <li>• Societal eco-systems and learning across the lifespan</li> <li>• Apprenticeship reform in France</li> <li>• The VET skills cycle in Ireland</li> <li>• The role of VET in including marginalized adolescents and adults</li> </ul> <p><small>You can find the report here <a href="https://doi.org/10.5281/zenodo.4033254">https://doi.org/10.5281/zenodo.4033254</a></small></p>	<p style="text-align: center;">2016 &amp; 2017 Brussels / 2018 Vienna / <b>2019 Helsinki</b> / 2020 Berlin</p> <p><b>VET for ALL – Skills for Life</b> VET – LLL: distinct or linked?</p> <ul style="list-style-type: none"> <li>• Apprenticeships: conceptions and misconceptions</li> <li>• Apprenticeship triangle: vocational learning, quality management and challenging innovation</li> <li>• Participation in adult E&amp;T in the European Union: new perspectives on system-level determinants</li> <li>• Navigating the structures of adult learning in Europe</li> </ul> <p><small>You can find the report here <a href="https://doi.org/10.5281/zenodo.3489723">https://doi.org/10.5281/zenodo.3489723</a></small></p>
<p style="text-align: center;">2016 &amp; 2017 Brussels / 2018 Vienna / 2019 Helsinki / <b>2020 Berlin</b></p> <p><b>Topics</b> Establish a list of current topics in VET research.</p> <p><b>Structures</b> Draw a picture of the most critical players in VET research</p> <p><b>Possibilities of cooperation</b> Show possibilities of cooperation between actors on national, EU and international level.</p>	

**Let's keep in touch**



**VETNET**  
European Research Network  
Vocational Education and Training

**bibb** Federal Institute for  
Vocational Education  
and Training

Information on the workshop will be available on  
<https://vetnetsite.org/european-vocational-skills-week-2020/>

We will inform you also by email as soon as the report is ready.

In the meantime visit us:

- VETNET [www.vetnetsite.org](http://www.vetnetsite.org)
- BIBB [www.bibb.de](http://www.bibb.de)
- EVSW [https://ec.europa.eu/social/vocational-skills-week/european-vocational-skills-week-2017\\_en](https://ec.europa.eu/social/vocational-skills-week/european-vocational-skills-week-2017_en)



### **2.3 The Contribution of Research to Innovation in Vocational Education and training (VET) - The Role of VET Institutes**

*Lara Buchholz, Hubert Ertl, Philipp Grollmann, Christina Widera, Isabelle Le Mouillour,* Federal Institute for Vocational Education and Training, BIBB.

#### ***Introduction***

The aim of this contribution is to present findings from a survey among Vocational Education and Training (VET) Research and Development Institutes across Europe and internationally. The survey was carried out in 2020 as part of the work surrounding the German Presidency of the Council of the European Union and a range of activities of BIBB within this context. The participating institutes discussed first findings in an online meeting. The stocktaking can serve as a basis for better understanding the contributions enhanced cooperation in research could make to a sustainable development of European VET. It will contribute to increasing the visibility of institutionalised VET research in Europe. The survey and the online meeting of the institutes also aim at identifying future foci of European VET research and the potential of collaboration of research institutes on topics of common interest. The comparison of current research activities and findings will allow to build on each other's work and develop more coordinated future research programmes.

#### ***What is institutional VET research?***

Institutionalized VET research and development looks back at over 50 years of history. It includes a range of activities and provides a rich experience base for innovation and development in VET on the national and European level. Despite several contextual and organizational changes and dynamics, there is also continuity in many countries in terms of designating organizational and budgetary resources and personal capacities to the further development of VET. Vocational Education and Training (VET) describes education and training which aims to equip learners with knowledge, know-how, skills and/or competences required for occupations or more broadly in the labour market including initial programmes at the beginning of careers and continuing education and training during later phases of life.

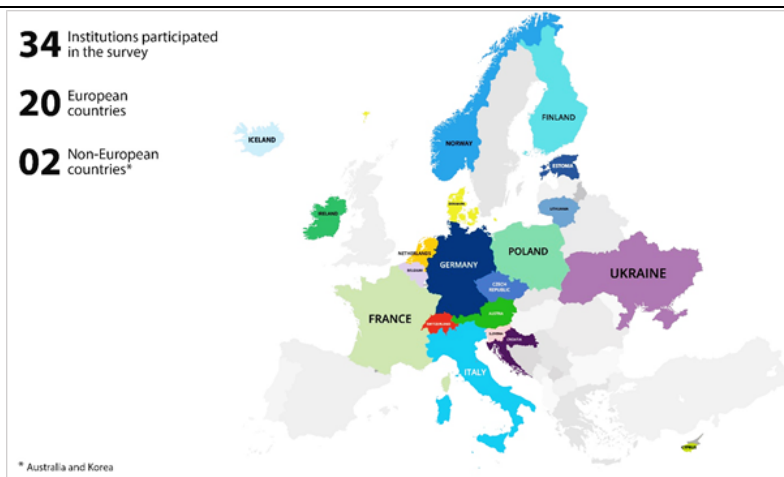
Across today's European Union member states first designated VET institutions were set up in the 1950s. The earliest example is the predecessor of the Czech NUOV, Národní ústav odborného vzdělávání (integrated into NUV in 2016) in 1953. In the meantime, the Czech National Institute for Education, the Education Counselling Centre and Centre for Continuing Education of Teachers (NÚV) and the National Institute for Further Education (NIDV) were merged into one organization, the National Pedagogical Institute of the Czech Republic (facility for further education of pedagogical staff). In the 1970s, several western European countries established institutes at a national level. For instance, in Germany the BBF, the Federal Institute for Vocational Education and Training Research, now the Federal Institute for Vocational Education and Training (BIBB), and the Centre des études et des recherches sur les qualifications (Céreq) in France were established in 1970. Two years later the Italian institute for VET, the Istituto per lo sviluppo della formazione professionale dei lavoratori (ISFOL) was founded. Since 2016 it is part of the Istituto Nazionale per l'Analisi delle Politiche Pubbliche (INAPP). As a result of these developments the European Centre for the Development of Vocational Education and Training (known as Cedefop) followed in 1975. Some countries that have more recently joined the European Union have founded their own institute, such as the Centra RS za poklicno izobraževanje (CPI) in Slovenia.

### *A survey among institutes of VET research and development*

34 institutions have actively participated in the survey. These institutions represent the expertise of 6.415 employees<sup>1</sup> in total. BIBB holds partnership agreements with around 30 institutes from European countries and beyond and carries out cooperation workshops with many of these partner institutions on a regular basis. The understanding of institutionalized VET research in this survey is based on the role and tasks of BIBB in the context of the German VET system and its experience with international cooperation. Figure 1 provides an overview of the 34 responding institutions.

**Figure 1**

34 institutions in 22 countries



At the outset of the survey a list of around 60 organizations was collected which were assumed to potentially fulfil the selection criteria, see Box 1. In the accompanying letter to the survey the recipients were asked to get in touch with other organizations, which they thought were relevant for the survey (snowballing approach).

#### **Box 1**

Criteria for the selection of organizations

- The organization is commissioned with tasks in VET research and development either through an institutional basis (e.g., a specific law) or a designated longer-term project-based funding for VET research and development.
- The organization is working on a national scale.
- Research and development activities take place in one or more fields on the continuum ranging from the level of VET systems and governance to the level of teaching, learning and competence development in VET.

After a pre-test with four institutions with diverse profiles and portfolios, questionnaires were sent out between mid-August and mid-September 2020. A second round based on reminders and some 20 additional contacts that resulted from the snowballing approach was added.

<sup>1</sup> The data from one very large organization was excluded, in which VET research and development is only a supplementary task. The main tasks of this organization are in the area of labour market administration.

**Table 1**

Overview of responding institutions.

Country	Institutions
Australia	NCVER
Austria	3s, IBW, ÖiBF
Belgium	Bruxelles Formation, Le Forem
Croatia	AVETAE
Cyprus	CPI; HRDA
Czech Republic	NPICR
Denmark	Aarhus University
Finland	Tartu University, EDUFI, Finnish Institute for Educational Research
France	Cereq
Iceland	University of Iceland
Ireland	SOLAS
Italy	INAPP, INDIRE
Korea	KRIVET
Lithuania	KPMPC
Netherlands	CINOP/ECBO, HAN, UAS Utrecht
Norway	OsloMET, NIFU, FAFO
Poland	Lukasiewicz, IBE
Slovenia	CPI
Switzerland	Leading House – GOVPET, Leading House – Economics of Education, SFIVET
Ukraine	NAES

### *The questionnaire*

The questionnaire gathered information about the various tasks and institutional setups, fields of expertise, working methods, and involvement into the strategic discourse on VET on the national, international and European level.

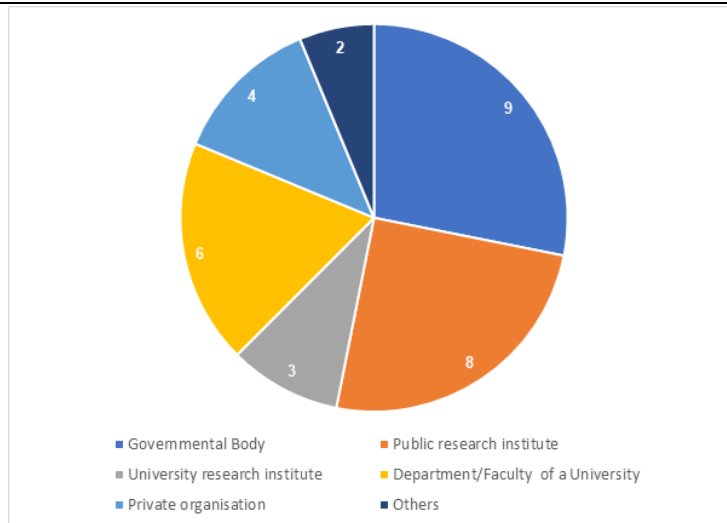
The questionnaire contains open and closed questions. Especially for the last section of this report, answers to several open questions on future topics, challenges and collaboration opportunities in VET research were evaluated. Qualitative content analysis was used to analyse and cluster answers. Results of the content analysis and all other data will be presented in frequencies in form of bar and pie charts. In some specific cases, the qualitative content of the answers will also be presented in detail.

In the following sections the results of the survey will be presented, starting with different organizational types and different tasks of the institutions. Afterwards the involvement in policy and practice will be analysed. In the final part the future expectations of the institutions will be described.

### *Results of the survey*

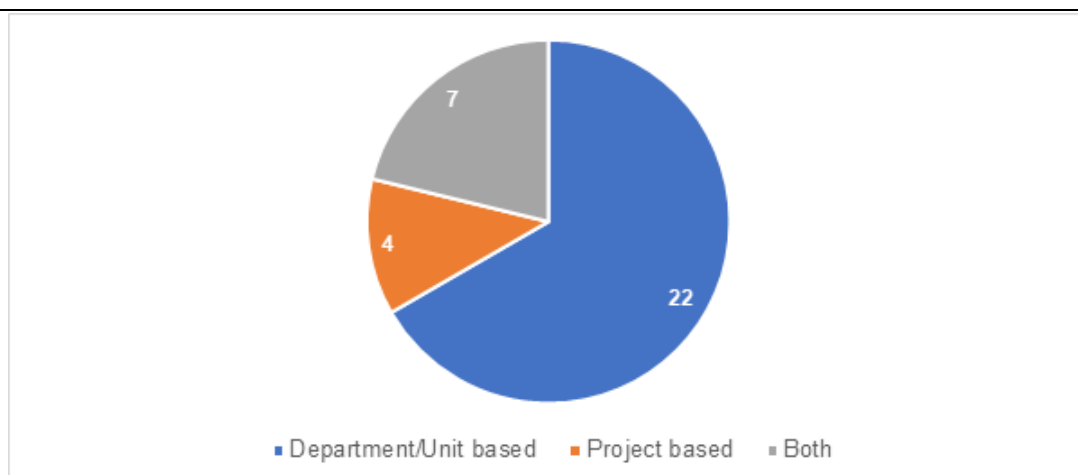
There is a wide variation across Europe of how institutional VET research is organized. Therefore, the responding institutions represent a variety of organizational types. Amongst participating organisations, almost equal numbers can be characterised as designated governmental institutions (9), public research institutes (8) and organizational units of universities (9). In some cases, respondents ticked multiple answers. In some cases, private organizations are commissioned with research and development tasks.

**Figure 2**  
Type of organization



Some countries do not concentrate VET research and development in designated institutions but distribute the tasks among a range of institutions and organizations of teacher education, economic and social research and public support structures. Often, such functions are assumed on a longer-term basis by different institutions, for instance in Denmark with a dedicated unit for labour market and skills analyses within the Ministry of Education and institutions of vocational teacher education that are also involved into systemic reform and research of university institutes. This mix of institutional types is also reflected in the different structures that organizations use when carrying out their work. Some institutions mainly work in stable departmental structures whereas others use project-based organizational set-ups, see Figure 3.

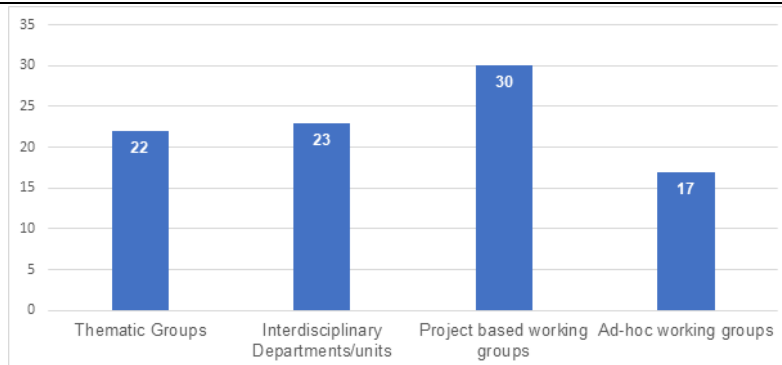
**Figure 3**  
Organizational structure of the institutions



Although the institutions specified that most of them are Department/Unit based, the institutions carry out their research and development work in project-based working groups (see Figure 4). Often the collaboration with different actors from policy and practice happens in projects. 22 of the institutions named the category “joint projects” as one of the key factors

of how to maintain a dialogue.<sup>2</sup> As a result, the organizational structure of project-based working groups seems to contribute positively to the collaboration with other actors in VET. Moreover, the institutions were asked what their main objectives of cooperation with other institutions were. 24 institutions named “joint projects” together with “policy/practice work” as one of the main objectives to cooperate with other institutions.<sup>3</sup> The possibility of conducting joint projects might have a positive impact on VET research in Europe and on the cooperation of different institutions.

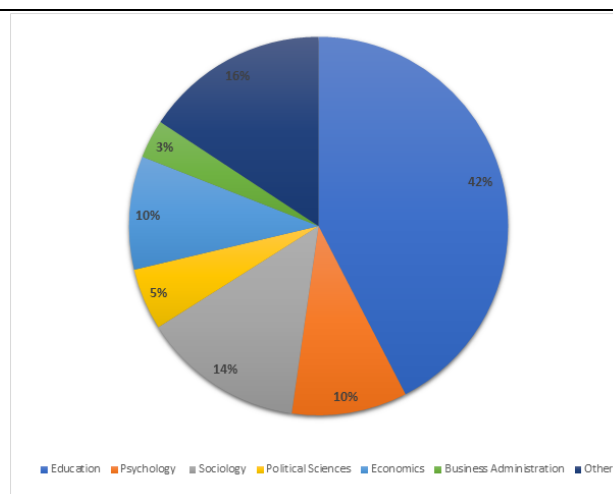
**Figure 4**  
Organizational structure to carry out research & development work



***VET research requires the collaboration between different academic disciplines***

As already mentioned, round about 7.000 employees of participating organisations contribute with their knowledge to the development of vocational training. The data generated shows, that most of the research and development staff belong to the fields of education and sociology, followed by psychology and economics.

**Figure 5**  
Academic background disciplines of employees in research and development

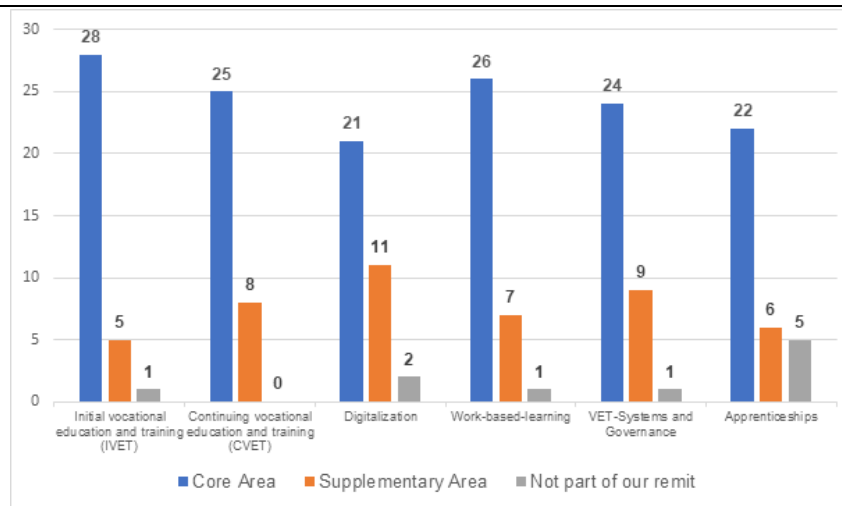


<sup>2</sup> Concerning the question in the questionnaire of *how* the institutions maintain a dialogue.

<sup>3</sup> Concerning the question in the questionnaire what the main objectives of the cooperation are.

The variation in the academic background disciplines of the employees corresponds with the wide variety of topics and tasks the institutions deal with. The institutes carry out various tasks, ranging from the analysis of the development and impact of occupational training policy at the system level to the identification of contents and the development of the curricular foundations of VET. In addition, a broad spectrum of topics has been identified, in which all institutes are equally interested. Initial programmes at the beginning of careers (IVET) and continuing education (CVET), as well as digitalization, work-based-learning, VET-systems and governance and apprenticeships were identified as ‘Core Areas’ for most of the institutions.

**Figure 6**  
Core thematic areas

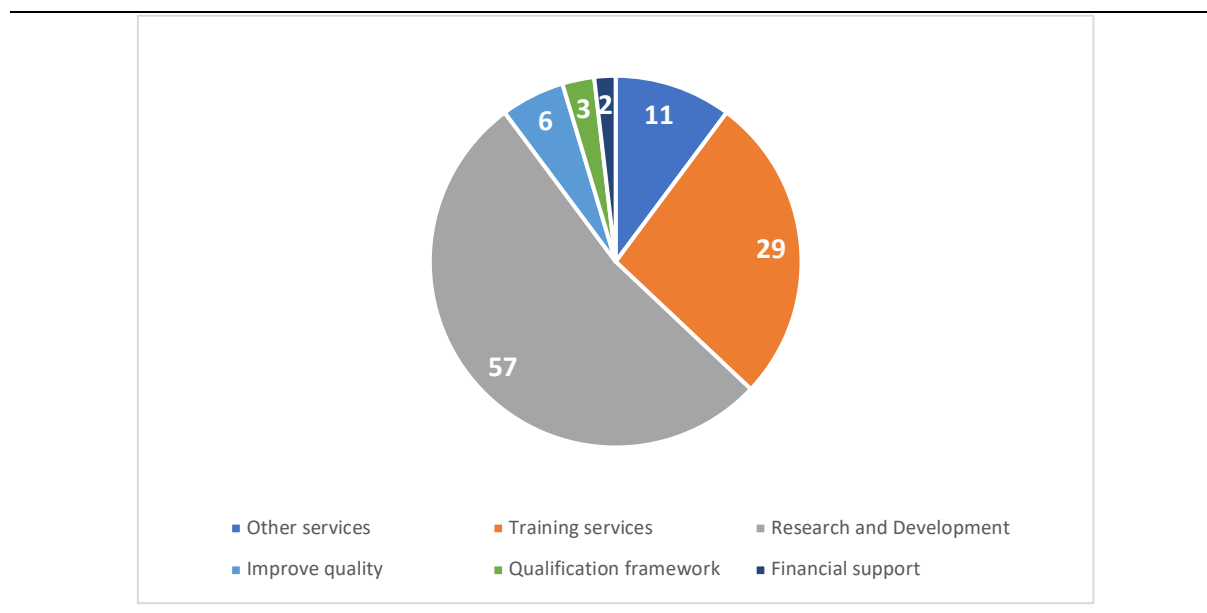


It is important to note that every institute has a different range of tasks and their work is based on different legal and administrative foundations. However, there is also a significant overlap in terms of the remit of the institutes’ tasks and responsibilities.

The institutes were asked to name the three most important main tasks they have to fulfil. Figure 7 shows that half of the mentions fall into the category of research and development in VET. In our survey “research” is defined as work that aims at systematically developing new knowledge, whereas “development” focuses on the application of new knowledge in VET practice and policy. Clearly, the two terms are not always fully distinctive but the overlap between developing new knowledge and the application of it might be of particular interest. Apart from the research and development work, one-quarter of the institutions’ answers fall into the category of providing training services as a main task.

**Figure 7**

Three main tasks the institutions have to fulfil (number of mentions)

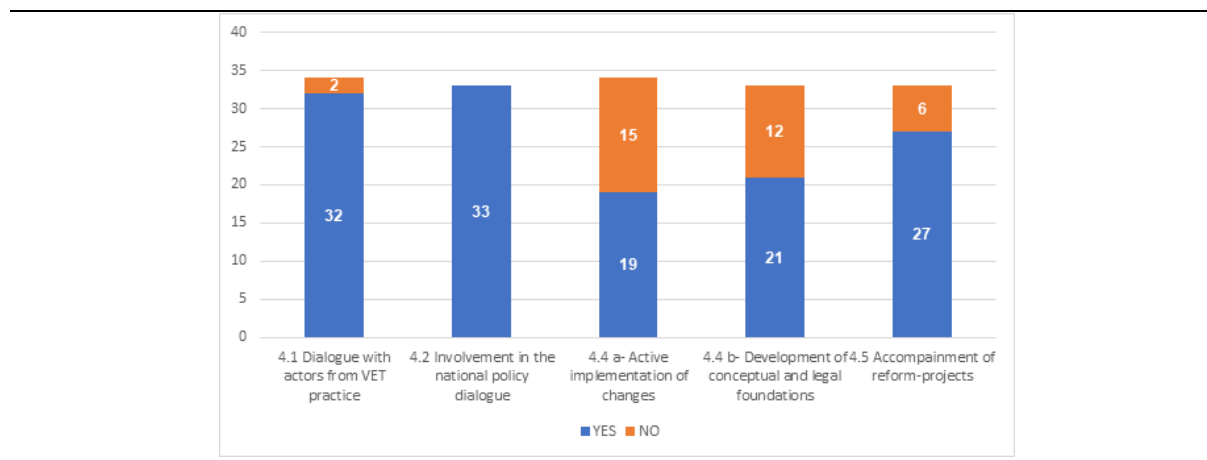


**VET research and practice**

Figure 8 shows in how far the different types of organizations are involved in policy and practice. All responding institutions are somehow involved in the national policy dialogue, whereas only two-thirds of them contribute to the development of conceptual and legal foundations. Typically, the institutes are also carrying out work that accompanies reform projects. The figure shows that almost all the institutions are also involved in the dialogue with actors from practice. Despite the variety of organizational types of institutions more or less all of them contribute to policy and practice.

**Figure 8**

Involvement in policy and practice



Due to the relevance of VET research for practice contexts, the questionnaire also asked about the share of employees with practical experience. Practical experience was broken down in the questionnaire into administrative, teaching/lecturing, or HR-type experience. The data

indicates that practical experience in teaching/lecturing is particularly widely spread amongst staff involved in research and development work at the institutes. In five of the 33<sup>4</sup> institutions more than half of the research and development staff have practical experience as teachers and lecturers. Another five institutions employ staff with 25-50% practical experience in this field. Concerning practical experience as administrators in VET, the data indicates that the proportion of research and development staff with experience as administrators, is less than 25% in all 33 institutions responding to the questionnaire.

**Figure 9**  
Practical experience of employees in research and development

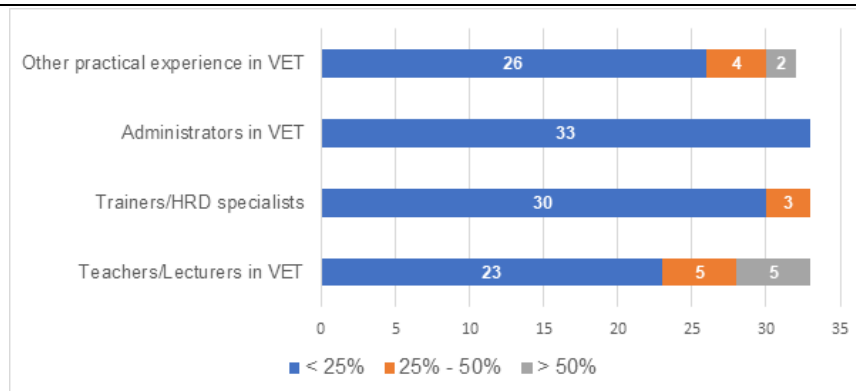
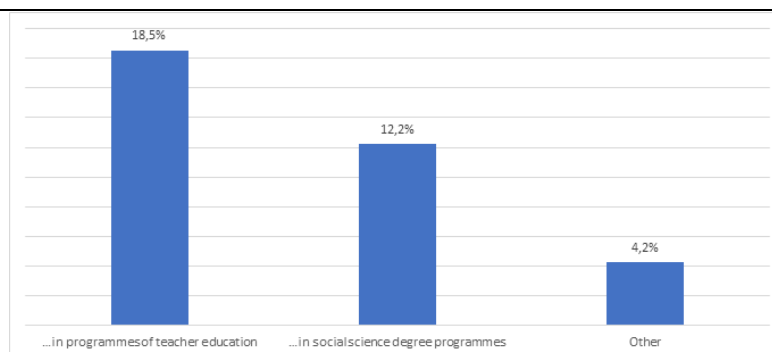


Figure 10 shows the proportion of employees in the institutions, who are also involved in teaching in higher education. A total of 328 employees, from all 31<sup>5</sup> institutions, work in teacher training programmes. This is 18.5% of the research and development staff. 216 people are involved in teaching in university social science programmes, representing 12.2% of research and development staff.

**Figure 10**  
Research and Development staff involved in teaching in higher education



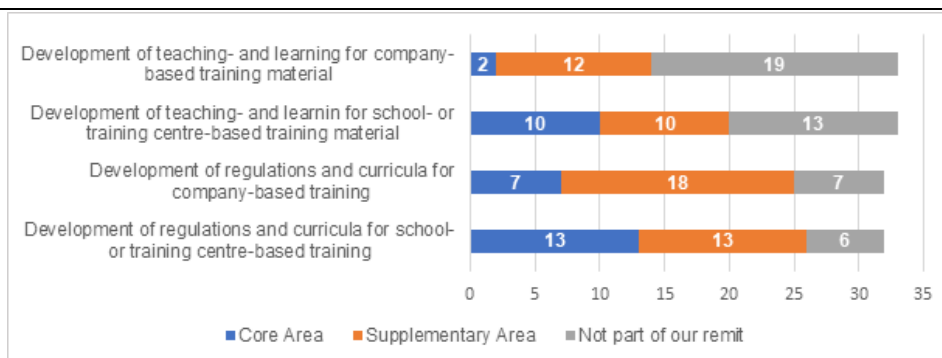
Institutes are also involved in tasks with practical relevance as the following figure shows. There is a slight dominance of regulatory tasks as opposed to the direct production of teaching and learning materials. Responding institutes were more intensely engaged in work on school-based functions compared with company-based functions.

<sup>4</sup> Only 33 of the 34 institutions answered this question.

<sup>5</sup> Only 31 of 34 institutions answered this question. A total of 1.770 people working in research and development.

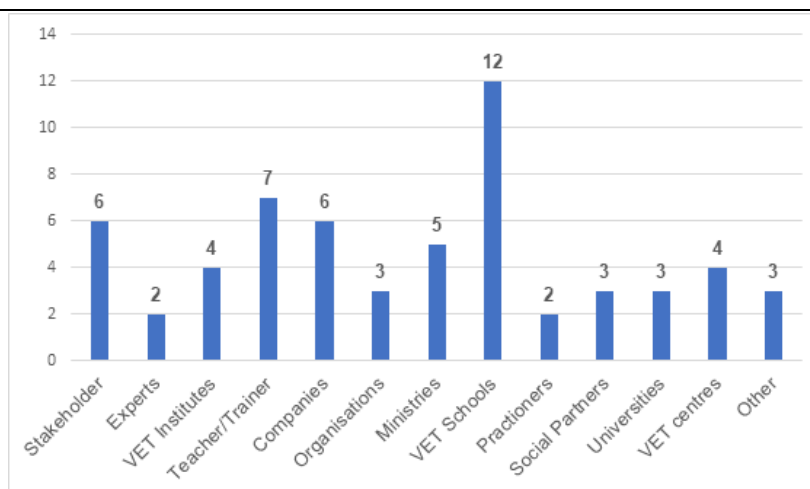


**Figure 11**  
Development of curricula and teaching/ learning material



As Figure 8 already showed, 32 of the 34 institutions maintain a dialogue with actors from VET practice. Moreover, the institutions were asked, with whom they maintain a dialogue. The answers varied from ministries to social partners, VET centres and individual experts and teachers and trainers. Most of the institutions collaborate with VET schools. Given, that most institutions are involved in the development of teaching and learning material, as well as in the development of regulations and curricula for school- or training centre-based training (see Figure 11), it is not surprising that the dialogue with VET schools seems to be a particularly important aspect.

**Figure 12**  
With whom institutes maintain a dialogue



***Future perspectives***

In order to guide the future development of institutionalized VET research, challenges and perspectives of VET research were identified in the survey. The institutions were asked to name the most important current challenges they have to cope with, their involvement in European and international cooperation in VET as well as possible obstacles for expanding the collaboration with other institutions.

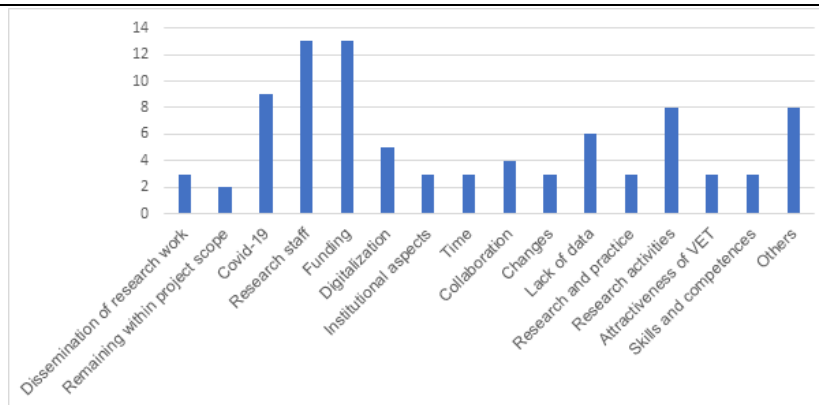
***Most important current challenges***

The institutions were asked to name the most important challenges they have to cope with in the current situation. In total 16 categories were built to cover the variety of answers in response

to the open questions posed. The high number of categories shows that the major challenges differ significantly between the institutions. The categories “research staff” and “funding” were both mentioned 13 times. These two aspects seem to be highly relevant for 13 of the 34 institutions regarding the current challenges. “Research staff” includes experts, researchers or project managers. Especially recruitment and the development of new VET staff seems to be problematic for a substantial part of the institutes. “Funding”, the other major current challenge, refers to a lack of funding that inhibits research work and projects.

“Research activities” is the second most mentioned category. It covers all answers that deal with research activities of the institutions. For example, expanding and prioritizing of research or broadening the perspectives on VET research. Seven institutions mentioned challenges due to the “Covid-19 pandemic”. They link the pandemic to unpredictable challenges emerging, such as field studies, conferences, funding, economic impacts and employment. As will be seen in the next section, “digitalization” seems not to be a major challenge but an important research topic for the near future.

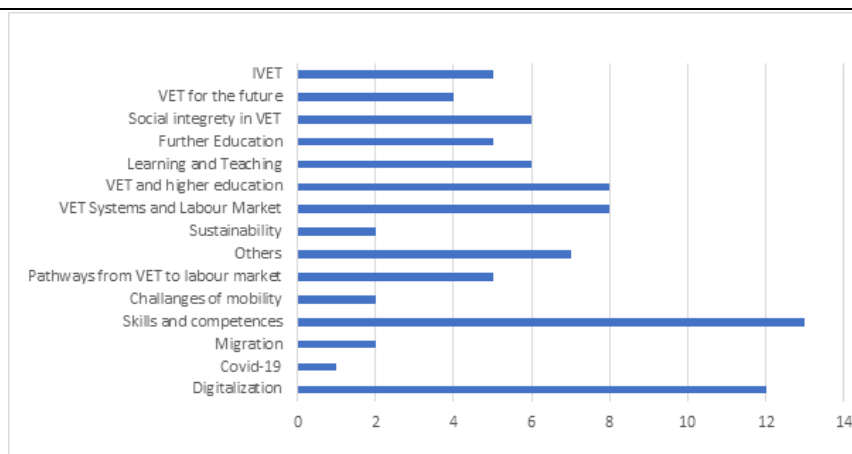
**Figure 13**  
Most important current challenges



***The most important research topics for the near future***

As mentioned above, 12 of 34 institutions see the topic of “digitalization” as one of the most important research topics for the near future. The category “digitalization” includes aspects such as the impact of digitalization, digital changes, the digital transformation and the digitalization of work and education. “Skills and competences” is the second most mentioned category. It includes skills and competences that are accompanied by digitalization, as well as key competences, social skills and upskilling. Even though the institutions have a strong interest in “skills and competences” as an important research topic, this aspect is not mentioned as a current challenge (see Figure 13).

**Figure14**  
Most important research topics

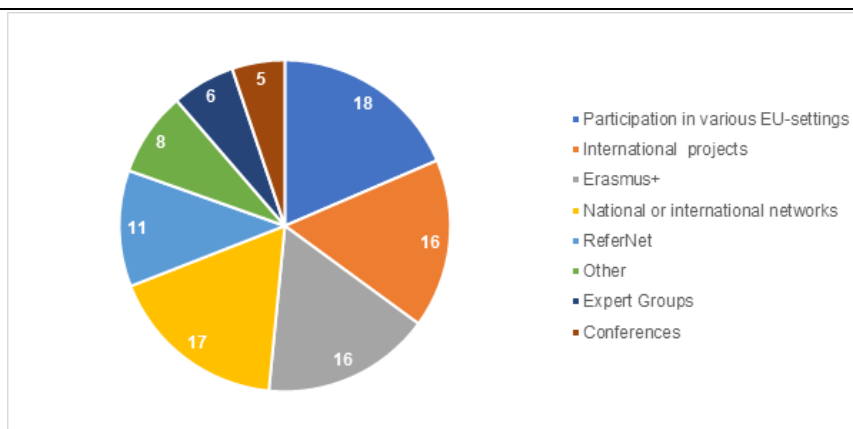


Regarding the category “Covid-19” it is the other way round. Although Covid-19 is as an important current challenge, the institutions do not seem to consider “Covid-19” as an important research topic. In conclusion, just because something is mentioned as a current challenge, it does not mean it is also relevant as an important research topic and vice versa. Other important research topics for the future are “VET and higher education”, “VET systems and labour market”, “social integrity in VET” and “learning and teaching”. In summary, the answers on future research topics are very heterogeneous. After analysing current challenges and future research topics, the next three sections deal with the collaboration between the different VET institutions in Europe.

### ***Involvement in European and international cooperation in VET***

The first question concerning the collaboration deals with the ways of involvement in European and international collaboration in VET (see Figure 15). The answers of the institutions can be summarized into eight categories. Four of these categories have almost the same frequency. The other four categories are mentioned more than five times each. In contrast to the answers in the questions in the two preceding sections, the institutions’ way of involvement seems to be more homogeneous. The category “participation in various EU-settings” was mentioned 18 times and therefore the category was the most frequently mentioned. It includes participation in networks or being member of various EU-associations or networks such as EVBB, EERA or EPAL. More than half of the institutions take part in European cooperation. The following categories are “International Projects”, “Erasmus+” and “National or International networks”. The former two categories were mentioned with a frequency of 16 and the latter 17 times. Although “Erasmus+” could also be seen a programme in which different institutions work together on international projects. Moreover, the category “International projects” can be defined as the development of joint studies with international colleagues on a project basis. In addition, the institutions mentioned the implementation of the Erasmus+ programme in their own national context as well as Erasmus+ strategic partnerships.

**Figure 15**  
Involvement in international collaboration in VET

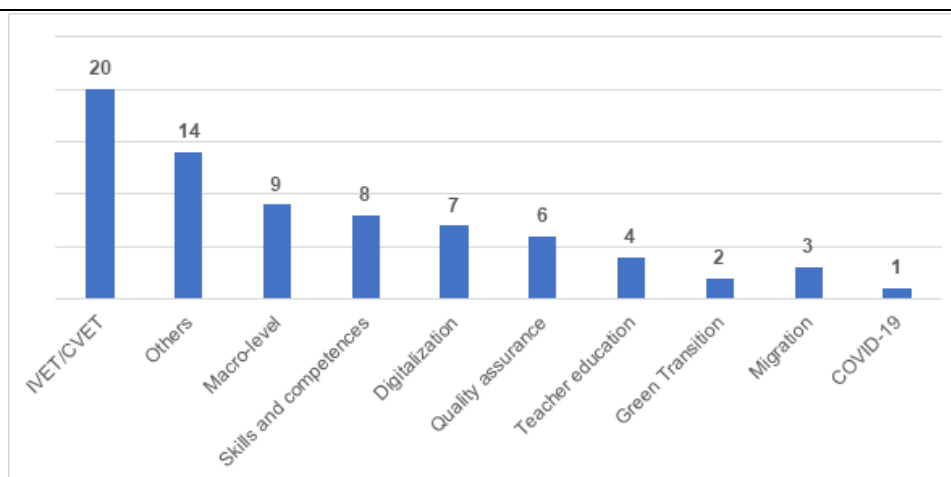


The category “National or international networks” covers all answers that include the aspect of being part of a network, as well as partnerships and cooperation’s between VET institutions. Membership of Cedefop’s “ReferNet” was mentioned 11 times.

***Thematic areas for extending existing collaboration with other VET institutions***

In which thematic areas do institutions see room for an extension of their collaboration with other VET institutions? In total 10 different categories describe thematic areas for extending collaboration. The most important thematic area contains the topics “IVET/CVET”. This category was mentioned 20 times. It includes all topics concerning initial and continuing VET as well as issues of lifelong learning, individual learning pathways and processes. The categories “skills and competences” and “digitalization” were mentioned several times. Therefore, some of the most important research topics also seem to be aspects for extending existing collaboration.

**Figure 16**  
Thematic areas for extending existing collaboration



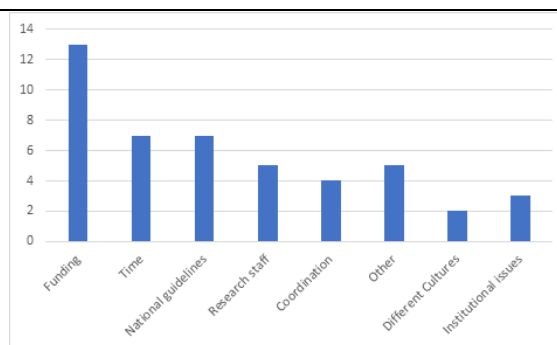
Topics related to the system setup including social policies, the labour market or other economic issues concerning VET are summarized in the category “macro-level”. This category was mentioned 9 times. The category “Other” is mentioned 14 times. It includes topics that are just mentioned once, for instance monitoring, inclusion, or reforms. Only few institutions

mentioned topics such as “green transition”, “migration” and “Covid-19” as areas of extending existing collaboration.

***Obstacles to extending collaborative work***

Most of the institutions see the “funding” of joint projects as an obstacle to an extension. This category was mentioned 13 times. Most institutions regard limited financial support for international cooperation and projects and a low budget for joint projects as an obstacle for more collaboration.

**Figure 17**  
Obstacles to an increased collaboration



Another important obstacle is “time”. Lacking resources in terms of time and a rise of the workload in research inhibit the collaboration between the institutions especially for the research staff. This category was mentioned 7 times. In addition, “national guidelines” was mentioned 7 times. Some institutions indicate that the political administration and changes in law can be an obstacle to an extension. A limited number of “research staff” is also mentioned as an obstacle and is related to the lack of time mentioned above.

***Prospects***

The studies’ purpose to stimulate discussion and strengthen the collaboration between institutionalised VET research in Europe is based on the conviction that this type of research fulfils an important role in the research landscape. In the following, prospects of European VET research and how to foster and strengthen collaboration will be discussed.<sup>6</sup>

***How can national institutional VET research contribute to strengthening European VET and collaboration?***

VET research in Europe contributes a long-term, systemic policy-relevant perspective to the future development of VET that other forms and types of research cannot provide. The findings of our survey indicate the diversity of the sector of institutionalised research across countries. It also highlights how increased collaboration across countries could help in tackling the challenges that VET systems are facing and how collaboration could make an important contribution to the societal challenges and future development of VET in Europe.

<sup>6</sup> We include the results of the discussion of an online meeting that took place in November 2020. In the meeting, findings of the survey were presented to respondents to receive additional information from the institutions and to integrate an early feedback mechanism within the process of exploring and interpreting the received information. The different institutions exchanged knowledge and experiences in following thematic areas: 1. “Content and Formats of Cooperation”, “Challenges of VET Research” and “Dialogue between research, policy and practice”.

Research cooperation works best when it is based on projects and enables mutual learning. A project-based cooperation includes research work that is developed and agreed jointly by the collaborators and at the same time based on the particular interests of the project partners. The cooperation includes meetings with co-researchers and joint platforms to develop, plan and execute the projects. Erasmus+ projects are by nature cooperative and enable the building of research and development communities. Cooperation also includes the organisation of VET research conferences and the participation in existing networks. It is most important to share and publish the results.

Experience shows that in order to expand or to set the cooperation on a solid footing personal contacts are crucial. This is particularly the case when detailed project proposals (for instance within the Horizon programme) have to be developed. Thus, the issue of building cooperation relies on individual researchers and their opportunities to establish contacts with their peers. This explains the importance of staff exchanges. Long-term contacts mean that the project partners are knowledgeable of the research and work culture of their colleagues, as well as of their organisational approach to research and possible limitations.

A further point is the visibility of the research results. The visibility can be ensured by participating in conferences and possibly more importantly by publishing in academic journals. Cross-referencing of publications could be better established and journals of research networks or institutes could be promoted in such contexts. Consequently, the expansion of the research and development cooperation could include:

- facilitating individual contacts between the researchers and the next generation of researchers,
- organising online conferences,
- systematically monitoring the cooperation,
- supporting and promoting publications and
- establishing a communication platform.

### ***How can institutional VET research and VET research in universities cooperate?***

In total 10 institutions that took part in the survey are part of a university or a faculty of a research institute. All of them are involved in the dialogue with actors from VET practice. Moreover, all of them are involved in the national policy dialogue. 8 of the 10 institutions are accompanying reform projects, whereas most of them are not involved in the active implementation of changes and the development of conceptual and legal foundations. Some of the universities contribute empirical evidence for policy, carry out projects on behalf of ministries or contribute in other ways to the knowledge for the national context. Research and development is a particular problem for smaller countries due to limited resources in universities and research institutions. Therefore, transnational cooperation as well as research in universities offer the opportunity to complement expertise. If this is the case it is even harder to attract young researchers into the field. Therefore, the nature of the field as an attractive area in which applied research can contribute to the development of educational opportunities for many young people needs to be foregrounded. In order to be able to carry out research that consistently complies with high standards, careers in VET research have to be promoted.

As far as cooperation is concerned, there are different disciplinary cultures and approaches. In economics, a relative narrow disciplinary orientation prevails. Here, research needs to adhere to very high international disciplinary standards, which can only be developed, maintained, and evaluated within the limits of an academic discipline and community. This can present an important hurdle for interdisciplinary research endeavours. Only research output that has undergone a rigorous process of scientific evaluation is "good enough" for the use by practitioners. Similarly, promotion processes in higher education often only reward discipline-based achievements, whereas interdisciplinary research in some cases does not fit the criteria of career development procedures. On the other hand, practice integrated and professionalised

research models were presented as alternative way of organising VET research, in some respect better suited to the interdisciplinary nature of some of the most important questions relevant in the area of VET.

### ***Conclusion***

The survey and the online event provide an overview of the challenges as well as the formats and contents of possible cooperation. The discussions as well as the findings show that strengthening the cooperation between the institutions and promoting and establishing a more cohesive and stable network of VET institutions could lead to active and sustainable VET research in Europe. Although the field of institutionalized VET research differs across countries, collaboration and exchange are important aspect to strengthen VET in Europe. The discussion on European cooperation in VET research should be continued in further events.

### **3 Impetus Presentations**

In accordance with the aim and scope of the workshop the presenters received a set of questions around they were asked to organise their presentations.

- What are the most relevant topics of VET research (not more than two) that you would like to see on the agenda?
- Can you position the relevance of these topics against the background of your national and disciplinary embeddedness?
- Why should this topic be of interest to European research and policy community?
- What are the specific challenges when addressing the issue through research?
- Where and why do you see the need for cooperation with other researchers

The presenters were selected in order to represent different national types and tradition and different types of institutionalisations of VET and VET research. The presentations were also intended to stimulate discussion in the following workshops.



### 3.1 Cooccurrence Keyword Analysis of Five Major VET-Journals: Clusters, Trends and Topics

Michael Gessler, University of Bremen

The analysis of published articles can be used to identify key topics and trends. Various methods are suitable for the analysis of published articles, such as the analysis of keywords that the authors have assigned to their article for identification.

#### *Data*

Gessler and Siemer (2020) identified key journals in the field of vocational education and training research. From this selection we chose the five journals with the strongest profile in vocational education and training. The time frame of our analysis extends from 2010 to 2020. 986 articles were considered in total. The journals and the number of selected articles are:

- Journal of Vocational Education and Training N=395
- Vocations and Learning N=206
- International Journal of Training Research N=162
- Empirical Research in Vocational Education and Training N=126
- International Journal for Vocational Education and Training (IJRVET) N=97

We received our data from Scopus. Not all journals published articles in the entire decade. The journal IJRVET, for example, publishes since August 2014.

#### *Method*

Cooccurrence keyword analysis identifies links between keywords and counts the frequency of links to identify their strength. Thus, not only the keywords are considered, but the keywords in the context of other keywords. To derive similarities from the data, the data is normalized. We use the association strength method, a probabilistic similarity measure (Eck and Waltman 2009). Keywords and links can be clustered in a second step. For this we used the VOS mapping technique with a weighted and parameterized variant of modularity-based clustering (Waltman et al., 2010). The result of this analysis is a network of clustered keywords.



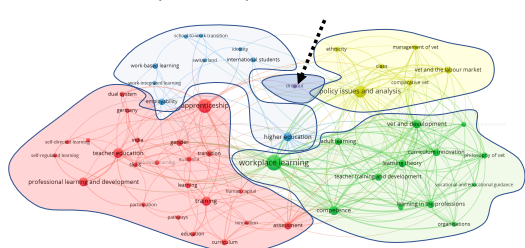
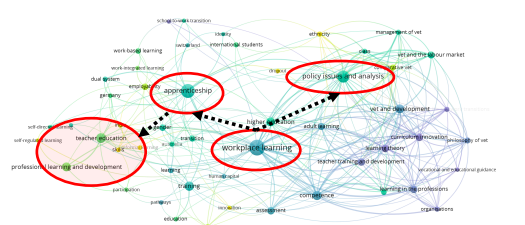
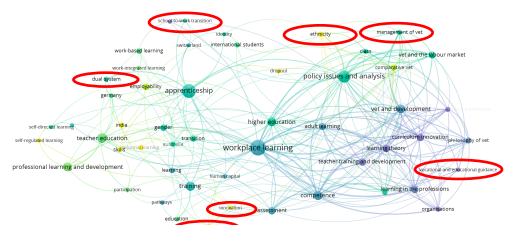
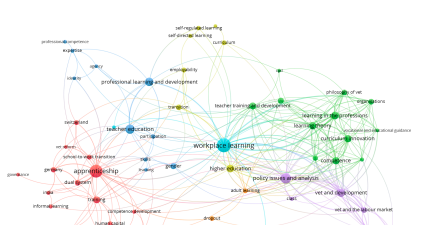
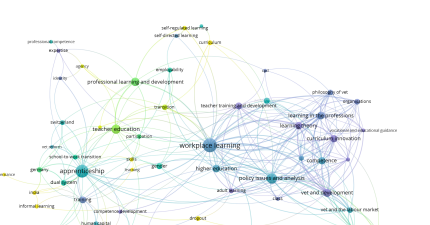
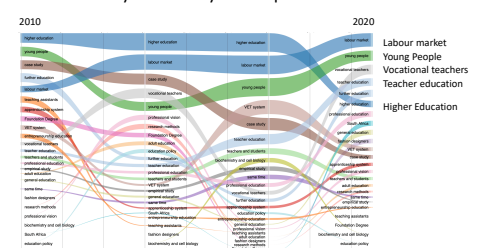
#### *Findings*

First preliminary results are presented in the impetus presentation.

#### *References*

- Eck, N. J. van, & Waltman, L. (2009). How to normalize cooccurrence data? An analysis of some well-known similarity measures. *Journal of the American Society for Information Science and Technology*, 60(8), 1635–1651. <https://doi.org/10.1002/asi.21075>
- Gessler, M., & Siemer, C. (2020). Umbrella review: Methodological review of reviews published in peer-reviewed journals with a substantial focus on vocational education and training research. *International Journal for Research in Vocational Education and Training*, 7(1), 91-125. <https://doi.org/10.13152/IJRVET.7.1.5>
- Waltman, L., van Eck, N. J., & Noyons, E. C. M. (2010). A unified approach to mapping and clustering of bibliometric networks. *Journal of Informetrics*, 4(4), 629–635. <https://doi.org/10.1016/j.joi.2010.07.002>

Slides

<p>   </p> <p>Preliminary results</p> <h2 style="text-align: center;">Co-Occurrence Keyword Analysis of five major VET-Journals</h2> <p style="text-align: center;">Clusters, Trends and Topics</p> <p style="text-align: center;">Prof. Dr. Dr. h.c. Michael Gessler</p>	
<p>Selected Journals (2010 – 2020):</p> <p>Journals with VET-focused articles (N = 986)</p> <ul style="list-style-type: none"> <li>• Journal of Vocational Education and Training 395</li> <li>• Vocations and Learning 206</li> <li>• Empirical Research in Vocational Education and Training 126</li> <li>• International Journal of Training Research 162</li> <li>• International Journal for Vocational Education and Training 97</li> </ul> <p>Australia (196), Germany (157), UK (156), Netherlands (93), Switzerland (81), Sweden (66), Finland (49), USA (45), Canada (38), Norway (34), Belgium (30), New Zealand (28), Denmark (23), Austria (18) ...</p>	<h3>Cluster Analysis: Dropouts</h3> 
<h3>Time Analysis: Teacher education</h3> 	<h3>Few considered topics</h3> 
<h3>Cluster Analysis: Only Europe</h3> 	<h3>Time Analysis: Only Europe</h3> 
<h3>Abstract Analysis: Only Europe</h3> 	

### 3.2 Reflections on VET Research Based on Emerging Issues in Research on Vocational Education & Training

Marianne Teräs, University of Stockholm

#### *Introduction*

Vocational education and training (VET) research is a pluralistic and multi-disciplinary field of research, as we all are familiar with, variation is broad as are research questions, research contexts and objects. One question that has interested me lately is: What is the current state of VET research? This impetus presentation gave me a good reason to reflect on this question. I decided to dwell into VET research published in our series *Emerging Issues in Research on Vocational Education & Training*. The 5<sup>th</sup> and 6<sup>th</sup> volumes of the series are to be published soon, in these six volumes there are total of 88 articles, varying from nine to 24 articles in each volume. Most of the articles have been presented first as conference papers in Stockholm International VET Conference and then written into full papers. One can say that this is limited material, we have several excellent journals in VET area, and I agree. However, what is interesting in these articles is that in conferences we present also on-going work or preliminary results of studies, and therefore we may get a glimpse of what is progressing and emerging in our VET research field. Thus, the aim of this presentation is to explore what kind of VET research has been published in these six volumes. What kinds of topics have been focused on and which analytical levels have been employed? Furthermore, I also examine what kinds of materials, methods and contexts were used in these studies. By answering these questions, we also can ponder which topics are missing and what kind of VET research we need in the future. I hope that this presentation will provoke lively discussions in the workshops.

#### *Analytical frames*

To explore my questions, I have used different analytical frames. I start with focusing on the topics by examining key words of the 88 articles. Thereafter I employ the framework produced already in the Brussels European Skills Week in 2017 (Nägele & Gessler, 2018) focusing on different analytical levels: micro-meso-macro. Then I look at the articles through the lenses of Stokes' (1997) 'Quadrant model for science', known also as 'Pasteur's Quadrant'. Finally, I present the materials gathered, methods used and contexts explored in the articles. I will start by shortly introducing Stokes' model.

Stokes' work focused on the area of science and technology. In his book, *Pasteur's Quadrant: Basic Science and Technological Innovation* (1997), he challenged the linear model of science divided into basic and applied sciences. He acknowledged that these types of research have different goals and that they are conceptually distinct (ibid, p. 6). Basic research strives for broader understanding of different phenomena on a scientific area and thus offering explanations to the field, whereas applied research focuses on some individual or group, societal need or use of new knowledge (ibid. pp. 7-8). He also challenged the idea that these types of research are kept empirically separated. He argued that actually this tension between the goals of basic and applied research are what science does and experiences (ibid. p. 16), and even though there are studies that focus on either understanding or use of new knowledge, there is a bunch of research that combine both goals. Stokes uses as an example Pasteur's studies on microbiology and how this knowledge was used in pasteurization and public hygienic. He then presents a four-field model for scientific research (ibid. p. 73) and argues that research is inspired by understanding and/or use of knowledge. On the vertical axis there is '*Quest for fundamental understanding*' yes/no and on the horizontal axis '*Consideration of use*' no/yes. As an example of 'pure basic research', which strives for deeper understanding of a phenomenon, but has no goal to contribute to usage, he gives Bohr's studies on atomic structure. Example of 'user-inspired basic research', which combines both goals, he uses Pasteur's studies

and as ‘pure applied research’ he gives Edison’s research. (ibid. pp. 73-75). We can ask, what has this model to do with VET research? I think that this way of thinking can help us to cross the line between basic and applied research, and also distance our thinking and talking about the gap between theory and practice.

Tierney and Holley (2008) were inspired by Stokes’ model and reflected on the state of educational research in the USA. The researchers acknowledged critic against educational sciences, for example, that there were many studies, but only few contributed to educational practice or that the results of studies were not visible in educational practice. The researchers wanted to cross the boundaries between basic and applied research and suggested ‘user-inspired basic research’ based on Stokes’ model for educational sciences. The researchers argued that user-inspired basic research “prioritises practice, encourages translational research, fosters interdisciplinarity and dissolves rigid educational structures“ (2008, p. 289).

### **Exploration**

I first identified the topics of 88 articles by exploring the key words the authors had chosen. There were total of 753 keywords. This reflects the variety of topics in the VET research field. Top ten key words were as follows, Figure 1 shows a word cloud to reflect the key words visually:

Education/al	43
Vocational	38
Learning	30
VET	27
Training	23
Work	22
Teacher	17
Professional and Social	13
Skill/s	11
Adult and Competence	10

**Figure 1**  
Visual representation of the key words



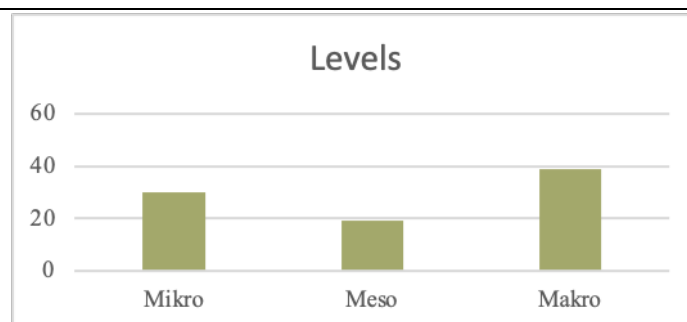
It is not surprising that the first five show our field. Then comes variations of work-related key words such as work-based and workplace. Vocational teacher education was also popular topic and issues related to professional development. Social aspect of learning was a frequent topic as well as different types of skills and competences. Several also focused on adult education. However, the top ten list covers only 257 out of 753 key words, representing ca 37%

of all the key words. In other words, there were several key words mentioned only once or a few times. For example, ‘Know/ing/ledge’ was stated five times. ‘Teaching’ was named three times. ‘Student/s’ occurred in key words also three times, as did ‘digital’ and ‘immigrants’. If we think changes in working life and in VET, one could ask why not, for example, diversity issues (other than migrants) were not addressed to or special need education or ageing population, environmental issues and climate change. Pandemia will certainly be focused on in the future.

When exploring different analytical levels, I identified the following: 30 articles focused on micro level such as teachers’ or students’ perspectives and learning. 19 articles explored issues on meso level such as workplaces or schools. 39 articles investigated VET systems and policies on macro level.

Figure 2 visualizes different analytical levels. Interestingly most of the articles focused on macro level reflecting, comparing and analyzing VET systems and policies. Articles that explored meso level questions were the least in the volumes.

**Figure 2**  
Analytical levels



The last question I explored was inspired by the Stokes’ model. Most of the articles I categorized under ‘user-inspired basic research’. In other words, they aimed to increase both understanding in the field and to contribute to the practice. This category consisted of 82 out of 88 articles. Even those macro level articles, which focused on systems and policies on societal or regional level, strived for contributing to practice or to specific societal needs. The remaining six articles, I identified as ‘pure applied research’, they were mostly reporting development projects and the results of the projects. I did not identify any articles, which could be considered as ‘pure basic research’. This result can be because of the type of articles published in these volumes, or it can show the nature of VET research field. However, one needs to remember that only later we can say if these studies actually fall into this category, because we can study the implications of the studies only later, but these studies were striving for ‘user-inspired basic research’. I also think it is good to ask questions such as What is ‘pure basic research’ in the VET field taking into account the variety of disciplines in our field? Or do we need that kind of research in the VET research field?

When looking at the theoretical and methodological choices in the articles, it is not surprising that the articles show broad variation of selection. Theories involved cognitive, sociological, psychological and educational perspectives. Both quantitative and qualitative strategies were employed as well as mixing different methods. Interviews, surveys and documents were the most frequent types of materials, but also some ethnographical and narrative material were gathered. Some articles reported interventions. Context of studies also varied, in empirical studies two most frequent were different types of VET schools and co-operation partners. In policy studies the context was typically national or regional level, however, also international comparisons were made.

### Summary and some questions

In this impetus paper, I have explored 88 articles in the series of *Emerging Issues in Research on Vocational Education & Training*. My aim was to explore the state of research in VET. Even though we can argue that my material was a limited view to this broad research area, we can see some trends and shortcomings. The top topics according to the key words of the articles involved learning in VET and in work, teachers, adults, professional and social skills and competences. Less attention was paid, again according to the key words, to knowledge, students, teaching, immigrants or digitalization, and none to diversity or environmental issues in VET. Most of the articles reflected macro level challenges and questions such as VET systems and policies in one or more contexts. Meso level studies were the least. Almost all the articles, I considered as ‘user-inspired basic research’ according to Stokes’ model. In other words, studies in the articles were aiming to increase understanding and knowledge in the area of VET, but they were also willing to contribute to VET practices. However, a question is did these studies actually change anything in VET practices or policies? Another question, do we need research focusing on effects and consequences of VET research in VET practices and policies? Do we need ‘pure basic research’? What would it look like? How is broadness of the field managed and what kind of topics need to be focused on more thoroughly in the future? I hope these questions will trigger lively discussions in the workshops.

### References

Nägele, C., & Gessler, M. (Eds.) (2018). *Report on the research workshop during the second VET Skills Week in Brussels, 22.11.17*. <https://doi.org/10.5281/zenodo.1345228>  
 Stokes, D. (1997). *Pasteur’s quadrant: Basic science and technological innovation*. Brookings Institution Press.  
 Tierney, W. G., & Holley, K. A. (2008) Inside Pasteur’s quadrant: Knowledge production in a profession. *Educational Studies, 34*(4), 28-297. <https://doi.org/10.1080/03055690802034468>

### Slides



**Reflections on VET research based on  
Emerging Issues in Research on Vocational  
Education & Training**

Impetus presentation, European Skills Week 2020, Online

Marianne Teras, PhD  
Associate Professor  
Stockholm University, Department of Education, VETYL Research Group  
[marianne.teras@edu.su.se](mailto:marianne.teras@edu.su.se)

 Stockholm University

**What kind of VET research was published in 88 articles?**

Topics?	Levels?	Materials?	Contexts?
			

**Topics as Key Words (753)**

Top ten key words were as follows:

1. Education/al	43
2. Vocational	38
3. Learning	30
4. VET	27
5. Training	23
6. Work	22
7. Teacher	17
8. Professional, Social	13
9. Skill/s	11
10. Adult, Competence	10


What is missing?

 Stockholm University



EVSW 2020 Berlin

30

 <p>Marianne Teräs, Department of Education</p> 	<p><b>Figure 3-5. Quadrant Model of Scientific Research</b></p> <p>Research is inspired by:</p> <table border="1"> <thead> <tr> <th colspan="2" rowspan="2"></th> <th colspan="2">Considerations of use?</th> </tr> <tr> <th>No</th> <th>Yes</th> </tr> </thead> <tbody> <tr> <th rowspan="2">Quest for fundamental understanding?</th> <th>Yes</th> <td>Pure basic research (Bohr)</td> <td>User-inspired basic research (Pasteur)</td> </tr> <tr> <th>No</th> <td></td> <td>Pure applied research (Edison)</td> </tr> </tbody> </table> <p>Out of 88 articles 82 fell into 'user-inspired basic research' quadrant</p> <p>(Stokes, 1997, p. 73)</p> <p>Marianne Teräs, Department of Education</p> 			Considerations of use?		No	Yes	Quest for fundamental understanding?	Yes	Pure basic research (Bohr)	User-inspired basic research (Pasteur)	No		Pure applied research (Edison)
				Considerations of use?										
		No	Yes											
Quest for fundamental understanding?	Yes	Pure basic research (Bohr)	User-inspired basic research (Pasteur)											
	No		Pure applied research (Edison)											
<p><b>Materials and methods...</b></p>   <p><a href="https://www.inspiredselection.com/sites/default/files/files/interview.jpg">https://www.inspiredselection.com/sites/default/files/files/interview.jpg</a></p> <p><b>This is the Swedish National Agency for Education</b></p> <p>The National Agency for Education is the central administrative authority for the public school system, adult and higher secondary education, childcare and for adult education.</p>   <p>Marianne Teräs, Department of Education</p> 	<p><b>Contexts?</b></p>    <p>Marianne Teräs, Department of Education</p> 													
<p><b>Concluding questions ...</b></p> <ul style="list-style-type: none"> <li>• VET research is a broad field, how about specificity?</li> <li>• If we embrace variation, on what costs?</li> <li>• What kinds of studies are missing?</li> <li>• What are the consequences of our research to theories, methods, practices and policies?</li> </ul> <p>Marianne Teräs, Department of Education</p> 														

### **3.3 Social and Research Challenges of VET School Multifunctionality and Innovation**

Mónica Moso-Díez, Head of the Centre for Knowledge and Innovation, Bankia Foundation for Dual Training

#### ***Research topics***

- VET system multifunctionality: from initial education and lifelong learning to applied innovation in VET schools.
- VET system as part of the innovation ecosystem at regional, national and European level: an R&D agent and subject.

#### ***Relevance for the research and policy community***

In this extremely demanding context, the VET system is key to fostering social well-being and competitiveness in terms of lifelong learning, applied innovation and local development in both Spain and Europe.

On the one hand, as Table 1 shows, VET delivers new cohorts of graduates of the formal Initial VET (IVET) system (primarily aimed at young people) (Homs, 2008; Marhuenda, 2019; Pineda-Herrero et al., 2015; Salva-Mut, et al., 2017). On the other, it updates and develops workers' knowledge throughout their professional lives through the VET for Employment (CVET) system (available both to those in work and those unemployed) (Choi & Calero, 2018; Tejada & Ferrández, 2012), which is especially relevant for overcoming the effects of Covid-19. Finally, VET schools (especially in the case of the school-based VET model found in Spain) have great potential as regards their close connection and proximity to businesses, especially microenterprises and SMEs, which, under suitable conditions, can become a powerful catalyst for applied innovation (Rosenfeld, 1998). VET schools have the capacity to help these companies in the deployment, transfer and adoption of technologies through technical services (implementation of new technologies, simulations and tests, prototypes, etc.), challenge-based innovation projects, cooperation between enterprises, close contact with the local environment, entrepreneurship initiatives etc. The incipient yet growing challenge faced by the VET system comprises, on the one hand, the integration of the IVET and CVET subsystems (still at an early stage at national level) (Real Decreto 498/2020) and, on the other, the fostering of multifunctional VET centres (although there are highly relevant experiences, they still require greater development and systematisation). This multifunctionality is beginning to be analysed in some Spanish regions as study cases (Albizu et al., 2011, 2017; Astigarraga-Echeverria et al., 2017; Estensoro, 2018; Navarro, 2018; Navarro & Retegi, 2018; Rego-Agraso, et al., 2017) and it is necessary to continue working from a multidisciplinary and comparative approach with stronger theoretical and empirical foundations (Echeverria & Martinez-Clares, 2019, 2020). This is of interest to the European research and policy community in terms of comparability and supranational cooperation.

On the other hand, at Spanish and European level the conception of VET is principally circumscribed to developing the capabilities, competencies and skills of the present and future workforce through vocational education and training for both young people and adults (Marhuenda & Chisvert-Tarazona, 2019). While this understanding of VET is necessary and key to making progress, it only represents a partial conception as regards the potential that the VET system holds, which can become a catalyst for innovation in small businesses and microenterprises (Moso-Díez, 2019a). More research is needed to provide evidence of how the VET system is shortening technology transfer cycles and promoting rapid take-up by small companies. This is of particular interest as it is part of several Spanish and European public policy domains — Employment (Skills and LLL), Research and Innovation (Horizon), and



Cohesion (ICT, RIS3) (Moso-Diez et al., 2019; Navarro et al. 2014; Otero et al., 2014). — that encourage social inclusion, competitiveness and sustainability.

**Table 1**

Social and research challenges of VET school multifunctionality in Spain





Functions	VET school role	Value contribution	Mechanisms	Situation in Spain
<b>Skills, values &amp; knowledge provision</b>	Vocational skills providers	Supply of young people with intermediate & higher qualifications	A VET system with different layers and qualifications (Isced 3 & 5).	A consolidated network of IVET based on schools. ('IVET subsystem').
	Facilitators of lifelong professional learning	Up/reskilling of the active population to adopt new skills & technologies	Personalised training programmes for employees and the unemployed (specific certificates).	A non-consolidated sector of providers of Continuous VET ('CVET subsystem').
	Spanish challenge	Integrating both subsystems	A new type of school: 'Integrated VET school'.	A heterogenous and limited but growing trend at regional level.
	Research challenge	Comprehension & organisation of VET as an integral system	Multidisciplinary research groups & projects, funding, open data, indicators.	Most advanced regions could be analysed in depth and compared. Learning lessons.
<b>Technology transfer &amp; applied innovation</b>	Technology service provider	Advisory and technical support services	Technology transfer projects to accelerate the dissemination of new technologies (micro & small businesses).	In a few regions, VET schools are encouraged to support firms to implement new technologies & systems.
	Access to infrastructure	Testing and trial services	Extended laboratory for micro & small businesses.	Some VET schools offer their labs to firms for pilot testing & trials.
	Innovation support	New collaborative discovery	Challenge-based learning/innovation projects with firms.	Within dual training, 'micro innovation' projects are emerging.
		Specialised technology centres	Shared projects & infrastructure (labs) for VET schools.	Some regions have created VET centres for applied innovation.
	Spanish challenge	Digitalisation and technological absorption of micro/SMEs	VET schools as catalysers of technology transfer & applied innovation.	Limited development in a few regions and not systematised at Spanish level.
	Research challenge	Comprehension & evidence: VET system as part of the innovation system	VET as an agent of applied innovation & VET as a subject of multidisciplinary research. Open data.	Some Spanish regions are more advanced and could be analysed in depth and compared. Hybrid research teams.
<b>Local development</b>	Connection	A relational node & local antenna	Networking activities, info, conferences. Very relevant in rural areas.	Strong territorial deployment of VET schools in Spain.
	Entrepreneurship	Boosting entrepreneurship	Skills for entrepreneurship & support for business creation.	In a few regions, VET schools encourage students to create new business.
	Spanish challenge	Addressing rural depopulation & entrepreneurship	VET school network as an instrument of territorial cohesion.	An informal and unsystematised trend at regional/local level.
	Research challenge	Comprehension of VET as part of local development	Multidisciplinary research projects, funding and shared indicators. Open data.	In-depth analysis & comparison of experiences. Theoretical & empirical studies.

Note. Source: Adapted from Moso-Diez (2019b, p. 18).

## References

- Albizu, E., Olazarán, M., Lavía, C. & Otero, B. (2017). Making visible the role of vocational education and training in firm innovation: Evidence from Spanish SMEs. *European Planning Studies*, 25(11), 2057-2075.
- Albizu, E., Olazarán, M., Lavía, C. & Otero, B. (2011). Relationship between vocational training centres and industrial SMEs in the Basque Country: A regional innovation system approach. *Intangible Capital*, 7(2), 329-355.
- Astigarraga-Echeverría, E., Agirre-Andonegi, A. & Carrera-Farran, F.X. (2017). Innovación y cambio en la Formación Profesional del País Vasco: El modelo Ethazi. *Revista Iberoamericana de Educación*. 74(1), 55-82.
- Choi, A. & Calero, J. (2018). El capital humano en los procesos de automatización: una primera aproximación al caso español. *Cuadernos económicos de ICE*, 95, 13-32.
- Echeverría, B. & Martínez-Clares, P. (2020). *Retos y estrategias de acción en torno a la investigación sobre Formación Profesional en España*. Fundación Bankia por la Formación Dual.
- Echeverría, B. & Martínez-Clares, P. (2019). *Diagnóstico de la investigación sobre la formación profesional inicial en España*. Fundación Bankia por la Formación Dual.
- Estensoro, M. (2018). Los centros de Formación Profesional en las estrategias de desarrollo local: el caso del Goierri. *Ekonomiaz. Revista Vasca de Economía*, 94(2), 280-299.
- Homs, O. (2008). *La Formación Profesional en España. Hacia la Sociedad del Conocimiento*. Colección Estudios Sociales, 25. Fundación La Caixa.
- Marhuenda, F. (Ed.) (2019). The school-based vocational education and training system in Spain, Technical and Vocational Education and Training: Issues, Concerns and Prospects, 32. Singapore: Springer.
- Marhuenda, F. & Chisvert-Tarazona, M.J. (Eds.) (2019). *Pedagogical concerns and market demands in VET. Proceedings of the 3rd Crossing Boundaries in VET conference, Vocational Education and Training Network (VETNET)*.
- Moso-Diez, M. (2019a). Una aproximación a la investigación europea sobre la Formación Profesional. In B. Echeverría, & P. Martínez-Clares (Eds), *Diagnóstico de la investigación sobre la formación profesional inicial en España*. Madrid: Fundación Bankia por la Formación Dual.
- Moso-Diez, M. (2019b). El valor de la FP para la Industria 4.0. In A. Díaz-Chao, Moso-Diez, M., & J. Torrent-Sellens (Eds). *La formación profesional en la empresa industrial española*. Madrid: Fundación Bankia por la Formación Dual, 9-76.
- Moso-Diez, M., Atwell, G., Gessler, M., Nägele, C. & Nardi, P. (2019). VET and regional smart specialisation strategies: A comparative approach. A panel discussion. In Stalder, B.E y Nagele, C. (eds.), *Trends in vocational education and training research, Vol. II. Proceedings of the European Conference on Educational Research (ECER), Vocational Education and Training Network (VETNET)*, pp. 338-348.
- Navarro, M. (2018). Centros de Formación Profesional unitarios o multi-funcionales? *Orkestra Working Paper Series in Territorial Competitiveness*, 2018-01 (CAS).
- Navarro, M. & Retegi, J. (2018). Los centros de formación profesional ante los retos de las RIS3. El caso de Navarra. *Ekonomiaz. Revista Vasca de Economía*, 94(2), 56-77.
- Navarro, M., Gibaja, J.J., Franco, S., Murciego, A., Gianelle, C. Hegyi, F.B. y Kleibrink, A. (2014). Regional benchmarking in the smart specialisation process: Identification of reference regions based on structural similarity. *S3 Working Paper Series*, 03/2014.
- Otero, B., Lavía, C., Alizu, E. & Olazarán, M. (2014). Innovación y cooperación en el SRI del País Vasco. *Revista Internacional de Organizaciones*, 13, 135-161.
- Pineda-Herrero, P., Ciraso-Calí, A. y Arnau-Sabatés, L. (2019). La FP dual desde la perspectiva del profesorado: elementos que condicionan su implementación en los centros. *Educación XXI*, 22(1), 15-43.
- Rego-Agraso, L., Barreira-Cerqueiras, E.M. & Rial Sánchez, A.F. (2017). La participación en la planificación territorial de la formación profesional del sistema educativo: la percepción de los agentes sociales. *Educar* 53(2), 241-260.
- Rosenfeld, S. (1998). *Technical colleges, technology deployment and regional development*. OECD.
- Salva-Mut, F., Tugores-Ques, M., Adame-Obrador, M.T., Oliver-Trobat, M.F. (2017). Labour market participation of Spanish youth with an intermediate or higher vocational education and training diploma. *Educar*, 53(2), 357-378.
- Tejada, J. y Ferrández Lafuente, E. (2012). El impacto de la formación continua: claves y problemáticas, *Revista Iberoamericana de Educación*, 58(3) 1681-5653.

## Slides

European Vocational Skills Week  
2020





**'Social and research challenges of VET school multifunctionality and innovation'**

Dr. Moso-Diez, Mónica

Head and Principal Investigator  
Centre for Knowledge and Innovation  
Bankia Foundation for Dual Training

**VET research in Europe: topics, structures and cooperation**  
Berlin, 11 November, 9:00 – 13:00





---

- **Diagnosis on IVET research in Spain (2005-2017)**  
<https://www.dualizabankia.com/recursos/doc/porta/2019/07/08/diagnostico-investigacion-fpi.pdf>
- **Challenges and action proposals for improving research on VET in Spain'** <https://www.dualizabankia.com/recursos/doc/porta/2019/07/08/retos-y-estrategias-de-accion-en-torno-a-la-investigacion-sobre-formacion-profes.pdf>
- **An online "Research Knowledge Map" of Initial VET**, including summary sheets (and links if available) of publications on Initial VET (doctoral theses, scientific articles and project reports)  
<https://www.dualizabankia.com/es/centro-de-conocimiento/mapa-del-conocimiento/>

- VET system multifunctionality: from initial education and lifelong learning to applied innovation in VET schools.
- VET system as part of the innovation ecosystem at regional, national and European level: an R&D agent and subject.





---

Functions	VET school role	Value contribution	Mechanisms	Situation in Spain
Skills, values & knowledge provision	Spanish challenge	Integrating both subsystems: IVET & CVET	A new type of school: 'Integrated VET school'.	A heterogenous and limited but growing trend at regional level.
	Research challenge	Comprehension & organisation of VET as an integral system	Multidisciplinary research groups & projects, funding, open data, shared indicators.	Most advanced regions could be analysed in depth and compared. Learning lessons.

Functions	VET school role	Value contribution	Mechanisms	Situation in Spain
Technology transfer & applied innovation	Spanish challenge	Digitalisation and technological absorption of micro/SMEs	VET schools as catalysers of technology transfer & applied innovation.	- Advisory and technical support services - Extended laboratory for micro & small businesses - Challenge-based learning/innovation projects with firms - Specialised technology centres
	Research challenge	Comprehension & evidence: VET system as part of the innovation system	VET as an agent of applied innovation & VET as a subject of multidisciplinary research. Open data.	Some Spanish regions are more advanced and could be analysed in depth and compared. Hybrid research teams.

---

Functions	VET school role	Value contribution	Mechanisms	Situation in Spain
Local Development & Entrepreneurship	Spanish challenge	Addressing rural depopulation & entrepreneurship	-VET school network as an instrument of territorial cohesion. -Strong territorial deployment of VET schools in Spain.	-An informal and unsystematised trend at regional/local level. - In a few regions, VET schools encourage students to create new business
	Research challenge	Comprehension of VET as part of local development	Multidisciplinary research projects, funding and shared indicators. Open data.	In-depth analysis & comparison of experiences. Theoretical & empirical studies.

## Danke! Thanks!

Dr. Moso-Diez, Mónica  
[moso@fundacionbankia.com](mailto:moso@fundacionbankia.com)  
[moso.monica@gmail.com](mailto:moso.monica@gmail.com)

### 3.4 VET Research Panorama in Poland - Between Tradition and Double Transformation

Andrzej Wojciech Stępnikowski, The Centre for VET Research & Development, Poland

#### *Abstract*

The goal of this impetus presentation is to discuss state of play and the main challenges of VET research in Poland with the reference to the apprenticeships and adults learning. Those challenges have been identified in the field of work pedagogy scientific discipline as a result of observed social-economical changes with relation (and evaluation) to conclusions from the „Nationwide Scientific Conference on 40th anniversary of Polish work pedagogy” organised in 2012. Speaking about VET research we have to bear in mind also other important factors like influence of European Funds, strategic documents, COVID-19 and mega trends such as double transformation. We should think what goals we can predict for VET researchers in the field of work pedagogy discipline for 50th anniversary conference and whole next decade.

#### *Introduction (about the work pedagogy history)*

Talking about VET research panorama in Poland we should keep in mind that once upon a time we had a centralised structured form known as the **Institute for Vocational Education** (*Instytut Kształcenia Zawodowego - IKZ*) that was organised in 1972 by a group of professors lead by Tadeusz W. Nowacki (Wiatrowski, 2004). It's areas of activities were much scientific then previously functioning (1923-1950) **Polish National Institute for Manual Work** (*Państwowy Instytut Robót Ręcznych - PIRR*) oriented mainly for VET teachers upskilling. Such broad scope of IKZ research areas was i.a. due to the fact that Professor T.W. Nowacki was the founder of „work pedagogy” in the Polish ground and a great promotor of that discipline and the hollistic concept „human-education-work” in whole Eastern Europe (i.a. in 2004 he received a title of *Honoris Causa Doctor* in the Pedagogic Science Academy in Kiev, Ukraine). For many years – until 1991 – the IKZ Institute has conducted research and development activities in the field of VET schools level classification of professions, curriculars, upbringing through labour, didactics and further development of theoretical and methodological basis of work pedagogy. The significant role has been also played by cyclic seminars nation-wide Polish Seminars of Work Pedagogy, which were a scientific school of prof. Nowacki and people of his surrounding like: Z. Wiatrowski, S. Kaczor, K. Czarnecki in 70s and 80s. That circle of work pedagogy's scientists was greatly extended in the 90s by the such professors like: S. M. Kwiatkowski, W. Furmanek, R. Parzęcki, K. Uździcki, E. Malewska, A. Bogaj, J. Niemiec.

#### *Legacy of the Institute for Vocational Education (IKZ)*

All those activities within the IKZ and nation-wide seminars have led to creation of great scientific legacy collected in the „Library of Vocational Education” (*Biblioteka Kształcenia Zawodowego - BKZ*) and the science magazine „Work Pedagogy” (*„Pedagogika Pracy”*) published by the IKZ until 1991. In that year – due the reason of liquidation of the IKZ [political issues], it's Library (BKZ) and publishinh of the „Work Pedagogy” science magazine were taken over by the **Institute for Sustainable Technologies – National Research Institute in Radom (ITeE-PIB)** with the direct attachement to already existing **Centre for Work Pedagogy for Innovative Economy (PIIG)**. In that way we have become successor of Institute for Vocational Education (IKZ). Our Centre (lead back then by prof. H. Bednarczyk) has continued publishing of the „Work Pedagogy” magazine till 2009. It has to be said that the Centre, since 1993 had been already - and still is - publishing also scientific „**Journal of Continuing Education**” (*„Edukacja Ustawiczna Dorosłych” - EUD*). In 2009 there was a decision taken that only one of those magazines will be further published and EUD is still coming out - with strong orientation to work pedagogy. The journal is addressed to researchers,

organizers, lecturers, VET trainers in vocational and continuing education, pedagogy students and people interested in and dealing with education, vocational development and improvement, reskilling. **The authors** of published articles in EUD are scholars from various universities, research institutes, experienced practitioners, organizers of vocational and continuing education and researchers, including among others: T. Aleksander, S. M. Kwiatkowski, Zb. Kwieciński, T. Lewowicki, J. Pólturzycki and from abroad: M. Auer, B. Bartz, A. Bielajeva, N. Greger, W. Höhn, E. Kreker, L. Mats, N. Niczkało, Samlowski, H. Schmidt. Our scientific magazines: „Work Pedagogy” (54 vol.), „Journal of Continuing Education” (110 vol.) together with many more scientific monographs create our Polish **Work Pedagogy Library** („*Biblioteka Pedagogiki Pracy*”).

Starting from the beginning of 90. our Centre has been actively involved in VET research i.a. by developing national standards for vocational qualifications (1995), models for diagnosis and mapping of competences (2011) and national standards for vocational competences (2011-2013). In 2010 our Institute acquired prize of DIE EUROPA EVBB, Foundation of Dr. Adalbert Kitsche (for the project: “*Entrepreneurial Spirit in the Network – the Internet as an Opportunity for the Growth of Competitiveness*”). In the period 2012-2014 we have developed *Innovation Laboratories in the development of competences* (including of special pedagogy teachers and people with special educational needs: i-Lab 2&3).

### **Main challenges up to 2020**

In 2012 our Institute organized a special „*Nationwide Scientific Conference on 40th anniversary of Polish work pedagogy*” (Jedlnia near Radom). That Conference have set the direction of VET research for the decade proposing concentration on theoretical basis of that discipline, work pedagogy in the preparation for the employment and the context of the society of knowledge and knowledge-based economy (with regard to the internationalisation of VET research). Few problematic tables were created, like school-teacher, human labour, vocational career and continuing education.

Such topics are being analysed by VET researchers concentrated in our Institute’s **Centre for Vocational Education Research and Development (OBiREZ converted from PPIG)** in Radom (16 researchers lead by dr Krzysztof Symela) and few didactic cathedrals of work pedagogy and andragogics at the universities in Bydgoszcz, Kraków, Lublin, Rzeszow and Warsaw (professors: R. Bera, W. Furmanek, R. Gerlach, U. Jeruszka, S. M. Kwiatkowski, F. Szlosek). Some VET research - dedicated to the labour market connections - were done also at the Institute of Labour and Social Issues in Warsaw (professors: M. Kabaj, U. Jeruszka).

Nevertheless, we must keep in mind also other factors influencing VET research like educational policy driven by social changes and ESF systemic projects. Therefore we should remember about the role of Institute of Educational Research (IBE) conducting projects like Polish Integrated Qualification System or prognosis for future demand for jobs from the branch school occupations classification. Supportive, but not researching itself, role in realisation of VET policy in the field of EFS projects has Central Examinational Commission (CKE) and the Centre for Educational Development (ORE) which has absorbed „National Centre for VET Support” (KOWEZiU) in 2016 (development of curriculars for VET and educational-occupation counselling).

Lately (2017-2019) our Institute’s OBiREZ found itself also in the borderland of EU funds and VET research (exploring one of the work pedagogy fields of career awareness) as a essential leader in the systemic project „Infodoradca+” (Infocounselor+) where 1000 occupations descriptions were made for the purpose of public services of employment needs (<http://www.infodoradca.edu.pl/>).

### ***Work pedagogy against double transformation challenges***

On the day of 01.04.2019 Poland has created new Research Network called „Łukasiewicz” (inspired i.a. by Fraunhofer Foundation) which consists currently of 27 institutes in 12 cities and employs about 7.000 staff, including 5.000 of researchers. One of those institutes is our Ł-ITeE in Radom with mainly technological departments (tribology, chemistry, pro-environmental solutions), but also with OBiREZ. We are still conducting VET research although we are now more concentrated on the challenges of double transformation and creation of applicable systemic solutions like National Skills, Competences, Occupations Observatory for Industry (KOSP) which we have submitted lately as a Gospostrateg project with Ministry of Development, Employment and Technologies. We also examine national VET structure (where we see some negative tendencies), apprenticeship scheme and financing policy in education.

The analysis shows that there are also challenges connected with disregard of EU recommendations (Copenhagen process conclusions) which are considered only selectively in Poland, especially when you look at the EC recommendations on dissemination of apprenticeship schemes and dual training in Europe and compare them to actual situation in our country (Stępnikowski, 2020). The changes that were made in last ten years had great influence not only on the content of learning programmes but also on the organisation and financing of the education system with its strong forwarding in the direction of school-based and public-preferred orientation. Nevertheless, from a research perspective, further studies are required, especially explanatory and prescriptive ones as those problems have resounded much stronger in the face of COVID-19 pandemic (Symela, 2020). Nowadays we try to keep up with new challenges and that's why we are also thinking on strategies and standards for VET teachers and trainers in the context of distant learning challenges and we've joined two Erasmus+ projects oriented for strengthening digital competences of educators. Finally, in 2022 we plan to organise ***Nationwide Scientific Conference on 50th anniversary of Polish work pedagogy in Radom*** with the attendance of invited international experts. We will try to think about challenges for that discipline in the next decade.

### ***References***

- Bednarczyk H., Koprowska D., Kupidura T., Symela K., Wozniak I. (2014). Opracowanie standardów kompetencji zawodowych, Radom, Instytut Technologii Eksploatacji – Państwowy Instytut Badawczy.
- Gerlach R. (2010) ed., *Pedagogika pracy w perspektywie dyskursu o przyszłości*, Bydgoszcz, Wydawnictwo Uniwersytetu Kazimierza Wielkiego.
- Jeruszka, U. (2019), *Zatrudnialność w perspektywie pedagogiki pracy*, Warszawa-Difin.
- Kabaj, M. (2012), *Wpływ systemów kształcenia zawodowego na zatrudnienie i bezrobocie młodych*, Warszawa, Instytut Pracy i Spraw Socjalnych.
- Kwiatkowski S. M., Symela K. (2001). *Standardy kwalifikacji zawodowych. Teoria. Metodologia. Projekty*, Warszawa, Instytut Badań Edukacyjnych.
- Kwiatkowski, S.M. (2018), ed., *Kompetencje przyszłości*, Warszawa, Fundacja Rozwoju Systemu Edukacji.
- Nowacki T.W., (1977), *Podstawy dydaktyki zawodowej*, Warszawa - PWN.
- Nowacki T. W., (1999), *Zawodoznawstwo*, Radom, Instytut Technologii Eksploatacji – Państwowy Instytut Badawczy.
- Nowacki T.W., (2008), *Praca ludzka. Analiza pojęcia*, Radom, Instytut Technologii Eksploatacji – Państwowy Instytut Badawczy.
- Nowacki T. W., (2010) Państwowy Instytut Robót Ręcznych w nurtach *nowej szkoły*”, [in:] Baraniak B. (ed.), *Od manualizmu do pedagogiki pracy*, Warszawa, Difin SA.
- Stępnikowski, A. W. (2020). *Mistrz w rzemieślniczym przygotowaniu zawodowym. Kompetencje społeczne i pedagogiczne*, Radom: Wydawnictwo Naukowe Łukasiewicz – Instytut Technologii Eksploatacji.
- Symela K., Woźniak I., (2018), *Podręcznik. Jak tworzyć informacje o zawodach funkcjonujących na rynku pracy?*, Warszawa, Ministerstwo Rodziny, Pracy i Polityki Społecznej.
- Symela, K., F. (2020), „Współpraca na rzecz rozwoju edukacji całościowej w trudnych czasach”, *Edukacja ustawiczna dorosłych* 3(110)/2020 [*Journal of Continuing Education*].
- Wiatrowski Z., (2004), *Podstawy pedagogiki pracy*, Bydgoszcz, Wyższa Szkoła Pedagogiczna.

## Slides



**Lukasiewicz**  
Institute  
for Sustainable  
Technologies

### Polish VET research panorama - Between tradition and double transformation

Dr Andrzej Wojciech Stepiński  
Centre for the Research and Development of Vocational Education  
andrzej.stepinskiowski@ite.lukasiewicz.gov.pl

Warsaw, 11th November 2020

### Introduction to the VET research (about the work pedagogy history in Poland)

„Such will be the Commonwealths as the upbringing of their youth“  
\* Jan Zamoyski, Polish Crown Chancellor, 1600 A.D.

- Polish National Institute for Manual Work (PIRB) 1923-1950  
\* Władysław Przanowski (founder of Polish „manualism“)
- Institute for Vocational Education (IKZ) 1972 – 1991  
\* prof. Tadeusz W. Nowacki – founder of work pedagogy in Poland (1972), promotor of the idea „human-education-work“ in Eastern Europe. Closest collaborators were professors: Z. Wiatrowski, S. Kaczor, K. Czarniecki

- Who was and actually still is the main IKZ successor ...?

### Legacy of the Institute for Vocational Education (IKZ)

The IKZ Institute functioning in the period 1972-1991 has left its heritage

- „Library of Vocational Education“ 260 vol. (Biblioteka Kształcenia Zawodowego – BKZ)
- Science magazine „Work Pedagogy“ („Pedagogika Pracy“)

To be followed by our Institute and -in particular- to our Centre for VET R&D (OBIREZ)



- National Conference on 40th anniversary of work pedagogy was organised by our Institute in 2012. This event has set up VET research goals for next 10 years

### VET researchers (OBIREZ)



### Institute for Sustainable Technologies – Centre for VET Research and Development (OBIREZ) experiences:

- 1991 Magazine Work Pedagogy (SI 2009),
- 1993 Journal of Continuing Education (SI now)
- 1995 development of national standards for vocational qualifications
- 2005-2008 modular education and its theoretical basis, innovative programmes, didactics
- 2011- development of models for diagnosis and mapping of competences
- 2011-2013 national standards for vocational competences
- 2012 – 2014 development Innovation Laboratories in the development of competences I-Lab
- 2015 – 2019 development of 1000 jobs descriptions (with competences profiles) INFOODRACCA
- External Quality Assurance Institution (PZZI) for several qualifications

Dr Krzysztof Szmal –  
Chair of the Centre for  
Research and  
Development of Vocational  
Education & ITE





### Łukasiewicz Research Network - Institute for Sustainable Technologies

Starting from 01.04.2019 SBL was established

27 institutes with 7000 workers, including 5000 researchers, mainly oriented towards industry and SME's needs (logistics, chemistry, mechanics, electronics, exploitation). There strong approach towards double transformation (digital and ecological) fostered by COVID-19

### VET Research in the Łukasiewicz Network

Our OBIREZ Centre is actually the only one within the Łukasiewicz Network to be so strongly involved in VET research. Together with the Ministry of Development, Labour and Technology we want to develop National Observatory of Skills, Competences and Occupations for industry




### Work pedagogy (priorities)



2012

- Thematic tables: School teacher, Human labour, Vocational centre, Continuing education

2022

2032

we are planning the 50. anniversary Conference in Radom in 2022-responding next decade challenges



### - 2010 „DIE EUROPA“ Prize - 2020 EVSW National Contact Point





### Łukasiewicz - ITEE Krajowym Punktem Kontaktowym EVSW!

Thank you very much! Merci! Muchas Gracias! Muito obrigado! Molto Grazie! Vielen Dank! Dziękuję bardzo!



## 4 Reports From the Working Groups

After the introductory statements and the impetus presentations, the discussion was held in working groups. The presenters were asked to address the same questions as those given to the presenters:

- What are the most relevant topics of VET research (not more than two) that you would like to see on the agenda?
- Can you position the relevance of these topics against the background of your national and disciplinary embeddedness?
- Why should this topic be of interest to European research and policy community?
- What are the specific challenges when addressing the issue through research?
- Where and why do you see the need for cooperation with other researchers?

### 4.1 Notes from Group 1 - Per Anderson

#### *Topics in VET Research*

A number of different current topics in VET research were discussed:

- **Simulation** in VET, this is an aspect of digitalisation, but simulations are not only high-tech, but it could also mean activities where students act, like “playing”.
- **Digitalisation** in general, is also e.g., about how mobile phones are used by young people to learn (and for other things).
- This relates to the topic of how communicative ecologies are developing and changing.
- Does this mean stimulation or limitation in **communication**?
- The digital transformation cannot be avoided; it is present in all vocational fields.
- Ecologies and ecosystems have overrun earlier concepts such as learning systems.
- The power of networks is increasing, and is important both for the young and how they relate to society, and for the regions, how policies are changing etc.

We will have an economy that has to be reconstructed after this pandemic period, how much resources will there be for VET research in the future? Digitalisation is a critical point for all adult people, for example Italy has a high age of the labour force, they would need a massive intervention to be up to date, but do we have the resources?

What is the role of **theory in VET research**? Presently there is often an instrumental approach to theory, using concepts to understand and interpret findings, but are we through our research contributing to the *development* of theory?

- **Environmental issues**, sustainable development etc.
- Demographic changes in population – **aging population, migration** – what does this mean for VET research? Research on integration in relationship to VET. Adult VET. The role of adult education in VET.
- To be integrated in society and enter employment, firstly adults need to know about the opportunities, how they can reach out, networks and ecologies they create and are part of themselves are important for this. You get to know things through your networks.
- How much can we integrate resources at the local level? Integration between different sectors of research?
- VET is not only for labour market and employability, but **also for citizenship**, young people to become active citizens, adults, migrants, to become part of their new society, become citizens. This is a topic for research.



- **Special needs education** in VET is important for inclusion.
- Research on funding of VET would be interesting, the funding has influence on what could be achieved in VET.
- Is funding based on short-term labour-market needs, or/and students also becoming citizens?
- Different interest groups have influence on e.g., funding.
- Is the interest to find the needs of the labour market? Or something more?

### *Structures of VET Research*

- Conditions are different depending on context.
- For example, an Italian researcher in this group is experiencing a strict connection between policy and research in her Italian research institute, which is directly connected to the department.
- **Forums to publish** research are important and lacking in some contexts.
- This is an example of important infrastructure.
- There is a lack of research in universities in some contexts, e.g., in Hungary.
- Could EU press countries to support VET research?
- **We must have educational systems for researchers. This is an important structure.**
- I.e., there is a need of resources and structures to qualify coming generations of researchers.
- A lack of professorships is problematic.
- **Could VET be part of a broader research sector?** E.g., adult education. Could the research integrate within broader topics?
- Research networks and associations are important. For example, Nordyrk, VETNET.
- There are active social media networks for VET teachers. Maybe researchers could connect more in that way, and/or connect with teachers via social media?
- **EU funding is an important factor that could support research on the European level.**
- **The connection between teacher training and research.** If VET teacher training programmes means a requirement on the university department to also have research, then this is an important condition for them to get resources for VET research.

### *Possibilities of cooperation between different actors*

- An intersectoral approach is important.
- There is a lack of connection between different interest groups.
- What role could research have behind decisions about dimension and direction of VET?
- An example from Hungary says that regional governments and committees with relevant stakeholders are needed, but the institutions do not exist, schools are in poor position.
- **We should think both about different sectors in education, and about connections between sectors in common themes.**
- **We have the cooperation with working life.** What is the relationship with working life for research?
- **Civil society**, NGOs as cooperative partners could be a new opening. How could VET research cooperate with such partners too?
- **Cooperation between institutions** is important, not only between individuals.
- **The situation depends on national conditions, e.g., the importance of regional vs. national level when it comes to power and influence.**
- **EU level gives opportunity for cooperation.**
- **EU research funding, how can we cooperate to develop projects?**
- Challenge for UK to cooperate after Brexit...
- Maybe new moods of cooperation with European partners?

- There should be potential for VET and AE research in the EU frameworks.

#### 4.2 Notes from Group 2 - *Eric Dumartin*

##### *Topics in VET Research*

The following topics were identified and discussed:

- The **education of VET teachers** should be addressed as a priority, as shown in Michael Gessler cluster analysis. The attractiveness of these jobs is shown as a critical issue. Making the teacher job more attractive and more valued in the society should be seriously considered as a key factor to ensure VET success. A minimum of level 6 on a scale of 8 of the European classification of competences is now required but the topic of teachers' level of education should not probably be condensed to that classification. Teaching VET needs to be a vocational and specific way of excellence and not a « by default » career.
- **Improving the link between vocational schools and companies.** This collaboration is a great field of research.
- **Improving the links between VET research and academic education**, improving cross connexions.
- **Improving the quality of practical training** delivered by the companies should be also explored as a studying field. There is sometimes (often?) a gap between the experience provided by companies and what it is supposed to bring to learners.
- **Too few young people go on an apprenticeship.**
- The percentage of young who are **not completing their apprenticeship** is a real concern. Research on abandon reasons must be developed. How many of those who have given up want to be educated later in life?
- **Effectiveness of digital learning in a VET path** could be more than a pure technical question but also a learning philosophy question: is it consistent to develop distance education in a learning environment that favours experimentation?

Apart from those attractiveness, efficiency, cross connexion topics the question of the research itself was raised. 2 topics were discussed to feed the answers to the subjects above:

- Creating a model to assess the empiric/creative level of the research.
- Moving from a binary « basic research »/« applied research » to a « **sustainable research** ». By sustainable research, we mean more action users-oriented research. The idea could be summarized as follow: **How to help the practitioners to use and implement research?**

Macro Level: Listing VET research topics quickly returns us to the question of fundamental or applied research. The why and the how are the two questions that echo each other. If the emphasis this year was on cooperation, it was to improve the visibility of the work of VET researchers and the impact of their work. The most important cooperation could be the one with stakeholders who would implement the research, what a participant has called «sustainable research».

Meso Level: Most of topics suggestions focused on «improving» VET efficiency. Improve attractiveness of teacher's job, cross collaboration, number of apprentices, quality of practical training...and one was more on technology effects on VET. This last point is raising a more fundamental question: how is VET supposed to deliver something different to learners, and is this vision threatened by new technology and especially by digital learning...? Is this question opening a new field of research, what could be VET in the future, not improved but different?

Micro Level: VET has a lot to do with representations. It seems that the negative representation that can be linked to VET in some countries is not limited to students but also affects teacher-applicants. We know where the unlocking keys are (in the improve items category) but search must focus on how to use them and help stakeholders to do so.

### *Structures of VET Research*

As shown on actors mapping, VET is an offering a systemic and complex environment. The structure question has been aborted with the following prism: What structure could hold to leverage best VET research inputs?

The group has particularly focused on a critical VET player, **professional associations**.

Professional associations are the key link between schools and companies. They are usually gathering and representing a sector of activity and design expected competences to provide effective work force to their members. A good relation and combination between PA, Research and VET schools offers significant chances of success by providing a good balance in the system. Apprentices receive updated training and pedagogy, companies receive competent workers, this is how professional association should contribute.

On the opposite, ineffective relation means outdated competences transfer. Taught jobs could not represent the last effective works or technologies. Unfortunately, this situation is too often existing.

One of the reasons for the lack of efficiency could be at some point «**an old white men**» **focus**, professional association following job description as it was by the past and not earning research benefits. This generation effect could come from the constitution of many of those professional associations, bringing together retired people or not opened to change. In addition to these critical remarks, which are not intended to be general, it would be interesting to conduct a study on the personal and professional characteristics of the stakeholders and see if there is a generation topic to deal with.

To overcome this issue, the creation of **consortium of actors** seems a good way to follow. PA, searchers, schools, politics and all relevant stakeholders should be working together on a regular base into constituted consortiums. Of course, initiative and leadership should be set.

The best VET structure could be the one, which is not yet existing.

Macro Level: There is not a single critical actor in VET. We know from our researches that VET is a systemic whole, interdependent, with a strong interference from the political sphere. Moreover, most of the actors are not only subject to changes but must also initiate changes. In this moving universe, it is hard for research to structure long term and efficient cooperation. The question is not to find a stable enough environment to develop VET research (it does not exist) but to create it or create the conditions for that.

Meso Level: Consortium are interesting to address complexity of VET. It would make sense to make a mapping of existing VET consortium and analyse key success factors. Consortium, embedding all the actors, is immediately raising the question of their initiative and leadership, and then of their governance, operational mode, funding... The task is difficult, but the challenge deserves to be tackled. What would be the place for the world of research, who would be its representants?

Micro Level: We put a focus on the delay in academic programs versus technological progress and jobs evolution. It is one of the consequences of the lack of coordination between schools and companies, coordination that should be ensured by professional organizations. Creating the conditions of a higher level of reactivity would probably positively affect the efficiency of apprenticeship path and should make it possible to have operational employees more quickly. But that's not all that's at stake. Bringing modernity is bringing pride to young people who will have more the feeling of being aware of their art. This aspect of the role of the structures must be reinforced (it also addresses teachers vocation crisis).

### ***Possibilities of cooperation between different actors***

Monica Moso Diez has opened a field of reflexion by considering the region as a possible partner. **To national and international we must effectively add regional.**

Region could offer a more pragmatic politic access to implementation of VET research. Moreover, region tends to **offer concrete applications and a higher speed of execution** in decision. Regions often like to see the impact of their decisions on people welfare and on company's activity. At this time when the influence of nations / regions is being discussed at the higher level of Europe, why not use the regions to make VET more visible and develop successful experiences?

The difficulties of relations with Europe were pointed out. Where they should be seen as partners, the European institutions too often mean engaging in hard work to secure applications or funding. If Europe doesn't sound awkward, it's when it needs results research and uses research centres as data providers. In this case, "customer-oriented", the cooperation is much more effective.

The lack of interactions outside of Europe was noticed, the main reason being the lack of common benchmarks on VET, the VET system being more developed in Europe.

Fundamentally, research and policy do not work in the same time space. Politics, especially governments, are geared towards the short term when researchers work long term. This difference in timing too often limits research to the observatory (the data is used for explaining the past or actual situation) and not to testing and implementing solutions that would require prospective.

Macro level: Governance of European VET initiatives is progressing with difficulty. We can hardly speak of European VET system, nor even of coordination, despite all efforts developed. The European Vocational Skills Week is a good and positive example. VET is probably covering too many political issues to move forward smoothly. This politic reality comes up against the sincere convictions of VET researchers who don't just want to make observations but accelerate and disseminate this practice. So, why not going to a level where researchers' community could be heard? Why not to combine a new target and a new method, also have the « implement research » approach?

Meso Level: European Regional institutions are offering a wide range of opportunities. As regions they all defend their specificity but they have in common the will to act in a visible way on their territory and « to be there » for a longer time. They do not necessarily propose other or additional legal support to VET (rules are generally the same) but they offer a shorter decision process and a targeted support. Consortium can be reunited more easily.

### **4.3 Notes from Group 3 - Franz Kaiser**

#### ***Topics in VET Research***

*What is currently on the VET research agenda?*

That was part of the presentations before. Nothing to add, maybe we have some more focusing on heterogeneity and disadvantaged people and inclusion of migrants than published in reports and journals.

*What should be on the agenda?*

- A focus on the need of vocational knowing and skills in broad or core occupation profiles, research on changes in work (industry 4.0) and needed competences including the mentalities and cognitive structures and
- health and care should be stronger in focus as well as social pedagogics and prevocational education, we still focus too much "traditional" crafts and technology and business and administration.

- Transition from VET to labour, strength the perspective of individuals (self-empowerment).
- Consequences of environmental change for VET.
- VET teacher & trainers competence, especially for “new learning environments.
- Career pathways, motivation and especially people in risk.
- Change of learning by digitalization and learning environment (changing places of learning)
- VET theory and fundamental questions – what should VET contribute to?

### ***Structures of VET Research - Actors / development / function / influence of policy /***

The WS group focused the actors – the situation of the VET researchers.

- VET research is acting in a hybrid situation (science, policy, companies, level of education, practice of learning and shaping learning situation), therefore we can see a broad field of disciplinary backgrounds of VET research in Europe
- Challenges in that context:
  - high quality in terms of theory and research methods in the disciplines is in contradiction to the need to cross the boundaries for VET research, a
  - status of VET research and the career perspectives for VET researchers (the status of VET in society has influence on the status of VET research) and the challenge to get “good young researchers”.
- Difference in the elaboration of VET research in the European countries in relation to the demand of policy in the countries – challenge for CEDEFOP and ReferNet
- EU Research funding is focusing on (technical or mobility) products. (We produce research, a different product), very difficult to get money for VET research

### ***Possibilities of cooperation between different actors***

- High interest in collaboration (over 1000 people wanted to participate in this meeting), challenge to choose 100.
- We need explicit research funding for VET research by the EU, if they want to push VET forward, more than Horizon 2020 (“too academic”).
- VETnet is important with its open doors for researchers on different levels of elaboration, CEDEFOP important as well, ReferNet-Country studies.
- Growing number of journals, but without translations in EU language (language is a strong barrier for research on a more practice level).
- Missing institutional, annual reports on VET research by CEDEFOP.
- CEDEFOP should set up call for proposals for VET research different to their own program.

#### **4.4 Notes from Group 4 - Andrea Laczik**

Aims of the session - More specifically we have discussed four questions:

1. What are the most relevant topics of VET research (not more than two) that you would like to see on the agenda? Can you position the relevance of these topics against the background of your national and disciplinary embeddedness?
2. Why should this topic be of interest to European research and policy communities?
3. What are the specific challenges when addressing the issue (of what) through research?
4. When and why do you see the need for cooperation with other researchers?

As these questions interlink, this report will contain elements that arguably can be relevant to more than one question.

### ***Topics in VET Research***

1. What are the most relevant topics of VET research in your country that you would like to see on the European agenda? Can you position the relevance of these topics against the background of your national and disciplinary embeddedness?

There seemed to be a consensus when outlining the most relevant national topics, hence no breakdown per country. In general, these broad areas coincide with themes that participants wish to see being covered by cross European and cross-country research. As it will be noted, identifying specific research questions which are suitable and relevant for countries across Europe can be more challenging. The link between research, practice and policy development has been emphasised throughout.

We all have been affected by the current pandemic which has clearly had an impact on all aspects of life. Hence the urge to investigate how **Covid-19** impacted on VET including what the short term and long term impacts are and how these may shape future VET; these are at the forefront of national and international research interest.

**Green and the digital** sectors are demanding a well-qualified workforce. The skills that are needed in these fast-growing sectors are largely unknown. Research is needed in this area a) to identify skills needs, b) to train teachers (initial teacher training and continuous professional development of teachers) in order to support talent development in these areas and c) to re-design work-based learning curriculum that reflects real life context and helps develop talent for the green and digital sectors. This would enhance the quality of VET and ensure that VET qualifications link directly to real life developments.

It has also been highlighted that further research should consider **learners' voice** especially in relations to VET governance. Are there any formalised procedures that ensure that the voices of these very often underrepresented actors/stakeholders in VET are heard in the context of education policy?

The **reputation of VET** and VET being a second choice has been mentioned as an area where further research is needed. How to make VET more attractive? How to ensure that VET would become a conscious pathway choice through which young people and adults can succeed?

2. Why should this topic be of interest to European research and policy community?

Investigating the above issues offer individual countries a chance to learn from examples of good practices in their region. Similarly, investigating policy initiatives/developments and their impact in their specific context can enrich our understanding of policy processes and decisions. It is the responsibility of the research community to clearly articulate the danger of 'policy borrowing' and to reflect on potential for 'policy learning'.

It is already evident that the pandemic has had a lasting impact on the economy, society, technology and on every aspect of life. However, what does this mean for VET? How can we use technology to overcome these challenges and further the quality of VET? Does vocational training need to be redesigned? In what way? How are other countries responding to the pandemic and what can we learn from each other? These questions could be relevant, such as for science, economy, and politics across Europe.

The digital transformation is rapid and reshapes our world. It influences occupations, the structure of learning and training, the relevance of continuing training and the way learning happens (e.g., distance learning). Trainers and teachers need to be prepared for this rapid change. Distance learning and on-line learning play an increasingly important role at the time of the pandemic.

Green economy is rapidly growing with the agenda of sustainability around the world. As VET directly links to the labour market, it is VET that needs to prepare the qualified workforce for this sector. VET can only do that if we have the correct intelligence about the sector.

Education and training are crucial prerequisites for career success and for integration into society for every single person. This topic is closely linked to issues of migration. Further, it already has been claimed that the challenges we face due to the pandemic could be turned for the advantage of VET. Professionals have been identified as key workers bringing them to the forefront of the public eye. The importance and necessity of VET graduates and their contribution during the pandemic may improve the general view of people with VET qualifications and may make VET a more attractive choice. If we want to make VET more attractive, the perspectives of the learners/apprentices are core. Very often research only focuses on, for example, the companies, VET schools and policy makers and leave those out who personally? experience VET most.

Improving the quality of the teaching through teacher training, improving the quality of student's learning through relevant curriculum and the quality of VET governance are common denominators with the European Agenda. This is to promote a more sustainable development in terms of employability.

### *Structures of VET Research*

#### 3. What are the specific challenges when addressing the issue through research?

This question was discussed by focusing on international comparative research, in particular the EU research framework and other EU programmes. It has been noted that VET research starts in national contexts and most VET research remains within the countries. However, we have agreed that conducting international and comparative VET research is vital to generate new knowledge.

Not all EU programmes have a research element, such as Erasmus. This could be changed to facilitate more VET research. The development of an EU research proposal is very time-consuming and bureaucratic. This can further reduce the engagement of those who have the language skills, expertise, and interests to contribute, but not the resources to devote to application development.

There is a relatively small group of researchers conducting VET research nationally and an even smaller group of researchers engaged in comparative and international VET research. To engage in a comparative piece of research, it may be a challenge to find collaborative partners proficient in English. Language can be a barrier in engagement. When planning a comparative project, selecting countries to participate can also be a challenge due to the restricted possibilities to choose from. VET research and capacity for VET research in individual countries differ. For example, Italy has a well-developed best practice VET map at local level but not a national VET research centre.

Comparative research also assumes that participant countries/researchers are interested in the same issues with the same research questions. It was suggested that a searchable database/platform could be developed for researchers, with a research profile and language knowledge to support the identification of the most suitable collaborators for comparative research. This would also support a more effective development of comparative studies.

Existing datasets: It was noted that there are valuable national datasets available for analysis focusing on the national research agenda. Inevitably these datasets are non-compatible, meaning they are not suitable for international and comparative research. It was suggested that emphasis could be given to create a database that is comparable across different European countries. Large scale and longitudinal European studies and programmes could (should) incorporate data collection including on the effects of interventions.

The voice of learners: The voice of learners is challenging to capture, hence fewer research projects include/focus on learners' perspectives. This is due to the fact that they are not well organised and lack lobby organisations in contrast to employers or VET teachers (such as the unions).

***Possibilities of cooperation between different actors***

4. Where and why do you see the need for cooperation with other researchers?

There has been an agreement that collaboration is needed at both national and international (European) levels. Collaboration works better if built on mutual interest and mutually agreed research questions. Collaboration may be driven by joint interest of ‘local’ researchers and/or based on larger scale institutional agreement.

Focusing on a European level, we have acknowledged the advantages of a multi-disciplinary research collaboration. Scientists with different academic and professional backgrounds examine the research focus differently. This reflects better the complex and multi-faceted nature of VET.

Collaboration should also include researchers who are experts in both qualitative and quantitative research processes. This would allow them to investigate the same topic from a different angle and improve the quality and validity of findings.

European-wide research relies on local scientists who are familiar with their vocational training systems and national opportunities, speak the local language and have access to the research field (VET practice).

Collaborative research is oriented towards a greater common vision to strengthen VET, in particular in relation to pedagogy, governance and wider socio-economic impact. For example, in Italy there is particular need to a) tackle unemployment, especially youth unemployment (for example, the persistence of significant number of young people being NEET, b) to improve the standing of VET and make it as a first choice, and c) to strengthen cooperation within VET at the three levels (institutional, regional, national). These issues resemble the focus of many other European countries.

Given the current context and its challenges, it will be increasingly necessary to engage in collaborative research and identify/investigate examples of good practices across Europe. This will support the development of evidence-based policy development and evidence-based practice.

**4.5 Notes from Group 5 - *Fernando Marhuenda Fluixa***

***First round – highlights of the impetus presentations***

B. Struck by what C. Nägele suggested: what VET research is

- the range of research topics is so vast in VET research because it spans the workplace and education
- changes in economy and society have impact upon VET more directly than in more autonomous phases of education

M. Amazing that despite VET seems to be at the centre, the budget going to research indicates that VET is a very small part of it.

Majority of students go to VET, but traditional research agenda of universities is more geared to secondary and primary education

R. Smart specialization of regions  
Regional funds in the future in the VET area  
Funding is moving towards VET now

M. The topics of research that we have heard in the impetus presentations, is it not too broad? Should we try to focus on some aspect?

The whole spectrum might be fading away the consequences  
Results of research to improve practice in schools and in industry



F. Regions and mobility of workers and apprentices/learners

Polarization of jobs (amazon, uber, ...)

Research for whom? Practice and policy, research itself, university

B. List of topics

Dimensions of research

L. Move to a general level before going down

Describing VET research: observation, analysis, communication

- Observing, choosing, prioritizing
- Analysis, choose methodology, how deep you want to get into empirical stuff
- Communication, problems with who is reading academic research, how to communicate in a better way

B. Danger in arguing that the policy community wants practical outcomes and the academy theoretical ones

The policy community also produces research that addresses problems of practice that policy can overlook

The assumptions of policy, about what happens in schools and the workplace, overlook the limited research base about curriculum and pedagogy outside school settings

**STRONG IDEAS**

- What is VET research? Observing, analysing, communicating
- Research must be good and sound, quality research, not quick answer

***Topics in VET Research***

- Teachers in VET as a source for quality of VET, who are those teachers, why do they choose this career?
- There is a shortage of teachers, now perhaps more supply but are they prepared to the job they will have to do?
- Digitalization, opportunities for improve the quality of VET at all levels, also in terms of specific arrangements of WBL.
- Cooperation is non-existent between schools and companies.
- Artificial intelligence affecting VET.
- It is very unclear what happens in the spaces (company, school). Apprenticeships, full-time students spending time in the workplace.
- Pedagogical approaches.
- Curriculum
- Emphasis on the autonomy of the learner, what about the role of the teachers? Even VET practitioners know little about this. Will digitalization contribute to make things visible?
- Confusion at international level on what is VET, because of the differences between the countries. Cedefop has done an important contribution to this, so we agree that we speak about the same issues, to share with other countries
- Economic, educational, social purposes intertwine in different countries
- VET schools and companies beyond provision of WBL and apprenticeships – innovation?
- Teaching-learning arrangements – digitalization and AI
- Qualification levels as ladders that can be used as transition pathways
- From artisan to professionalism: deal more with clinical cases

### ***Structures of VET Research***

- Commissioned funded research by EU.
- Contribution to international research.
- High quality published research, most of the journals are based in the UK, Australia
- Who is the most central player in the field of research at EU scale?
- **There may be (multinational) corporations in research which have strong administrative and support system that makes them competitive in applying for funding.**
- Most universities are not specialized in competing for funding, yet they are the ones doing real research: How to involve them better, to have them more on the forefront?
- **English language and local/national research published in country language.**
- Expectations of research: practitioners rather than policy makers, they remain longer on their jobs.
- **Competition and cooperation** for research.
- Education and social science.

### ***Possibilities of cooperation between different actors***

- Increase the work by VETNET
- Go beyond the traditional actors, i.e., the Joint Research Centre was not known in VETNET before 2019.
- Involve further actors that are relevant even if not at the core of the usual suspects.
- Trying to stimulate collaboration between researchers in different cities and countries; SIG, teams who are interested in the same subject that you can spread the work, stand on each other's shoulders.
- The pandemic has shown us how to travel without moving, therefore chances for international cooperation are larger or more common now
- Comparative studies with countries; how to organize research between two different universities in two countries; we still work too much on the national perspective (of course there are projects like Cedefop or BIBB that are wider).
- Match timing, make known what you are currently working on (cooperation instead of competition).

## **4.6 Notes from Group 6 - Lázaro Moreno Herrera**

### ***Topics in VET Research***

- Relevance to continue focusing on ethnicity, migration and the role of VET in inclusion.
- Importance of studies of words meaning and uses in VET including comparative studies. This due to implications of different concepts such as inclusion and integration.
- The importance to incorporate interceptionality in research in VET.
- Drop out needs to be study to help best improvement of practices.
- Studies about VET responsiveness to work mark and society demands will be beneficial.
- Apprenticeship and implications of Covid in certain contexts needs to be study.
- Cross-national comparative studies keep to be extremely valuable.

### ***Structures of VET Research***

- Renewed interest in practioners engagement in research.
- VET research is gaining more visibility and cooperation with European Commission and national agencies is extremely beneficial.

- Vocational schools are having a stronger voice in the research agenda in different contexts, very positive!
- Three-part research is very beneficial (schools, academic institutions, stakeholders from the worlds of work) ...be aware of dangerous for research of established agendas that might exclude controversial issues.

### ***Possibilities of cooperation between different actors***

- The international networking promoted by conferences is highly missed
- Virtual ways are a positive contribution
- Importance to strengthen cooperation with European commission and other bodies supporting research
- Academic community is usually very open to cooperation, we feel strong limitations from availability of resources

### **4.7 Notes from Group 7 - Isabelle Le Mouillour**

VET systems are currently under stress due to the major changes in economies, societies and the COVID 19 pandemic. Following an ecosystem approach, the participants to the workshop are running research on that topic from two different perspectives. One major research topic is how VET organisations and policies are responding to the changes and how resilience is emerging and consolidating. The research approach encompasses responses to the strategies and responses developed by single actors (policy players, regional actors) as well as (new) emerging patterns of interactions between the actors. The VET ecosystems are undergoing a test in 'real time' that implies monitoring and analysis of changes and decisions taken by the actors. The second perspective is that of diagnostic of IVET and employment. It includes not only the analysis of VET provision, the role of VET teachers and students but also the development and analysis of different indicators linked to the labour market and quality of life. In this respect, the ecosystem includes the labour market, social challenges and competitiveness of companies. A topic that should not be forgotten is the resilience of individuals (learners, teachers) and their personal abilities and competences to deal with changes.

VET teachers and trainers. A second major current and future research topic focuses on VET teachers and trainers and more specifically the qualifications and education/training pathways of VET teachers. The objective is to provide evidence that leads to modernising VET teachers' competences. The need emerges from the identified need for VET teachers to better understand and interact with work-based learning as well as for them to deal with heterogeneous population of learners. The focus on migrants and refugees leads to research questions not only dealing with the integration of refugees in the VET systems (for instance through mentoring programmes; multilingualism in VET) but also dealing with supportive mechanisms for VET teachers. Past comparative projects feed into this research topic, which should lead to the design of practical proposals for VET teachers. This VET research topic is embedded into a wider research agenda on inclusion in VET and comparative research on refugees in VET. Both topics are going to be taken forward in forthcoming comparative research projects as well as the topic of adapting teaching and training to future 4.0 work.

Internationalisation of VET. A third line of research deals with international cooperation in VET, policy transfer and sustainability of reforms and changes initiated in that context. The project is aiming at identifying levers and obstacles to international VET cooperation and the definition of successful projects.

Take a transversal and dynamic approach. The participants to the workshop underline that VET research should also deal with the dynamic of changes at the level of required knowledge, competences, and skills of individuals. In that regard, the concept of 'digital serenity' was coined. In a broader perspective the change in qualifications needs to adapt to changes in

industry has been a research topic for the last 10 years which nowadays experiences a revival since solutions have to be elaborated at systemic level and that the pandemic acts as an accelerator for changes. The focus should be on low/middle qualifications, which VET systems particularly address. Digitalisation and entrepreneurship could emerge as further future research topics.

### ***Topics in VET Research***

	Context	Methodological approach
Macro	VET systems Digitalisation Policies Pandemic Inclusion in VET International cooperation in VET	Development of indicators (VET, labour market; quality of life)
Meso	Qualifications and education/training Pathways of VET teachers Adapting teaching and training to future 4.0 work	Competence / skills analysis Field research
Micro	Individuals / learners' competences and skills	

### ***Structures of VET Research***

VET research is a dynamic field, acting as driver for changes, partially based on evaluative or prescriptive approaches. In the current climate of major challenges for policies, societies and economies, VET research could set priorities and provide critical views. Most important is the good theoretical foundation in VET research. VET Policies go through shifts over time, which adds to the dynamic of VET research. The need for catching developments with data and theoretical frameworks and accommodating with policy-induced changes is a dilemma.

Although dynamic by nature and circumstances, VET research lacks resources and framework conditions for research cooperation. Especially researchers following a more qualitative approach meet difficulties in acquiring funds; in many cases, funds are scarce to finance the development of research designs. State policies should step in to set up framework conditions for research cooperation. Stable funding is important as well as consolidated research groups to achieve quality. The framework could lead to building up a research ecosystem including resources, research priorities, promotion of research in specific areas, sharing of databases and promotion of networks of stakeholders and researchers. The VET research agenda should be specific as well as liaise with VET and research policies.

Innovation in VET research also stems from PhD students, they should not be forgotten in the whole picture and trends in research by PhD students could be surveyed as an indicator on VET research development.

### ***Possibilities of cooperation between different actors***

‘Networking’ came to the mind of all participants to the workshop and researchers are usually active in different networks. The worst case for VET researchers is little connectivity with other VET researchers in their countries or beyond. Good networks support mutual learning and catch opportunities (for instance, they are informed on research calls). They are also sphere of mutual understanding and can in some cases, be operated effectively with small amounts of funding. From a research perspective, VET systems are meeting similar challenges and research cooperation could use this ground for developing research projects.

One challenge to be addressed is to overcome the ‘language bias’. Most visible or widespread publications, those used for indexing, are usually published in English language;

producing thus a bias in cross-referencing. Key concepts, which sound similar have nevertheless another meaning once contextualised.

#### 4.8 Notes from Group 8 - Paolo Nardi

##### *Topics in VET Research*

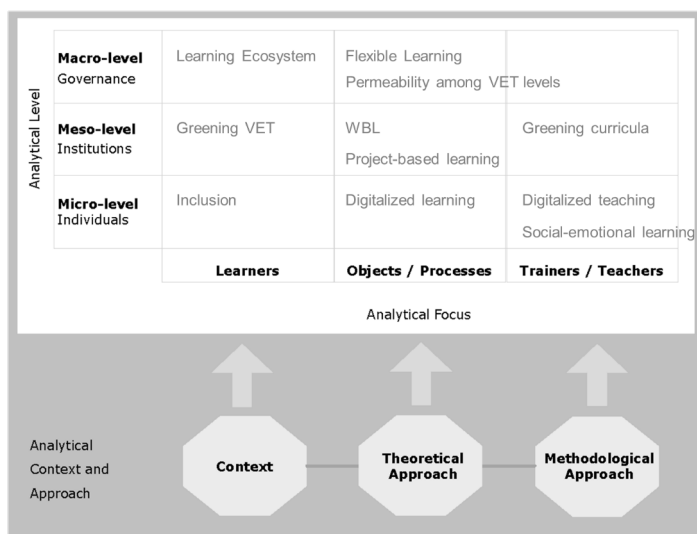
Aim: Establish a list of current topics in VET research. Sort them according to the VETNET research framework.

Some keywords: What is currently on the VET research agenda? What should be on the agenda?

The discussion among the participants confirmed the relevance of the topics as outlined by VETNET community in the past years and the analyses outlined by the keynote speakers during the plenary session, namely: Work-Based Learning (WBL); apprenticeship; digitalization; although it was underlined how these research topics have been mainly focused on Initial VET.

The participants have then shared their vision on emerging issues for VET research, including:

- **Inclusion:** a wide research area related to specific sub-areas based on targets (disability, dropouts, migrants), on learning environment and its impact on learning; on skills (social-emotional learning and life skills).
- **WBL:** it would be important to focus more on the micro-level, showcasing the practical experience of VET centres or companies; research on WBL should also look at emerging practices commonly defined as project-based, challenge-based, reality-based learnings.
- **New Learning:** as defined by ETF, it would be important to start analysing innovations in terms on VET teaching & learning (Augmented Reality; Virtual Reality; Simulation), namely in connection with the external shock determined by Covid19
- **Flexible learning,** including adult learning, informal and non-formal learning; in particular the role of IVET centres in this context
- **VET Governance:** to analyse structures of the VET ecosystems
- **Greening:** how green skills are included in the curriculum and how sustainability is changing industry and, as a consequence, should affect VET
- **Permeability** among VET levels or between VET & labour market.



### ***Structures of VET Research***

Aim: draw a picture of the most critical players in VET research

Some Keywords: Actors in VET research / development of VET research / function of VET research / evidence-based policy vs. policy-based evidence / Status of VET research ...

The group includes a wide representation of players involved in research, including National and European Agencies, VET centres and University. Thus, the concept of VET research is wider than academic research. Beside scholars (including teacher educators), the group outlined some original but relevant actors:

- Practitioners: their involvement in research faces some criticalities; good examples came from the Netherlands or Cometa-Italy).
- Employers, trade unions not only as recipients, but sometimes also as funders.
- Ministries or Public Agencies, usually funding but also, more importantly, setting the agenda.
- Research community, setting the criteria for «academic» recognition and influencing topics, methods.
- Academic context, where VET research does not receive enough space and recognition, badly affecting the investment in this field.
- European programs: VET research is often funded by ad-hoc projects. However, while research developed by Erasmus+ projects does not often receive adequate recognition, other programs, including Horizon which is more research-oriented, are not able to involve VET players.

### ***Possibilities of cooperation between different actors***

Aim: Show possibilities of cooperation between actors on national, EU and international level. Discuss barriers and opportunities to cooperate. Discuss supporting structures within research, in policy.

The group members underlined both opportunities and barriers to cooperation. In terms of opportunities, they outlined:

- The importance of a stronger Internationalization of VET research, namely beyond EU.
- Among the good practices, the group mentioned:
- The CoVE initiative (more research-oriented than other programs), fostering wide cooperation among different actor of the learning ecosystem.
- ETF has been promoting important actions to support research capability in VET sectors in EU Neighbouring Countries, establishing collaborations among EU and non-EU countries.

Barriers as mentioned by the group mainly concentrate on:

- Funding, because of:
  - the lack of research-oriented programs in the VET field;
  - need for a more coordinated approach to existing sources of funding;
  - lack of international perspective at national level, making hard for instance comparative analysis (you may get funding only for your national level);
  - VET research is not yet strong enough to get great international fundings.
- Existing differences in the points of view of the potential partners (academic not close to real practice; practitioners lacking research skills...).

#### 4.9 Notes from Group 9 - Eoghan Ó Murchadha

##### *Topics in VET Research*

Currently, in VET, the prevailing topics under scrutiny appear to be analytically at the meso level, primarily looking at role of schools and trainers and the opportunities afforded to learners.

It is suggested that too much research is conducted which is purely academic and not cognisant of attitudinal, didactical settings in the TVET classroom. There is much scope for co-operation between schools for larger scale research projects which could explore digitisation and internationalisation of VET.

Similarly, and most relevant considering recent pandemic induced changes to teaching methodologies, is the need for innovation in VET. Each element of educational VET delivery should be explored and scrutinised e.g., digital learning, online learning, and the capability of teachers to meet these needs, not just the learners and apprentices.

This focus on digitalisation and sustainability should be expanded to include the capability and professionalism of trainers within the firm. Their competence is as important as that of the teachers within the school.

Recent changes to the delivery of education generally have shown that there is a need for the flexibility in the delivery of education. This could work to the benefit of inclusion in education on a greater scale, particularly where adult learners are involved. VET is an important pathway for adult learners and there is room for more co-operation and collaboration in this area.

**Keywords arising attitudinal, didactic, digitisation, internationalisation, technology, interaction**

##### *Structures of VET Research*

In terms of structure, at present, the most critical players in VET appear, analytically to be those at the macro level. It appears commonly across Europe that those of a bureaucratic disposition have the power to influence the direction of research and education in some cases.

An example would be the roll of the chambers in Germany. Their influence over curriculum is evident if they were to suggest that the competences are not authentic. This could trigger a change of curricula in favour of certain segments of industry or firms. As a major provider of funding, the *Länder* have the capacity to overtly affect funding of research projects.

Furthermore, the bureaucratic bodies and those of governance do not readily take advantage of the knowledge and findings presented by researchers. Academic research is repetitious and generally results in findings which endorses previous research. It is worth negotiating harder with governing bodies that policy be linked to research undertaken and that its value is better understood.

It is possible to gain greater understanding of cross boundary issues by developing links with institutions across states to access international funding. This would allow for projects which would be deeper and broader in scope and aim. Moreover, it would allow for the hybridisation of studies across new partners.

**Keywords arising: Bureaucracy, curricula, policy, funding, hybridisation**

##### *Possibilities of cooperation between different actors*

There appears to be issues at the macro level due to the overwhelming control of research and its direction such as that endorsed by European agencies. This cohort provides research findings which are overwhelmingly representative of issues at a macro level across states.

Excellent work is being done by researchers on a micro level which provides more realistic and authentic information of issues affecting the stakeholders across all socio ecological levels.

Consequently, co-operation is required between larger parties such as CEDEFOP and expert research groups such as VETNET where expertise can be shared, e.g., CEDEFOP's access to pan European data and individual researchers' expertise to analyse the information. This is the first step to finding real (pure) information.

**Keywords arising: Agency, co-operation**

#### **4.10 Notes from Group 10 - *Vidmantas Tutlys***

##### ***Topics in VET Research***

- Issues of equity and implications of VET to social inclusion and coping with inequalities can be missed or left behind the attention of VET researchers when focussing just on the digitalization, green skills or strengthening the links between VET and business.
- Exploring the role of political ideologies in setting up agendas of the national VET policies.
- Enhancing comparative research on the different issues and topics related to curriculum design, work-based learning, accessibility regimes, development of CVT and others.
- Need of more holistic approaches to VET research by focusing on the wider and interdisciplinary contextualization of research objects.
- Internationalization of VET topic/object of research is needed. Such topics, as VET and migration, implications of migration to VET, accessibility of the VET for the 3rd country migrants in the EU countries could be more explored.
- There was suggested deeper exploration of the borders between the academic VET research (academic) and development (Erasmus+). For example, comparable analysis of Erasmus+ research outcomes with the outcomes of academic research.

##### ***Structures of VET Research***

- Status of the national and international journals – how to enhance publications in the national journals, develop opportunities for publications in the national journals? Making international journals really international in terms of topics and accessibility is also important.
- Rethinking the disciplinary classification of the VET research in terms of disciplines and subdisciplines is needed in order to enhance institutional and comparative research in VET.
- Becoming more international / global in the VET research is also very important.
- Supporting national infrastructure of the VET research is needed, especially in the countries that lack economic and financial capacities.
- Overcoming the limits imposed by the national legislation and academic culture, such as institutional limitations to the career of researchers and imposed limitations in choosing the options for publication defined by ranking.
- Supporting young VET researchers is very important.

##### ***Possibilities of cooperation between different actors***

- How to boost the VET research globally, not only on the EU level, especially paying attention to the development of the VET research in the countries outside EU, which struggle with the development of VET.
- Translating the findings of the national research which does not get to the international journals or events is important, because these findings can significantly expand the existing „visible“ know-how“.
- Formal institutionalization of the VETNET as an association of researchers and not just as informal community would enable higher/better sustainability of cooperation in this field.



- Promoting international Exchange programmes of the VET researchers through EU research programmes could be relevant.

#### 4.11 Notes from Group 11 - Özlem Ünlühisarcıklı

##### *Topics in VET Research*

###### Topics (long list)

The following are the topics that we considered crucial.

- Green economy
- Digital transformation
- OR double transformation
- What is the role of VET in participating?
- Michael's topics
- What kind of jobs are needed?
- Demand side: for which jobs should VET prepare the workers? This is missing.
- Social inclusion: groups of young people left out of education.
  - Migration,
  - Language issues
- Working for qualification especially for the young people.
- Much need continuing VET, a more flexible system would reach people
- Skill demand, skill gap
- Accounting for historical changes, people today forced to change jobs more often, LLL with more flexibly/permeability
  - So, there is need for research to find the right structures
- VET teachers
- Gender
- low participation due to stigma, perceived status of VET, to promote participation in VET

###### Topics that are prioritized

After discussing on the above-mentioned topics we decided the following topics would be prioritized.

- Dissemination of continuing education in double transformation
- Ecological
  - Digitization
  - Accounting for historical changes
  - Upskilling of teachers
- Social inclusion:
  - Migration
  - Language
- Gender (attract female into the VET), raise prestige and payment of “traditionally female” jobs.
- System change

##### *Structures of VET Research*

###### System change

- System focuses on IVET, but we need a stronger focus on CVET
- Measurement about skills: the measurement is not yet there
  - You have qualification and certificate: measurement is very different from one place to another and makes comparison of competences impossible

- The important thing is the skill of the person and what skills are needed
- EU instruments, such as EUROPASS or ESCO, needs further development and wider use. Also, digital technology and artificial intelligence (AI).
- A stronger, better cooperation between the following stakeholders are considered important:
  - educational institutions,
  - policy makers,
  - workplaces,
  - social partners,
  - trade unions and
  - learners.
- Researchers, and their research interests, and the direction of future research.

### ***Possibilities of cooperation between different actors***

- The system of cooperation
  - Sometimes it is not regular, no structure
- National, EU, international:
- National level:
  - Cooperation between educational institutions, policy makers, workplaces, social partners, trade unions and learners. They would come together on a regular basis.
    - There are such structures but in many cases, they are not working very well. So, more cooperation is needed.
    - Representatives should be at expert level. Not influencers but experts.
- Related with above point: What is missing, let's look for that. Look into comparative studies, or examples from other countries (EU and international level).
- More research is needed comparative/international research.
- Research is usually about juxtaposition of countries for a comparison because each country is different from each other. We need tools for deeper analysis structures. Thus, there would be a better understanding the differences and similarities in VET systems and why it is so.
  - Is it possible to combine possibilities of VET system in LLL?
    - In some countries it is at university level, some at secondary. How to bring the systems together?
    - Recognition of VET and university, a flexible system/permeability. We should look for possibilities.

## **5 Conclusions, further steps, and farewell**

At the summaries from the workshops delegates of organisers reflected about their conclusions from the workshop.

### **5.1 Concluding Remarks: International Collaboration as a Key to Success for Vet Research**

Hubert Ertl, Vice President and Director of Research at the Federal Institute for Vocational Education and Training (BIBB)

#### ***VET research and collaboration***

The challenges VET is facing in Europe and beyond are varied and complex. This is reflected in the overview of European VET policies provided in Kinga Szebeni's contribution (see chapter 2.1). These policies, including quality assurance, teaching and learning, European vocational core profiles, apprenticeships and Centres of Vocational Excellence, are, on the one hand, reactions to some of the pressing challenges VET is facing at the level of many European countries, but also the supranational level. On the other hand, they are attempts to actively shape the VET landscape and the future development and direction of VET systems. In all these areas, however, the insights of VET research will be required for providing a solid basis for evidence-based decision-making in policy and practice.

Relevant and rigorous research requires reliable data sources and systematic analysis of research data can then lead to new knowledge. European institutions such as Cedefop can play an important role in these processes. However, European institutions can fulfil this role best, if they are operating in a network of strong national research organisations. This is the case because, for one, there is the issue of scale and capacity as the wide-ranging and complex nature of VET cannot be adequately covered by one group or one type of institutions alone. Second, the intricate knowledge required to come to terms with the complexities of the field of VET practice and policies, is often shaped by national systems, regulations and concepts, and is best fostered at the country or regional level. Institutions at European level can contribute much needed synthesis, comparison and generalisation of research findings.

Therefore, the key to strengthening VET research seems to be collaboration at and between different levels. This applies to all types of research organisations, ranging from universities, independent research institutes to other forms of institutionalised VET research. Ideally, collaboration combines the specific expertise of organisations in a meaningful way (complementarity) and/or increases the combined clout of the partners (capacity accumulation). Both forms of collaboration are also relevant for creating the database required to conduct cutting-edge research.

#### ***Institutionalised VET research***

In the context of Germany's Presidency of the Council of the European Union in the second half of 2020, the Federal Institute for Vocational Education and Training (BIBB) conducted a survey on the role of institutionalised VET research institutes in Europe and the collaboration of these institutes at European level. The term institutionalised VET research refers to organisations that are given a particular mandate for engaging with VET or some of its aspects by government bodies (for instance, ministries or government agencies) and/or by legal statutes (for instance, laws or regulations) for a longer term and at national level.

Some of the most important findings from this piece of work are presented in chapter 2.3. The findings indicate that, due to its particular mandate and its often long-term perspective, institutionalised VET research tends to be particularly relevant to policy and practice because it makes research data and specific VET expertise available for a variety of stakeholders and

target groups. In many cases institutionalised VET research is conducted for the purpose of informing reform processes and their implementation.

The findings also demonstrate how important collaboration is for institutionalised VET institutes to fulfil their roles. However, funding constraints sometimes represent a severe obstacle to sustain and expand collaboration. The contributions collected in this volume show that there are many opportunities and sources of funding at European level already that can support collaboration between European researchers from different disciplinary and national backgrounds; there are also many examples of these collaborations producing valuable knowledge. However, particularly in terms of more fundamental (as opposed to more directly policy-relevant) research, it is also clear that the whole VET research community would highly welcome a more explicit recognition of VET topics by high-status funding sources. For instance, it would be desirable for VET topics to be more explicitly reflected in the research framework programmes of the European Commission.

### *Comparative and international perspectives*

The contributions collected in the volume, as well as the discussions in the workshops at the event, demonstrate the range of questions relevant in VET research. It has become clear that there is a need for national research agendas to be synthesised and juxtaposed at a European and international level. The role of comparative research needs to be strengthened in order to counteract the limitations of research in the national context, which can sometimes be restricted by the confines of systemic stasis and unfounded resistance to reform. Co-ordinated research strategies and research findings that are relevant beyond system borders can contribute to the impact of VET research in policy and practice. The particular role and perspectives of institutionalised research can drive this ambitious endeavour.

Researchers know from experience that personal contact is crucial for setting up collaboration and for developing it into sustainable research networks. The restrictions imposed by the Covid-pandemic have shown us the possibilities but also the limitations of trying to substitute personal contact by digital means. When detailed and innovative research proposals are developed (for instance, in the context of the Horizon Europe programme), decisive progress is often only possible, if professional trust and joint expertise are either already in place or are developed in personal meetings. Therefore, building collaborations that can thrive in a competitive environment that relies on opportunities to establish an understanding between peers. For this purpose, staff exchanges can be an important instrument as they can form the basis for long-term collaboration at individual and at institutional level. Participation in staff exchange programmes can provide the opportunity for getting to know the work culture and the organisational structures of partner organisations.

These programmes can also play an important role in shaping the next generation of VET researchers. If doctoral students and post-docs become part of a partnership-driven collaboration model, they are more likely to conceive research questions and approaches that lend themselves to including international perspectives. Also, institutionally supported exchanges can make the work at VET research organisations more attractive to ambitious young researchers. Attracting high-calibre researchers, in turn, will ensure that VET as a research area will thrive by generating knowledge that is relevant in equal measures to VET policy and practice.

## **5.2 Concluding remarks: VETNET as a Catalyst to International Collaboration and Booster for the Development of VET Research**

Christof Nägele, University of Applied Sciences and Arts Northwestern Switzerland, Chair of VETNET

Research creates knowledge, explores connections, and helps explain the world and contributes to making it understandable - with a view on today and the past. In an ideal and intelligent world, this knowledge is used wisely to shape the present and the future.

In the last few months, we have learned how vital exchange, cooperation, and the will to learn from each other mutually is for research. We must never forget that research can only flourish if there is an exchange between the researchers and stakeholders from policy, economy, society etc. Open formats, lively and open discussion are one means to reach the goal.

One of the goals of VETNET is to foster mutual exchange and learning between researchers and different stakeholders - and the participants of the workshop at the EVSW 2020. Participants from Europe and worldwide gathered to discuss VET research. It is a challenging discussion as VET research is multifaceted - in many ways. Beyond all divergent interests, a shared goal is to build a world in which young people and adults can actively shape their careers and lives meaningfully and successfully.

It is tempting, also inspiring, to get involved in VET research. The presentations and discussions during the European Vocational Skills Week 2020 show the multiplicity of VET research and policies and the diverse challenges VET needs to find answers to. These challenges can vary significantly from region to region. VET research shows that it can adaptively answer topical questions and propose solutions to local and global problems. From a theoretical and methodological perspective, there is the challenge of a wide variety of scientific theoretical approaches. That is why cooperation and mutual exchange is essential.

It is a great joy and satisfaction that our joint workshop with the BIBB and the European Commission DG Employment, Social Affairs and Inclusion was a great success.

## 6 Participants

In the registration process participants were asked to report about their affiliation and background. This is the list after some minor editing and shortening.

Title	First Name	Last Name	Organisation/Background	
Prof. Dr	Vibe	Aarkrog	The Danish School of Education, Aarhus University	
	Theodore	Abah	Certiport	
Dr	Benga	Aderibigbe	TVET-CPD Network	
	Enoch	Adeyemi	Dominion Leadership Institute	
	Sabina	Adilova	as a participant / VET Expert	
	Miki	Akaike	MA, Tohoku University, Japan	
Prof. Dr	Giuditta	Alessandrini	Universita'di RomaTre	
	Asif	Ali	Engineer from Pakistan (building work ).	
	Jose Ignacio	Alonso		
	Miguel	Amorim	DG Employment - European Commission / Policy Officer	
Prof	Per	Andersson	Linköping University, Sweden	
	Daniela	Andra	Teacher	
	Panagiota	Andreopoulou	Ministry of Education	
	Maria	Andreou	Undergraduate Student	
	Ana Maria	Andrioaie	Colegiul Mihai Eminescu	
	Nicolò	Angelo	Education and Training Network	
	Roberto	Angotti	Senior Researcher at INAPP, Rome	
	Gulshirin	Annadurdieva	Director	
	Prof. Dr	Silvia	Annen	University of Bamberg
		Sofia	Antera	Stockholm University
		Theopisti	Apostolidou	CEDEFOP
	Dr	Yannick	Atthos	Board of Directors United Quality Management Institute, USA
		Torres	Aucejo	Conselleria de Educaci3n GVA / Ricardo Manuel
		Daniela	Avarvare	University of Bucharest
Prof. Dr	James	Avis	University of Derby, University of Huddersfield	
	Despoina	Bampanelou	Labour Institute of the General Confederation of Greek Worker	
	Nadia	Bardone	Project manager , AFP Colline Astigiane	
	Guler	Bayramova	Teacher	
	Olena	Bekh	European Training Foundation (ETF)	
	Syrine	Ben Chahla	IOM Tunisia	
	Dr	Magdolna	Benke	Researcher, CHERD, University of Debrecen.
Maria		Berenguer	Ministry of Education (Spain)_VET	
Mariachiara		Bernasconi	Agenzia per la Formazione, l'Orientamento e il Lavoro della Provincia di Como - IT	
Damien		Bertrand-Forboteaux	Parliamentary Assistant to MEP Ilana CIGUREL	
Andrea		Biancini	Enaip Lombardia	
M. Ed.		Mustafa	Bilgin	University of Wuppertal
	Mirjana	Bojanic	National NQF and WBL Advisor	
	Paola	Bolognini	Executive Officer / Euro App Mobility	
Dr	Lorenzo	Bonoli	Swiss Federal Institute for Vocational Education and Training	
	Filomena	Borba	Master, ISCAL/IPL	
	Andre	Borges	DreamShaper Portugal	
	Oleksdandra	Borodiyenko	Institute of Vocational Education and Training of the National Academy of Pedagogical Sciences of Ukraine	
	Brigitte	Bouquet	,	
	Enrico	Bressan	Fondazione Centro Produttività Veneto	

## VET Research in Europe

<b>Title</b>	<b>First Name</b>	<b>Last Name</b>	<b>Organisation/Background</b>
	Lucyna	Brodziak	ZESPOL SCHOOL CHEMISTRY BYDGOSZCZ, vocational school
	Lukas	Brück	GFA Consulting Group GmbH
	Lara	Buchholz	Working student in the BIBB, Section 3.1 “International VET Comparison, Research and Monitoring”
Dr	Andreas	Bücker	Politicomm
Dr	Andreas	Bücker	Politicomm
	Laura	Bulgari	Welcome APS
	Miren	Canellada	TKNIKA
	Stacey	Cannon	Assistant Principal Officer , Department of Further and Higher Education, Research, Innovation and Science, Ireland
	Marco	Caputo	Cosvitec scarl
Dr	Pinya	Carne	UNIVERSITY OF BALEARIC ISLANDS
	Norma	Castro	IAL MARCHE SRL - ITALY
	Jonah	Champaud	Université Paris Dauphine FR Durham University UK
	Valentina	Chanina	Project & Office Manager , EFVET
	Stelina	Chatzichristou	Expert, department for skills and labour market, Cedefop.
	Mei	Chuang	Deputy Director / Taipei Representative Office
Ass. Prof.	Hatice	Cilsalar	Yozgat Bozok University
	Mădălina-Angela	Ciobotea	Kindergarten teacher
	Adriana	Cioloa	Textile and Leather Engineer, Trainer in the same field / Dual Vocational School / Car Interior Company
Dr	Camelia	Constantinescu	The International Baccalaureate Organisation: Career- related Programme
	Paulo	Costa	
	Renato	Cursi	Don Bosco International - Executive Secretary
M. Sc.	Mathias	Cuypers	TU Dortmund University
	Sandra	D'Agostino	INAPP - Institute for Public Policy analysis (Italy)
	Davide	D'Angelo	Cosvitec Scarl
	Dana	Dabbous	The Edge Foundation
Dr	Teresa	Damásio	Grupo ENSINUS CEO
	Elmo	De Angelis	Director / TRAINING 2000 , VET organization in the marche Region, Italy
	Daniela	De Gregorio	Consiglio Nazionale delle Ricerche
	Joost	De Meulder	European Parliament - Office of Ilana Cicurel MEP / Parliamentary assistant
Dr	Henk	De Poot	Nobis Policy Lab The Netherlands
	Dominique	Delaporte	REFORMED aisbl / President Founder
MSc. BAration	Marsela	Dhimitri	National Club of Parents with Children of Autism Spectrum Disorders; Open Window (youth NGO)
	Iván	Diego	VALNALON
Dr	M'Hamed	Dif	Senior Associate Researcher at BETA/Céreq-CNRS within the University of Strasbourg
	Irina	Dimitrova	Chief expert / Bulgarian - National Agency for Vocational Education and Training
	Desislava	Dineva	BMF Port Burgas EAD
	Nesrin	Doğan	vqa expert, vocational qualification authority
	Ileana	Dogaru	Liceul Tehnologic “Ștefan Odobleja” Craiova
Dr	Dieter	Dohmen	FiBS Research Institute for the Economics of Education and Social Affairs
	David	Doran	Work with vulnerable people needing supported employment / Ips employment specialist
Dr	Alexandra	Doroftei	FPCE, UNIVERSITY OF PORTO (PORTUGAL)
	Eric	Dumartin	MEDEF / President of Transitions Pro Ile de France
	Rimantas	Dumčius	PPMI www.ppmi.lt
Dr	Torsten	Dunkel	BIBB
	Snjezana	Duricic	Helvetas, a development project in TVET
	Snjezana	Duricic	Interventions and Business Development Manager, Helvetas

## VET Research in Europe

<b>Title</b>	<b>First Name</b>	<b>Last Name</b>	<b>Organisation/Background</b>
	Esar	Duvdevani	Former Israeli government official at the Ministry of Labor, Economy and Industry, Commercial director of the Lish Group
	Betancort	Egea	Pepe, Construction Industries Global 3CCS,S.L.
	Sophia	Ekengren	The Swedish council for higher education / Investigator
	Monia	El Faziki	SEA EUROPE
	Kat	Emms	Edge Foundation
Prof. Dr	Hubert	Ertl	Bundesinstitut für Berufsbildung
Dr	Bill	Esmond	University of Derby, UK
	Markus	Espeter	Head of Communications at the European Association of Institutes for Vocational Training
	Cay	Etzold	RT for Twinning project Strengthening capacities for quality assurance and governance of qualifications
	Monica	Eula	Expert EU funds - free lance
Prof. Dr	Karen	Evans	UCL Institute of Education, London
	Vytaute	Ezerskiene	Education, Audiovisual and Culture Executive Agency (EACEA)
	Shireen	Farag	Deutsche Gesellschaft fuer Internationale Zusammenarbeit
	Lotfi	Farhat	Electromechanical Engineer
	Esther	Fdez	MA, ccfp
	Asghar	Feizi	Iran technical and vocational training organization
	Sérgio	Fernandes	INSIGNARE - Associação de Ensino e Formação
	Lacramioara	Fira	Seminarul Teologic Ortodox,,Sf Ioan Gură de Aur
Prof..	Panos	Fitsilis	University of Thessaly
	Marta	Fonseca	vet council / Secretary VET Catalan Council
	Sofia	Forero-Gómez	SOLAS
	Angela	Friesen	Bildungszentren des Baugewerbes e. V. (Germany)
Dr.-Ing.	Wolfgang	Frohberg	Deutsche Gesellschaft fuer Internationale Zusammenarbeit (GIZ) Project Market Oriented Vocational Education, Higher Education and Training (MOVE-HET) in Jordan.
	Kyriaki	Galaiou	European Commission
	Cecilia	Ganapini	MSc, Researcher at University of St. Gallen within GOVPET
	Iwona	Ganko	Labour Market Expert / European Training Foundation
	Carmen Luz	Gaona Urdiales	IES Gabriel Miró
	Sonia	García	Funcionaria
	Sonia	García Cifuentes	Departamento Educación Gobierno Navarra
	Jawara	Gaye	Staff of the Islamic Development Bank
	Jonas	Gebhardt	Institute of Vocational Education, (Skilled) Work and Technology / Beufsbildungsinstitut Arbeit und Technik (biat) Europa Universität Flensburg / GER / Research Assistant
Dr	Marthe	Geiben	BIBB
	Manuela	Geleng	European Commission
Dr	Susanne	Gerlach	University of Duisburg-Essen
Prof. Dr Dr h.c.	Michael	Gessler	University of Bremen, Germany
	Pooja	Gianchandani	GIZ
Prof	Niki	Giannopoulou	EETT
	Milagros	Gimenez	UNNE
	Olivier	Gineste	UNMFREO
	Chara	Gontzou	Head of Unit - OAED Directorate of Vocational Training for Adults, Expert in European issues - VT for Adults European Projects' Coordinator
Dr	Fatma	Gozalan Cicek	Turkish Ministry of National Education
Dr	Franz	Gramlinger	Editor of bwp@ and organizer of the VET research conference in Austria 2 times
	Violeta	Greciuhin	Technical University Gheorghe Asachi from IASI
Dr	Philipp	Grollmann	Federal Institute for Vocational Education and Training (BIBB)



## VET Research in Europe

<b>Title</b>	<b>First Name</b>	<b>Last Name</b>	<b>Organisation/Background</b>
	Rebecca	Grübel	Bildungswerk der Hessischen Wirtschaft e. V.
	Anna	Gudmundsson	Senior adviser, Expert to the Swedish government in EU related issues.
	Nelly	Guet	Alerteducation
	Sofia	Gutierrez	
	Kristian	Haaga	Finnish vocational college for further education and training in social and health care, bioenergy, animal caring, fisheries, nature and environment, agriculture, forestry, and gardening. / Project Coordinator
Dr	Andrea	Hagovska	World Bank Expert
	Themis	Halvantzi-Stringer	European Federation of Tourist Guide Associations
	Etienne	Hannecart	NGO
Dr	Etienne	Hannecart	NGO Environment and Computer Mapping Chiefly adults over 60
	Agnes	Hansen	Diplom-Psychologin / VET-teacher Pestalozzi-Fröbel-Haus
	Robert	Hantsch	University of Rostock Lehrstuhl für Wirtschafts- und Gründungspädagogik
	Cynthia	Harrison	CEDEFOP
	Sabine	Heine	Vocational Training Centre
Dr	Natalia	Herger	Program of Education, Economy and Work (PEET), Institute of Education Sciences Research, Philosophy and Literature School of the University of Buenos Aires
	Isabel	Hermoso Lorente	Profesora de Secundaria
	Victoria	Hernandez	IES GABRIEL MIRÓ
	María Altamira	Hernando	Consejería de Educación. Junta de Castilla y León.
	Raghda	Hesham	GIZ / Educational Advisor
	Akram	Hijazi	Palestine
Dr	Randa	Hilal	Optimum for Consultancy and Training
	Ute	Hippach-Schneider	BIBB
Dr	Ralph	Hippe	European Commission - Joint Research Centre
	Erich	Hutter	Eu Businesslawyer
	Teona	Huzum	Babes-Bolyai University, Cluj-Napoca, Romania
	Maria	Iacovidou	inspector
	Filip	Iliev	Cabinet of the Deputy Prime Minister in charge of economic affairs, Government of the Republic of North Macedonia
	Daniela Elena	Ionele	Teacher VET / Colegiul Tehnic „August Treboniu Laurian” Agnita-Sibiu-Romania
	Andrea	Isphording	BMBF
	Cecilia	Ivardi Ganapini	University of St Gallen
	Jasminka	Iveković	Ministry of Science and Education
	Yvonne	Jänchen	Programme coordinator Movetia, the Swiss National Agency for exchange and mobility
	Michel	Jehee	MSc , Mbo Rijnland (institute for secondary vocational education)
	Irina	Jemeljanova	EU-consultant Cedefop
	Jacob	Jensen	Northdenmarks EU-Office
Dr	Maria	Johansson	Malmo University
	Julie	Jorgensen	eu advisor
	Andreas	Jörk	Handwerkskammer für Ostthüringen (Chamber of Skilled Crafts for East Thuringia)
	Florian	Kadletz	European Training Foundation / Specialist in Entrepreneurship and Enterprise Skills
	Elvan	Kahyaoglu	I am working at the Ministry of National Education - DG for VET that takes part in several national & international research activities continuously.
Prof. Dr	Franz	Kaiser	Institute for Vocational Education, Faculty of Philosophy, University of Rostock
	Eftychia	Kalampoukidou	FEG-European Federation of Tourist Guide Associations ExCo President
	Aikaterini	Kalyva	EDUUCATOR

## VET Research in Europe

<b>Title</b>	<b>First Name</b>	<b>Last Name</b>	<b>Organisation/Background</b>
	Bob	Kaminski	FAJNA Social Cooperative, Institute Of Innovatics and ESKLSTER Cluster Of Social Economy
Dr	Christian	Karl	University of Duisburg-Essen Faculty of Engineering Department of Civil Engineering Vocational Pedagogy and Specialized Didactics in Construction Engineering
	Maria	Katechi	State Scholarships Foundation-Hellenic Erasmus+ National Agency
	Sean	Kearney	IAPMO (International Association of Plumbing and Mechanical Officials)
Dr	Natasha	Kersh	UCL Institute of Education
Prof. Dr	Nicole	Kimmelman	Professor for Vocational Education and Training Friedrich-Alexander-University of Erlangen-Nuremberg (FAU)
Dr	Ditte	Kimps	Departement of Work and Social Economy, Flanders
	Büşra	Kirez	Curriculum and instruction specialist in the Department of Vocational and Technical Education, Turkish Ministry of Education.
	Lida	Kita	ETF, Specialist in VET and Social Inclusion - Country Coordinator Serbia, Turkey and Israel Operations Department
	Snezana	Klasnja	Youth policy
	Konstantinos	Kloudas	Enoros Consulting Ltd
Ing.	Aneta	Komperova	Europe Direct Brno
	George	Kostakis	Cedefop / Expert
Mr	Elvis	Kotherja	Business
	Fotios	Kotzakioulafis	
	Erika	Krämmer	Szegedi Szakképzési Centrum Móravárosi Szakképző Iskola
Dr	Léna	Krichewsky-Wegener	Institut für Innovation und Technik (iit) Berlin
	Maike	Kroschowski	Mobility coach of the Chamber of Skilled Crafts Lübeck, Germany
	Sanja	Kruse	GIZ
Dr	David	Kunst	European Commission
	Audrius	Kurlavicius	General interest
	Valentina	Kuzma	GZS ZGIGM
	Anthie	Kyriakopoulou	Cedefop
	Andrea	La Porta	Impiegato / Confartigianato Imprese Piemonte Orientale
Dr	Andrea	Laczik	Edge Foundation/University of Oxford, Dept of Education / Head of Research/Research Fellow
	Vivian	Lai Dini	HKCAAVQ
	Gueliz	Lali Azari	M.Sc., Project manager VET DE02
Ms	Manon	Lapasset	Asociación Mundus
	Paddy	Lavelle	Education and Training Boards Ireland
	Athina	Lazou	DIRECTOR, THE MANPOWER ORGANISATION O GREECE
	Isabelle	Le Mouillour	Federal Institute for Vocational Education and Training, Germany
	Aurore	Lebreton	JTM / project manager
	Snizhana	Leu-Severynenko	Senior Workforce Development Manager, USAID Economic Resilience Activity   FHI360
Dr	Jens	Liebe	UNESCO-UNEVOC
	Sonila	Limaj	VET Researcher Capacity Development Coordinator for Employment and Skills
Deputy Minister	San-Quei	Lin	Ministry of Labor, Taiwan
	Nina	Lindenroth	Wirtschaftsakademie Schleswig-Holstein / project manager
	Pär	Lundström	Expert Skills Provision. The Swedish Installation Federation and representative of The Executive Extended Board Cedefop
	Louise	Macavin	SOLAS
	Valerie	Mack	Ankara Chamber of Industry, European Alliance for Apprenticeships
	Evgenia	Mahler	University of Applied Sciences Wismar
	Darko	Mali	Center Republike Slovenije za poklicno izobraževanje (Institute of the Republic of Slovenija for VET)

## VET Research in Europe

<b>Title</b>	<b>First Name</b>	<b>Last Name</b>	<b>Organisation/Background</b>
Dr	Valerio Massimo	Marcone	University Roma Tre
	Pınar	Mardin Yılmaz	Ministry of National Education, TURKEY / Expert
Prof. Dr	Fernando	Marhuenda Fluixa	Universitat de València, Spain
	Iasko	Maria Andreea	muzeul etnografic al transilvaniei / economist
	Dragomir	Marian	Liceul Tehnologic Toma Socolescu
	Julia	Markelova	Medical college, Russia
Dr	Jörg	Markowitsch	3s Research & Consulting, Vienna, Austria
	René	Martin Larsen	Director / CoVE - welfare and assistive technology
	Lenny	Martini	UNESCO-UNEVOC International Centre
	Ramona	Martins	MSc, University of Teacher Education Lucerne
	Gabriele	Marzano	Regione Emilia-Romagna
Ambassador	Arthur	Mattli	Embassy of Switzerland in Romania
	Dario	Mazzella	AWS / Digital Skills Program Manager EMEA
Dr	Andrew	Mccoshan	Associate Faculty Member, Further Education and Training Research Centre, Dublin City University, Ireland
Mr	Stewart	Mckinlay	National Manufacturing Institute Scotland, Manufacturing Skills Academy
	Sergii	Melnyk	Head of sector vocational education the Institute of Educational Analytics
Dr	Margherita	Menon	Veneto Region
	Zorica	Mihailovic	Psychologist
Assoc. Prof.	Cosmina	Mironov	University of Bucharest, Faculty of Psychology and Educational Sciences
Dr	Eirini	Monsela	Greek Ministry of Education and Religious Affairs
	Rafael	Montilla Castillo	European Project Coordinator Junta de Andalucía-General Directorate for Vocational Education and Training
	Tarcizio	Morais	Responsible for VET Centers of Salesians in Europe
Prof. Dr	Lázaro	Moreno Herrera	Stockholm University, Sweden
	Flore	Morgand	Erasmus agencies
Dr	Monica	Moso-Diez	Head and Principal Investigator, Centre for Knowledge and Innovation, Bankia Foundation for Dual Training
	Jelena	Mugosa	D'Agency
Dr	Chenjjerai	Muwaniki	Lecturer Adult and Continuing Education, Great Zimbabwe University, Masvingo, Zimbabwe
	Amal	Nachit	I don't have
Dr	Christof	Nägele	University of Applied Sciences and Arts Northwestern Switzerland
Dr	Paolo	Nardi	Cometa Research - Cometa Formazione, Como, Italy
	Peter Tetteh	Narh	TVET Link Africa / Engr.
	Ciara	Ní Fhloinn	SOLAS - The Further Education and Training Authority Ireland
	Lena	Nicolaou	
	Elena	Nielsen	EU Adviser , Central Denmark EU Office
	Margarita	Nikishina	Specialist / Institute of development professional education
	Tone	Nilsen	Diku / Executive Officer
Dr	Anders	Norberg	Education Strategist, Skelleftea municipality Coordinator, ERASMUS+ ALBATTs project Associated Researcher, Umeå university Expert, Batteries Europe
	Simon	Normandeu	OECD
	Stefan	Nowatschin	Oberstudiendirektor , BvLB, dbb and CESI
	Özgür	Nurdoğan	Working for National Agency VET Unit.
	Daniel	Nwachukwu	Affiliated with an oil & gas company in Nigeria , and Non partisan European parliament community group named "What Europe does for me" .
	Eoghan	Ó Murchadha	Dún Laoghaire Further Education Institute
Dr	John	O'Connor	Head of Function Quality and Qualifications Ireland
	Rita	Orlando	Foundation Matera-Basilicata 2019 / Open Design School

## VET Research in Europe

<b>Title</b>	<b>First Name</b>	<b>Last Name</b>	<b>Organisation/Background</b>
Dr	Ghia	Osseiran	Post-doctoral Research Fellow at the Centre for Lebanese Studies, Lebanese American University
Mag.	Wolfgang	Pachatz	Federal Ministry of Education, Science and Research, Department for Technical and Vocational schools and Colleges
Dr	Maria-Carmen	Pantea	'Babes-Bolyai' University, Romania - Associate Professor ETF- member of the Editorial board member of the EU-CoE Pool of European Youth researchers
	Olga	Papakyriakou	Pediatric Nurse The Agia Sofia Children's Hospital Of Athens / Ambassador Of Greece for The European Vocational Skills Week 2020
	Christina	Pappas	HELLENIC FEDERATION OF ENTERPRISES (SEV)
	Cristina	Patranoiu	Icf
	Ema	Perme	Ministry of Education, Science and Sport
	Isabella	Petroz	European Commission DG EAC
	Silva	Piestiniene	Project coordinator / Rokiskis technology, business, and agricultural school
Prof. Dr	Matthias	Pilz	University of Cologne, Germany
	Radu Mihail	Pintilie	Liceul Vasile Conta
	Radu-Mihail	Pintilie	Liceul Vasile Conta
	Maria Pia	Ponticelli	Fondazione Istituto Tecnico Superiore per tecnologie innovative per i Beni e le Attività Culturali e Turistiche, in acronimo Fondazione ITS BACT
	Ruta	Porniece	Founder of Smart minds
	Abhijit	Prabhugaonkar	DSDE
	Guillaume	Prévo	Euro App Mobility
	Slavka	Prodanova	госпожа
Dr	Amvrosios	Prodromou	Education
	Eliza	Przetak	DG Employment
	Mariia	Pukalo	Deputy Director / St. John Bosco Youth Training Center
Prof.	Ermira	Qosja	Professor in Management and marketing department/European University of Tirana
Dr	Elena	Quintana-Murci	UNIVERSITY OF THE BALEARIC ISLANDS
	Isabel	Quirino	Agrupamento de Escolas Poeta António Aleixo
	Valentyna	Radkevych	Institute of vocational education and training of NAES of Ukraine
	Taina	Rahkola	International specialist at Helsinki vocational college
	Shikhar	Rai	Consultant
	Sudarshan Babu	Ramesh Babu	
Dr	Justin	Rami	Further Education & Training Research Centre Institute of Education Dublin City University
Dr	Enrica	Rapolla	University of Naples
	Simon	Rath	Researcher at BF/M-Bayreuth
	Yulia	Redina	Centre for VET Studies
	Alan Martin	Redmond	Pôle OPTITEC / European Project Manager
	Tamar	Remishvili	TAMAR/EXPERT EXPERT OF LEPL NATIONAL CENTRE FOR EDUCATIONAL QUALITY ENHANCEMENT OF GEORGIA, TBILISI
	Norberto	Ribeiro	O IPMHI - Instituto Português de Medicina Holística Integrativa é uma instituição que inova na formação, ministra, pesquisa e divulga saberes no domínio das Terapias Naturais e do potencial Humano. / Casting de Vocações - Empreendedorismo Vocacional em Saúde e Bem-Estar
	Becky	Riches	Matera - Basilicata 2019 Foundation Project Manager
Dr	Heta	Rintala	Häme University of Applied Sciences / Project Researcher
Dr	Graciela Clotilde	Riquelme	CONICEPT and Program of Education, Economy and Work (PEET), Institute of Education Science Research, Philosophy and Literature School of the University of Buenos Aires.
Dr phil.	Matthias	Risler	No affiliation, open network of researchers and consultants interested in Apprenticeships, Dual VET and Dual Studies locally and globally

## VET Research in Europe

<b>Title</b>	<b>First Name</b>	<b>Last Name</b>	<b>Organisation/Background</b>
	Sara	Rodríguez	Social media manager Spanish contact point , Asociación Mundus
	Silvia	Rossini	Associate Project Manager, Global Apprenticeship Network (GAN Global)
	María	Rozas Larraondo	Gobierno de Navarra
	Romana	Rusek	VET teacher
	Karin	Ruul	Ministry of education and research
	Nataliia	Rzhevskia	Pereiaslav-Khmelnytskyi Hryhorii Skovoroda State Pedagogical University
	Sarah	Sachse	Bildungswerk der Hessischen Wirtschaft e. V. Wiesbaden, Germany
	Siham	Saidi	MEDEF / European an International Social Affairs
	Senad	Sakipovski	President in NGO
Dr	Arduino	Salatin	SCF - Scuola Centrale Formazione
Prof. Dr	Francesca	Salva Mut	University Of Balearic Islands
	Maria	San Jose Sanchez	Project manager at Vividus International
	Fernando	San Miguel	Chamber of Commerce of Navarre
	Ines	Sancha Gonzalo	Fundae
	Nicolas	Sander	Research Scientist , Bundesagentur für Arbeit / German Federal Employment Agency
	Andreas	Saniter	ITB Uni Bremen, DE
	Joaquim	Santos	FNE (National Federation of Eduaction) / FNE - Executive Commission
Prof	Miguel Baião	Santos	Universidade Lusófona de Lisboa
Dr	Yelda	Sarikaya Erdem	Cappadocia university
Dr	Jorgelina	Sassera	CONICET and Program of Education, Economy and Work (PEET), Institute of Education Science Research, Philosophy and Literature School of the University of Buenos Aires.
	Alicia Leonor	Sauli Miklavčič	Skupnost VSS/Association HVC / Head of Development
	Fabiana	Scarano	ETF
	Ianina	Scheuch	TU Dresden (MP-INVET)
	Marco Emanuele	Schiatti	freelance
	Françoise	Schmit	Chambre des salariés - employees
	Mantas	Sekmokas	Independent
	Vedrana	Šenjug Užarević	Croatia
	Madlen	Serban	University of Bucharest, Faculty of Psihology and Educational Sciences
	Sara	Seyam	Egypt
	Matteo	Sgarzi	Centre d'études et de recherches sur les qualifications (Céreq)
	Ghulam	Shabeer	Punjab Vocational Training Council (PVTC) , Pakistan Vocational Training Institute Muzaffargarh, Punjab, Pakistan Computer Instructor (Computer Application & Office Professional)
	Lile	Shalikiani	Education and Employment Coordinator
	Ada	Shima	Undp / Programme coordinator
	Alexander	Siboni	Free-lance consultant / Independent VET Expert
	Susana	Silva	ESPROMINHO- Escola Profissional do Minho
	Susana	Silva	Esprominho - Escola Profissional do Minho
	Daniela	Simidchieva	BIA
	Laia	Simón	Linkia FP
	Mînzicu	Simona Valentina	Șerban Vodă Theoretical High School Slănic, Prahova, Romania / Primary school teacher
	Vassilis	Siomadis	Responsible for European projects of IME GSEVEE (Small Enterprises Institute of the Hellenic Confederation of Professionals Craftsmen and Merchants)
Dr	Michał	Sitek	Instytut Badań Edukacyjnych (Educational Research Institute)
	Sílvia	Soares	ISQ

## VET Research in Europe

<b>Title</b>	<b>First Name</b>	<b>Last Name</b>	<b>Organisation/Background</b>
	Rafaella	Sofocleous	in the workshop i
Dr	Mikheil	Sokhadze	FAO- National team leader of the NAITS (National Animal Identification/Registration system) project.
	Mónica	Solana	Education Department / Technical advisor
Dr	José Luis	Soler-Dominguez	Florida Universitaria
Ing.	Petr	Spousta	National Pedagogical Institute of the Czech Republic, expert in Department of VET and curricula. Former Deputy of Manager of finished national Project Modernisation of Vocational Education and Training focused on Flexibility of Educational Pathways nad Programmes.
Prof. Dr	Barbara E.	Stalder	Bern University of Teacher Education Institute of Upper Secondary Education
	Julian	Stanley	European Training Foundation
	Andreas	Stefanidis	President of the Educational Association of Athens HFAISTOS
Dr	Andrzej	Stepnikowski	Lukasiewicz Research Network - Institute for Sustainable Technologies, The Centre for Research and Development of Vocational Education
mgr inż.	Piotr	Sulek	Teacher Zespół Szkół Transportowo- Komunikacyjnych w Lublinie
	Bige	Susuzlu	<b>General Manager</b> , Coşkunöz Education Foundation
	Kinga	Szebeni	European Commission
	Siria	Taurelli	European Training Foundation (ETF)
	Torsten	Temmeier	Chamber of Industry and Commerce Hanover: Senior Referent Vocational Training and Education International.
Prof. Dr	Marianne	Teräs	
	Sabrina	Thom	EACEA
	Naomi	Timmer	H2O People, European Junior Water Programme, SPIRE SAIS Erasmus+ Project
	Arjun Prasad	Tiwari	Kathmandu University School of Education / TVET management and development in Nepal
	Neringa	Tolstych	Head of Methodical Support Sub-Unit of Consultation and Information Unit, Qualifications and VET Development Centre, Vilnius, Lithuania
	Anna Hagen	Tønder	Fafo Institute for Labour and Social Research / Senior researcher
	Antonio	Trezza	Skills Consulting Srl
	Benedetta	Trignani	Cedefop
	Dimitrios	Tsiastoudis	Phd.c. School of Physics, Aristotle University Thessaloniki, Greece
	David	Tsiskaridze	Internationsl Business and Economic Development Center
Prof. Dr	Vidmantas	Tütlys	Vytautas Magnus University, Academy of Education
	Selma	Ulrichs	GIZ
Prof. Dr	Özlem	Ünlühisarcıklı	Boğaziçi University, Faculty of Education
	Odd Bjørn	Ure	<b>Cand. polit.</b> , Consultur. Studies@Analyses
	Ramune	Vadeikyte	VET Centre Zirmunai, project manager
	Lina	Vaitkute	University of Verona (Italy) and Vytautas Magnus university (Lithuania)
Dr	Vasileios	Valmas	Valmas Consulting - CarrieraOptima.com
	Jürgen	Van Capelle	NA DE02
	Gonnie	Van Der Eerden	CINOP
	Ellen	Van Drie	Consultant / National Agency Erasmus+ at CINOP in the Netherlands
	Jolien	Van Uden	European Training Foundation / Specialist in VET Policies and Systems
Dr	Haske	Van Vlokhoven	Research Centre for Quality of Learning   Department of Education   HAN University of Applied Sciences
	Martine	Vanherck	Rejouissiences. Université Liège
Dr	Maarit	Virolainen	Finnish Institute for Educational Research University of Jyväskylä
	Elena Roxana	Vişan	Teacher; PH-D candidate
Dr	Dimitra	Vlachokosta	Research institute IGBMC
	Nils	Vogt	German Bakers' Confederation

## VET Research in Europe

<b>Title</b>	<b>First Name</b>	<b>Last Name</b>	<b>Organisation/Background</b>
Dr	Inez	Von Weitershausen	University of Zurich
	Christian	Wagner	Owner of proquality consult and Education consultant - Team Leader of various donor funded VET projects
	Sabine	Weger	CMA France
Dr	Martin	Weinel	School of Social Sciences, Cardiff University
	Anke	Wekerle	NA BIBB
	Katarzyna	Wendykier	Zespół Szkół Odzieżowych, Fryzjerskich i Kosmetycznych nr 22, Warszawa, Poland / Erasmus+ VET project co-ordinator / English teacher at Technical Secondary School in Fashion industry and Hairdressing services sector. Zespół Szkół Odzieżowych, Fryzjerskich i Kosmetycznych nr 22, Warsaw, Poland.
	Katja	Wenzel	Vocational Teacher, Germany
Dr	Christina	Widera	BIBB
	Aurora	Xhorxhi	Austrian Institute of Excellence
	Ekrem	Yazici	Expert
Dr	Becky	Youngman	International Baccalaureate
	Ana	Zacharian	
	Lilia	Zestrea	Center of excellence in construction / Head of department civil and industrial construction
	Unai	Ziarsolo	Senior Project Manager MIGUEL ALTUNA LHII, Spain
	Miha	Zimšek	Researcher, Project Officer Association of Slovene higher vocational colleges