DunE-BB-EU Vocational Training Network

"Designing Digitally Supported and Sustainability-Oriented Centers of Excellence in Vocational Education and Training in EUROPA"

Erasmus Plus KA2 Project 2019 - 2022



Guideline

on the design of regional digitally-supported and sustainability-oriented centers of excellence in vocational education and training in Europe (updated on 31.08.2021)

Contents

Foreword of the patroness	2
Introduction	3
Answers and design suggestions	7
Shaping reliable and coherent funding	41
For regional-national-international partnerships, working hours need to be reasse and working time budgets need to be funded	essed 41
Preliminary conclusion	42
Personal thanks of the Dune-BB-EU vocational training network leader	43
Annexes: Reference to DunE-BB-EU Interim Report 2020	
Overview of the DunE-BB stakeholders	
Checklist for CoVE design - still in progress until 03.09.2021.	

Foreword of the patroness

The project "Designing Digitally Supported and Sustainability-Oriented Centres of Excellence in Vocational Education and Training in EUROPE" is unique in Europe. It aims to put vocational education and training in Europe on a common basis, to make it sustainable and to create the best possible opportunities for young people on the labour market and for their future.

This guideline is the conclusion of a two-year Erasmus+ project in which partners from all over Europe came together and exchanged experiences with a lot of time, commitment and passion in order to advance the design of regional centres of excellence in vocational education and training in Europe.

The guideline is a further step, together with the European initiative "Centres of Vocational Excellence", to advance the implementation of the Osnabrück Declaration for Vocational Education and Training in Europe of the Council of 25 November 2020. This already identifies centres of excellence in vocational education and training as an important cornerstone for the European Education Area 2025. The European Union is funding the development and design of a total of 100 centres of excellence with 400 million euros in the coming years until 2027, thus sending a clear signal for cross-border cooperation in vocational education and training.

A special task of the Centres of Excellence, in addition to training skilled workers, is to develop and promote innovative approaches to meeting economic and educational policy challenges. The strong focus on sustainability links the goals and future priorities of the European Union in the areas of climate protection and economic policy with vocational education and training and complements the European Skills Agenda in its intentions.

However, this guideline would not have come into being had it not been for the heart and soul, the wealth of ideas and the commitment of the numerous network partners spread across Europe. Through countless hours of coordination, online meetings and debates, the common conviction to advance vocational education and training at European level was put on paper - always in the knowledge that the future of Europe, like Europe itself, is diverse, challenging and dynamic. The regional and sustainability-oriented centres of excellence thus lay an excellent foundation for flexible, innovative and modern European vocational education and training.

My special thanks therefore go to all the partners, network supporters, committed people who with their time and ideas have filled this guideline with life.

Lena Düpont

Member of the European Parliament

Introduction

Since 2019, the Erasmus+ Vocational Education and Training Network "Designing Digitally Supported and <u>Sustainability-Oriented</u> Centres of Excellence for Vocational Education and Training in Europe" (DunE-BB-EU 2019-2022), has been in existence to concretize the design of regional centres of excellence for vocational education and training in Europe together with all relevant stakeholders in vocational education and training.

The EU initiative "Centres of Professional Excellence" (CoVEs) has been in existence since 2018 and aims to support the implementation of the European Skills Agenda, the Council Recommendation on Vocational Education and Training and the Osnabrück Declaration. The initiative is an integral part of the new Erasmus+ 2021-2027 programme and the Action Plan implementing the European Pillar of Social Rights.

The common concern is to promote high-quality – excellent – vocational education and training in the interest of young people in accordance with the UN Sustainable Development Goal 4.

In this context, it is worth recalling the **Osnabrück Declaration for Vocational Education** and **Training in Europe** of the EU Council of 25 November 2020, which outlines four main objectives and measures to successfully shape the "**European Education Area 2025**" by 2025, among others with regional centres of excellence for vocational education and training:

- "1. Resilience and excellence through high-quality, inclusive and flexible professional education
- 2. Establishing a new culture of lifelong learning the importance of vocational training and continuing education and digitization
- 3. Sustainability a green perspective in vocational education and training
- 4. European area of vocational training and international vocational training

. . .

Particular emphasis is placed on quality assurance, **centres of professional excellence** and the governance of EU VET policy.

The Recommendation sets out six objectives:

- 1. Vocational education and training adapts flexibly to changes in the labour market
- 2. Flexibility and opportunities for further development are at the heart of vocational education and training
- 3. Vocational education and training is a driver for innovation and growth and prepares for environmental and digital change and for occupations in high demand
- 4. Vocational education and training is an attractive choice based on modern, digitised training and competences
- 5. Vocational education and training promotes equal opportunities
- 6. Vocational education and training is based on a culture of quality assurance"

Source: https://www.bibb.de/de/133318.php

By 2027, the EU is funding and supporting more than 100 centres of excellence/networks of vocational education and training in Europe with 400 million euros via Erasmus+.

The press release of the DIHK dated 27.04.2021 refers to the next Erasmus+ funding programme (2021-2027) and summarizes the requirements for an application very well:

"The CoVEs (Centres of Vocational Excellence) aim to provide high-quality vocational qualifications and to support entrepreneurial activities and the diffusion of innovation. They are also intended to act as knowledge and innovation hubs for businesses, particularly SMEs. They aim is to bring together a wide range of local partners, including businesses, chambers, vocational schools, universities, research centres, development agencies and employment agencies.

At the same time, it is planned that the CoVes will collaborate with centres of excellence in other countries via international platforms. These cross-border cooperation in vocational training should be characterised by a common interest in securing skilled workers in specific sectors such as aviation, e-mobility, environmentally friendly and circular technologies, ICT and healthcare. They should also focus on innovative approaches to address economic and educational policy challenges, including climate change, resource depletion and scarcity, digitalisation, artificial intelligence, integration of migrants and training of low-skilled people."

https://bildungsklick.de/aus-und-weiterbildung/detail/44-millionen-euro-fuer-die-entwicklung-beruflicher-exzellenzzentren

However, Europe needs more than 100 Centres of Excellence/Networks of Vocational Education and Training to reach the 17 UN Sustainable Development Goals by 2030 and the international-national climate protection goals by 2035/2045/2050.

The Centres of Professional Excellence are assigned t the Partnerships for Excellence in Erasmus+ Key Action 2 and are "key actions" of the initiative.

Excellence is understood as a holistic and partnership-based concept. The focus is on the learners!

Excellence was the core theme of the European Week for Vocational <u>Education</u> and Training 2020, and since then has determined many EU dialogues on excellent vocational education and training.

For the implementation of the concept, the following objectives are described by the EU Commission:

- the emergence of "skill ecosystems" contributing to regional development, innovation, social inclusion and smart specialisation strategies;
- promotion of innovation and applied research, particularly in SMEs
- strengthening the European and international dimension of excellence in vocational education and training,
- Networking a wide range of local, regional and national partners from different countries.

The following three policy frameworks provide the CoVE with a mandate, support and guidance:

"European Skills Agenda

The European Skills Agenda is a five-year plan designed to help individuals and businesses develop and use more and better skills by:

- strengthening sustainable competitiveness, as set out in the European Green Deal
- ensuring social justice, implementing the first principle of the European Pillar of Social Rights: access to education, training and lifelong learning for all throughout the EU
- building resilience to respond to crises, based on lessons learned during the COVID-19 pandemic"

https://ec.europa.eu/social/main.jsp?catId=1223&langId=en

"The European Skills Framework for Entrepreneurship (EntreComp)

We live in a fast-changing society where it is important for everyone to have the ability to seize opportunities and ideas, to collaborate with others, to build dynamic careers and to shape the future for the benefit of all.

To achieve these goals, we need people, teams and organisations with **entrepreneurial thinking** in all areas of life.

The European Commission has developed EntreComp, **the European Entrepreneurship Competence Framework**, as a reference framework to explain what is meant by entrepreneurship.

EntreComp provides a comprehensive description of the knowledge, skills and attitudes that people need to be entrepreneurial and create financial, cultural or social value for others.

EntreComp is a **common frame of reference** that identifies **15 competencies** in **three key areas** that describe what it means to be entrepreneurial."

https://ec.europa.eu/social/main.jsp?catId=1317&langId=en

"European Skills/Competences, Qualifications and Occupations (ESCO)

<u>ESCO</u> (European Skills, Competences, Qualifications and Occupations) is the European multilingual classification of skills, competences, qualifications and occupations.

ESCO functions as a dictionary that describes, identifies and classifies occupational occupations and qualifications relevant to the EU labour market and the education and training area and systematically identifies the links between these occupations and skills. It is available in an online portal where the data set on occupations and competences can be viewed and downloaded free of charge.

Its **common** <u>reference</u> terminology helps to make the European labour market more effective and integrated and enables more effective communication between the world of work and education and training."

https://ec.europa.eu/social/main.jsp?catId=1326&langId=en

The DunE-BB-EU VET network partners have produced this guide, among other things, to remind policy-makers in the national states of the need to invest in the transformation of vocational schools towards digitally supported regional centres of excellence for VET with 360 degrees of sustainability education.

Since 2018, various VET stakeholders have been working on what is meant by a regional centre of excellence for vocational education and training. In this guide, the DunE-BB-EU Vocational Education and Training Network brings together all the findings of intensive and fruitful dialogues that have taken place since 01.11.2019. The trend topics of digitization, sustainability and internationalization have a transformative impact on the worlds of life and work. The transformation of vocational education and training places into regional digitally supported and sustainability-oriented centres of excellence therefore challenges all stakeholders in vocational education and training to achieve the necessary target profile. The DunE-BB-EU Vocational Education and Training Network has broadened the European quality debate on excellent vocational education and training and has raised the issue for the partners involved in the respective national states and regions.

The guideline presents the results of the discussions of the VET network conferences, the online dialogue forums and uses further information from other sources to describe the design of digitally-supported and sustainability-oriented centres of excellence in VET in Europe.

This guide answers the following questions:

- 1. What is a Regional Centre of Excellence for Vocational Education and Training?
- 2. Why do regions need centres of excellence for vocational education and training?
- 3. How should a regionally digitally-supported and sustainability-oriented Centre of Excellence for Vocational Education and Training be designed from the point of view of users and vocational education and training partners? Results of the quality discussions
- 4. What further information is useful for the transformation of VET learning venues into regional centres of excellence?
- 5. Necessary framework conditions for the successful transformation of VET learning venues into Centres of Professional Excellence (CoVEs)

In the following, answers and design proposals are presented, which provide guidance and decision-making support for policy-makers, but also suggestions for other VET actors who

are not part of the DunE-BB-EU Vocational Education and Training Network in the further development (transformation) of their VET learning venues into regional centres of excellence for vocational education and training.

The creation of digitally-supported and sustainability-oriented regional centres of excellence for vocational education and training in Europe is a joint political and social task.

Stefan Nowatschin, Senior Director, DunE-BB-EU Project Leader

Answers and design suggestions

To 1) What is a Regional Centre of Excellence for Vocational Education and Training?

"Centres of Vocational Excellence (CoVE) are often portrayed as the institutions that embody professional excellence. However, the purpose, structure and functions of CoVEs vary greatly from one context to another. Differences and similarities are often disguised by the use of specific terms and what is lost in the language. CoVEs are assigned different roles in policy and enjoy different levels of political commitment and prioritization in resource allocation. Often CoVEs exist in isolation without partnerships with other educational institutions at national and international level. CoVEs can be providers of qualifications (e. g. vocational schools or training centres) and co-ordination/development centres or networks."

The ETF concept paper "Centres of Vocational Excellence – an engine for VET Development?" summarizes a wide range of challenges, especially for vocational schools. The early 2020 ETF European Training Foundation publication "Centres of Vocational Excellence - an engine for VET Development?" placed the research focus "on the capacity of vocational schools to act: the role they can play in promoting vocational excellence, both by deepening and broadening their relationship with employers and by collaborating and coordinating with other skills providers - other schools, companies, universities or specialized development agencies. Where CoVEs are in development, policy makers, school leaders and their partners need to define the regulatory framework to agree on objectives and responsibilities. In this context, vocational schools must be given scope to improve, expand and renew the supply of qualifications in cooperation with relevant partners. In the future, the ETF will seek to develop a common understanding of what stakeholders need to know and what skills they want to improve. In addition, it will be investigated how these needs can be met by a network. ETF research confirms that there is a need for international networks and partnerships. Skills providers increasingly want to equip learners with skills that enable them to work for inward-investing companies or in international labour markets. Some specialised schools, such as maritime and aviation schools, have already received international accreditation, driven by the labour markets they serve. International partnerships are also popular with teachers and learners – they offer great opportunities for learning. The ETF's planned CoVEs network will complement other platforms and networks, helping established and emerging CoVEs to access, share and replicate best practices."

https://www.etf.europa.eu/en/publications-and-resources/publications/centres-vocational-excellence-engine-vocational-education

The website of the EU Directorate-General for Employment, Social Affairs and Inclusion contains a video describing the requirements for a Centre of Vocational Excellence. In addition, the following explanatory note was published there:

"Centres of Vocational Excellence (CoVEs) bring together a wide range of local partners, such as vocational training providers, employers, research centres, development agencies and employment services (among others), to develop "competence ecosystems" that support regional, economic and social development, innovation and smart specialisation strategies.

They aim to provide high-quality professional skills, support entrepreneurial activities, disseminate innovation and act as knowledge and innovation centres for enterprises (especially SMEs), while cooperating with centres in other countries through international cooperation platforms."

https://eceuropa.eu/social/main.jsp?catId=1501

To 2) Why do the regions need centres of excellence for vocational education and training?

On page 3 in BWP 5/2016 Special printing of the Leadership Congress 2016 "Vocational Schools 4.0" the President of the Federal Institute for Vocational Education and Training (BiBB) Prof. Dr. Friedrich Hubert Esser reminds all political leaders to "make vocational schools engines of progress in the dual system." He points out that "vocational schools should be supported in unlocking their potential for innovation in vocational education and training and ensuring that they, too, are widely recognised as a brand in the dual system. It is about more positive associations and a better visibility of dual vocational training through modern vocational schools!"

A good five years have passed since this very accurate statement. Support and the necessary technical and building modernisations have been slow, partly due to the Digital Pact, and are in the process of being implemented. The necessary investments in personnel - working time budgets for local-national international cooperation, innovation - participation in vocational education and training research and interdisciplinary research, and training and further training of teaching staff – have been made only sporadically in recent years, but not on a national scale. The same applies to the area of vocational training administration. In Germany, according to the DunE-BB-EU Vocational Training Network, there is considerable room for improvement in this area in fourteen federal states. The Hamburg Institute for Vocational Education and Training (HIBB) and the Schleswig-Holstein Institute for Vocational Education and Training (SHIBB) are now two very good examples of how vocational education and training can be organised more coherently and successfully developed in federal states. But this is not enough from the point of view of the DunE-BB-EU actors. In Germany, another 14 federal institutes for vocational education and training, based on the two very good examples from Hamburg and Schleswig-Holstein, should be set up and. together with the very good Federal Institute for Vocational Education and Training, further develop national vocational education and training in cooperation with the EU VET actors and UNSECO-UNEVOC.

The ET 2020 Working Group on Vocational Education and Training (VET) describes the target profile in 2019 as follows: "The "most advanced" CoVEs not only contribute to regional development and smart specialisation strategies and act as innovation engines in local ecosystems, but also actively contribute to the generation of new knowledge."

Source:

"Mapping of Centres of Vocational Excellence (CoVEs) ET 2020 Working Group on Vocational Education and Training (VET) ", Manuscript completed in October 2019

http://www.scformazione.org/wp-content/uploads/2019/12/KE0119739ENN.en .pdf

The target profile of the German UNESCO Commission has been recommending a 360 degree vocational education and training for sustainable development since 2018. So far, very few vocational schools and other places of learning in vocational training are moving in this direction. The design features are indicated in an information leaflet.

https://www.bne-portal.de/files/BNE Handreichungen%20Education%202 018 Sustainability vocational%20Education web.pdf

The Vocational Schools I in Uelzen are already very close to the target profile of the UNESCO Commission. The design features of a regional sustainability-oriented centre of excellence are described in:

https://www.unesco.de/bildung/bne-akteure/bbs-i-uelzen-lernort-fuer-360-grad-nachhaltigkeitsbildung

The BBS I Uelzen has produced an information film on this subject, which shows, in part, how sustainability is lived in a place of vocational education and training.

https://www.bbs1uelzen.de/wp-content/uploads/2021/01/BBS I Imagefilm v4.mp4

As part of the first three-day VET network kick-off conference, these design options were presented to the other European vocational schools and other VET partners and discussed together in a quality discussion. See:

https://www.bbs1uelzen.de/wp-content/uploads/2021/02/BBS_2019.mp4 and https://www.bbs1uelzen.de/netzwerke-und-kooperationen/eu-berufsbildungsnetzwerk/

To 3) How should a regionally digitally-supported and sustainability-oriented Centre of Excellence for Vocational Education and Training be designed from the point of view of users and vocational education and training partners?

Course of the project:

The DunE-BB-EU Vocational Education and Training Network was founded on 01.11.2019 in Uelzen. Based on the life and professional practice of the actors in the vocational training places and other vocational training partners, the guideline gives concrete expression to the image of the Centres of Professional Excellence (CoVEs).

The preparation of the guideline is based, among other things, on the results of the following meetings, videoconferences and video dialogues:

At the six conferences, the six learning sites presented their vocational training institutions with the involvement of other regional vocational training partners.

During the presentations, excellent examples of digitally supported and sustainabilityoriented vocational education and training projects were presented. Overview and results of the conferences and dialogue forums

- 1. Launch conference Uelzen (Germany) 01.11.2019 to 03.11.2019
- 2. Video conference Tartu (Estonia) 26.09.2020
- 3. Video conference Florence (Italy) 26.02.2021
- 4. Video conference Valetta (Malta) 23.04.2021
- 5. Video conference Graz (Austria) 07.05.2021
- 6. Video conference Rouen (France) 27.05.2021

Further significant findings were collected in the DunE-BB-EU dialogue forums, which were organized as online meetings, where VET stakeholders presented the design features and requirements needed from their point of view.

1. DunE-BB-EU Dialogue Forum with Parents 24.03.2021.

"How should regional digitally-supported and sustainability-oriented centers of excellence in vocational education and training be designed from the perspective of parents?

Result report of the dialogue forum with parents on 24.03.2021:

Fruitful DunE-BB-EU parent dialogue provides valuable design advice

DunE-BB project leader Mr. Oberstudiendirektor Stefan Nowatschin was very pleased to welcome the three speakers Ms. Arja Krauchenberg, EPA European Parents' Association, Ms. Sabrina Wetzel, Bundeselternrat (Federal Parents' Council) and the former Bavarian state parents' representative and current chairperson of the federal initiative 3XMEHR, Ms. Ingrid Ritt, as well as the DunE-BB-EU network partners and other interested persons to a one-hour zoom meeting on 24.03.2021 for the Parents' Dialogue.

Ms. Krauchenberg, living in Vienna, connected in her speech the Hundertwasser cities Uelzen and Vienna through the sustainability-oriented buildings Hundertwasser-Bahnhof Uelzen and Hundertwasserhaus in Vienna. Hundertwasser was a sustainability artist who oriented his designs, including his buildings in Uelzen and Vienna, to the three dimensions of sustainability: ecological - social - economic. He had already been a sustainability pioneer in his lifetime, working successfully throughout Europe. Ms. Krauchenberg was impressed that also through the initiative of the BBS I Uelzen, the idea of sustainability of Hundertwasser, has increasingly been gaining importance in the region of Uelzen and beyond. In her opinion, the EU vocational training network makes an important contribution to the exchange of excellent vocational training practice and to learning from and with each other. In order to educate and train in the best possible way, the European economy and society needs regional digitally-supported and sustainability-oriented centers of excellence in vocational education and training, said the spokesperson for the European Parenthood. Finally she concluded that it will not be enough for Europe to be willing to invest in vocational education and training through Erasmus+ and structural funds. There is a need for coherent investment and binding action plans for vocational education and training - including for vocational schools, in which the national states and the national federal partners (federal states and municipalities) must ensure appropriate co-financing. The implementation of the goals and measures of the "Osnabrück Declaration on Vocational Education and Training in Europe - https://www.bibb.de/de/133318.php" was signed by all education ministers in Europe, including Ms. Karliczek, the Federal Minister of Education, and also by the EU Commissioner Niclas Schmit on November 25, 2020. From

2021 to 2025, the EU education and vocational training area is to be shaped together. The establishment of regional centers of excellence in vocational education and training and a significantly higher level of cooperation are key success factors in order to jointly contribute to the achievement of the 17 Sustainable Development Goals (Agenda 2030) and the national and international climate targets.

In her presentation, Ms. Arja Krauchenberg outlined the following areas of action and quality for the design of regional digitally supported and sustainability-oriented centers of excellence in vocational education and training in Europe:

"What do parents generally expect?

- a holistic approach that focuses on the learner
- an education that helps their children develop not only their professional skills, but also to develop their personality
- a good collaboration with companies
- balanced and coordinated programs
- well-established mobility programs

What do parents want in particular?

- inclusivity
- · openness and accessibility for all
- consideration of students' special needs (disabilities, linguistic and cultural differences, gender)
- project-based teaching and learning
- focus on subject-specific and interdiscilinary competencies
- practical orientation working toward meaningful goals
- nodes of innovation
- digitally supported teaching and learning
- · receiving inspiration through exchange with other centers
- working on innovations in networks
- cooperating
- updating training programs adapted to the latest technology
- Summative assessment, formative assessment
- many ideas e.g. EBBD (European Business Baccalaureate Diploma)

Ms. Sabrina Wetzel, Federal Parents' Council, agreed with Ms. Krauchenberg's comments. The Federal Parents' Council demanded that the 4K model should also be used as a guideline.

Creativity, collaboration, critical thinking and communication are the so-called "four competencies for the 21st century. The OECD's Learning Compass 2030 identifies these, among others:

https://www.oecd.org/education/2030-project/contact/OECD Lernkompass 2030.pdf.

She emphasized that in the transformation of schools towards 4.0, which is already underway, parents should be involved, even if the "children/youth" were already over 18 years old. In her view, there must be a longer right of co-determination and co-design also in the vocational school forms!

With the further transformation of the learning places of general and vocational education one would have to orient oneself at very good examples.

Corona has uncovered the weak points in schools - including vocational schools. Ms. Wetzel mentioned the lack of training and continuing education for teachers, deficits in the Internet and technical equipment at vocational schools.

Digital educational formats and good practice of digitally supported teaching must also be usable in a meaningful way after Corona. Adapted and meaningful hybrid teaching-learning formats are therefore part of the standard at a center of excellence for vocational education, according to Ms. Wetzel.

Mrs. Martine Riot from the partner vocational school in Rouen (France) confirmed that in many European countries, especially in the vocational school sector, parents are left out. There is no parents' representation at all, according to the head of the department for international contacts.

It was noted that in the European vocational school areas, the students / trainees are mostly 18 years old and the parents are no longer formally involved there.

The former Bavarian state parents' representative and current chairperson of the federal initiative 3XMEHR Ms. Ingrid Ritt reported on the good approaches from the state of Bavaria. Here, the state and the municipalities have started in an exemplary manner to work hand in hand to launch a digital excellence initiative for selected vocational school centers.

As part of the "Centers of Excellence at Vocational Schools" project, the Free State of Bavaria bears 50 percent of the total eligible costs for the technical equipment, while the other half is borne by the respective independent cities or districts as the sponsors of the vocational schools. This means that a total of around ten million euros has been made available for new technical equipment at the schools.

The "Industry 4.0" funding program and the "Integrated subject classrooms at vocational schools" funding program are part of the BAYERN DIGITAL II master plan in vocational education.

The multi-year funding program "Budget for integrated subject classrooms at vocationally qualifying schools" comprised a volume of 35 million euros in 2018. Integrated subject classrooms are classrooms at vocationally qualifying schools with occupation-specific hardware and software equipment.

All these programs have the aim of a digitally supported center of excellence. However, there is still a lot of room for improvement in terms of sustainable development, even though models already exist, e.g., the climate school concept. However, there is still some way to go to achieve 360 degrees of sustainability in vocational education and training - target profile of the German UNESCO Commission, further information:

https://www.bne-

portal.de/files/BNE_Handreichungen%20Bildungsbereich%202018_Nachhaltigkeit_berufliche%20Bildung web.pdf

Ms. Ritt also pointed out the concept of the climate school, which is not based on one-off actions, but is a binding path over several years in all CO2-relevant areas (communication and networking, purchasing and procurement, nutrition, digitization, mobility, waste, heat, electricity) in a school and in the working world.

The Burkhart Grob School, a technical vocational school in Mindelheim, was awarded with its comprehensive commitment during the European Vocational Skills Week as the best in the category Green Erasmus by the EU Commission in the school year 2020/21. The internationalization project of the vocational school was built up and constantly refined within 5 years. Its basic idea is directly derived from the UN's 17 Sustainable Development Goals and the meaning of vocational education:

https://www.bsmn.de/technikerschule-mindelheim/south-cheshire-college-england/

(This only as an example of a model vocational school on sustainable teaching and learning).

The project manager of the awarded "excellent" Bavarian vocational school Mr. Studiendirektor Karl Geller added that the vocational school Mindelheim has a long tradition in environmental education and meanwhile has many connections to foreign schools. An "Energy Efficiency" project has been set up with their partner school in Crewe/England. Mr. Geller pointed out that this project was awarded by the EU Commission as the best project in Europe in the category Green Erasmus in 2020. "The core of this project is the idea to use our students in England as "climate ambassadors" for English students at the partner school in so-called Energy Days and thus pass on own knowledge about sustainability at eye level and in the foreign language. The Brexit will most likely end this project, which is why we are considering offering a similar program at our own school. The basis for this is the energy efficiency course we have been offering for 7 years, which has received several national awards. This course should now be offered on a European level and combined with foreign language learning, as we already do with our students." For further information:

karl.geller@bsmn.de

In her presentation, Ms. Ingrid Ritt outlined the following areas of action and improvement for the design of regional digitally supported and sustainability-oriented centers of excellence for vocational education and training in Europe:

"Let's start with the school buildings: What is the energetic and technical condition? Can the building technology be used for teaching purposes? Is the school's energy consumption data used for teaching purposes? Based on the particular situation, could we possibly make a school project out of it?

Education at vocational schools, more than any other, must be sustainability-oriented because that is where the levers are the greatest. Even if sustainable education is more than just energy or environmental education, on the one hand the deficits already start with the latter. The vocational school sector, for example, probably requires the most energy and emits the most CO2.

We also need to have to look at the school construction programs of the municipalities and states: How are these designed?

What does the **education and training of teachers** look like with regard to sustainable development? This applies to initial training at the university as well as to the 2nd phase in the seminary or in the teacher training period. Is there a consumer-oriented basic education in the energy sector for every field of study? Whereby the energy field could be seen quite broadly, e.g. energy and agriculture, energy and nutrition, energy and house building, energy and mobility, energy and waste, etc.

At every professional center of excellence there must be **sustainability officers or environmental officers, or better yet a whole team**. Just as it is a matter of course that there are, for example, safety or fire protection officers.

Sustainable development must be a requirement in the **QM program of vocational schools**, and **evaluations** must include questions about sustainable orientation and sustainable action.

Sustainability officers - a sustainability team - or environmental officers must be given time **allotments** for their work. On the one hand, one cannot constantly burden teachers with additional tasks without credit, and on the other hand without commitment, one cannot demand that they take care of and perform the corresponding tasks.

Specialist positions for sustainability education must exist at governments or school supervisory authorities. These positions simply have to be created.

What is the situation in the **ministries of education**? Do they have staff explicitly responsible for sustainable development? However, structures such as those that have now been created for digitization must also be created for sustainable development.

Back to teaching, the essential factor at school:

Sustainability education is more than environmental education. The UN has formulated 17 goals for sustainable development. These may be little known at vocational schools. Accordingly, teaching is not oriented to them. At a digitally supported and sustainability-oriented center of excellence for vocational education, however, this must be the case!

If sustainability is to be thought of globally - and actually it only makes sense in this way - comprehensive, sustainability-oriented **internationalization measures** would be necessary, as has been and is practiced at Mindelheim Vocational School with the foreign projects mentioned at the beginning. The acquisition of knowledge in a sustainability area takes place simultaneously with the use of a foreign language to communicate with foreign partners and to create solutions to problems. This promotes social competence and self-esteem in equal measure. Let's not forget: vocational schools are not only good at theory, they are also good at practice. And presenting lessons as a problem-solving method also appeals to students!

Digitization is not an end in itself, but must pursue clear goals and bring added value. Data use, algorithms and artificial intelligence are enormous fields of knowledge for which a deep understanding is needed and which must be understood.

Responsible decision makers in education and in politics have to act and decide according to these insights. Above all, thinking in the direction of sustainable development MUST start as soon as possible and then be acted upon decisively. Equally important is the interaction of vocational centers of excellence with companies and training providers. It would be confusing if different digitalization and/or sustainability directions were taken at schools and in training companies.

Sustainability makes the most sense when thought of globally! We do not live in an ivory tower; natural, climate and weather events act in a global interplay. For example, the rampant burning of the rainforest is also of concern to us and affects all of humanity.

And last but not least: **VALUE EDUCATION** is indispensable!

If we want to act, work, teach and learn in a digitally supported and sustainability-oriented way, we have to live and stand up for the standards and VALUES defined in our Basic Law and constitutions. Because regardless of whether we are dealing with material things, nature or people, only if we are able to deal with everything in a careful and appreciative manner we can live together in the long term and secure a future worth living for future generations.

Therefore, be motivated and let's help together to tackle our sustainability goals and digital transformation and demand them everywhere."

2. DunE-BB-EU Dialogue Forum with Students-Youth Representatives-Apprentices 21.04.2021

"How should regional digitally supported and sustainability-oriented centers of excellence in vocational training be designed from the youth's point of view?

Excerpts from the speech for the DUNE-BB -EU Youth Dialogue by the German UN Youth Delegate for Sustainable Development Fabian Gacon:

- "An important starting point for us is the implementation that future generations grow up together with the idea and concept of sustainability.
- We need a strong expansion and transformation of education for sustainable development, especially when it is not about the classic school and later academic career. Vocational school-based careers need to be considered and the successful model of apprenticeship needs to be developed as well.
- There needs to be greater integration of sustainable concepts in training. Outdated training concepts are an enormous hindrance to the implementation of the 2030 Agenda and can no longer be tolerated. This will also benefit the apprentices, who will receive a long-term and future-proof education or training. The training concepts must be adapted at the vocational and school level. In the concepts of the vocational level, it needs above all in occupations with high levels of emissions further developments around on the newest conditions of the working method to remain. This transformation is necessary in order to save emissions more effectively and easily. Approaches such as resource-saving and socially responsible work need space in the training programs. The job descriptions will probably change a lot in the next years and therefore current training approaches are needed to enable future-oriented work. This also means the involvement of teachers and their further training opportunities.
- Highly important here is the SDG 17: Partnership. There is a need for stronger networking among vocational schools in Germany. School administrators as well as teachers need a strong exchange among each other to meet the growing demand on them. In particular, the participation of students plays an important role. They should have the opportunity to implement their own projects within their school and company training periods. They should be involved in the processes. For this to succeed, there needs to be a strong network of
- students and strong representations, so that topics such as
- equal opportunities are addressed by those who experience injustice and discrimination.
- In addition to closely networked schools within Germany, cooperation with other European countries is needed. The concepts for apprenticeships need common standards and can learn from each other. The trainees also benefit both characterwise and professionally from strong foreign cooperation. Such cooperation not only strengthens the exchange but also the common cohesion. At the end of the day, everyone is fighting for good training and a future for all.
- In order to address the transformation and strengthening of the collaborations, better funding for vocational education for sustainable development is needed. Funding must be adapted to the needs of the schools. Concepts for the

implementation of sustainability must be developed and implemented together. There is a need for mandatory monitoring projects to enable a timely evaluation and a compelling adaptation.

- We must also start with the companies and ensure that companies look beyond their own interests and pursue a future-oriented corporate design. With trainees who experience training that incorporates sustainable development, the employees of tomorrow can help shape companies.

The chairman of the **Young CDA**, **Mr. Gernot Nahrung**, outlined the following general conditions for excellent vocational training on 21.04.2021::

- "Give students orientation, find their own strengths and interests and show individual perspectives for the future
- Strengthen the reputation of vocational education and training in Germany through permeability in continuing education and highlighting success stories
- Raise awareness of qualifications and the value of practical experience among companies (glas ceilings)
- Improve "external" framework conditions for trainees trainee ticket, trainee residence halls

Our demands on politics

- Modern and digitally supported career orientation tailored towards the students' needs
- "Workshop year" support program specifically for young people without a diploma or with special supports needs whilst pursuing their vocational qualification
- Reliable funding for career guidance (expiry of co-funding by ESF in 2022)
- Investments in vocational schools through "Pact for Vocational Schools
- Digitisation
- Modern equipment and teaching materials
- in teaching staff ("retirement wave"), including lateral entrants with appropriate pedagogical/didactic training
- Subsidies must be accessed guickly and unbureaucratically.

For further information:

- https://www.cda-bund.de/aktuelles/zukunft-auf-der-kippe-wie-gehtes-weiter-mit-der ausbildung/
- https://www.cda-bund.de/aktuelles/ausbildungsmarkt-in-der-coronakrise/
- https://www.cda-bund.de/aktuelles/corona-jahrgang-verhindernund-ndash-zukunftschancen-sichern/ "

The student representative of the BBS I Uelzen, Ms. Chelsea Gerche, made the following comments:

"Hello, my name is Chelsea Gerche, I am 21 years old and in the student council of BBS 1 Uelzen. Unfortunately, my English is not so good that I could give the presentation in English, but I have asked a classmate to translate. Mr Borchmann will deliver my text in English.

First of all, I would like to say that a BBS can pursue the sustainability goals much better than a primary or general school in Sek. I and II. Personally, I have come to this conclusion because I/we were not taught much about the topic in secondary school. It is important for each of us to protect the environment, to start projects where we can create something together and enjoy making a difference in the world.

Since I am the voice of the student body at our school, I don't want to go into political concepts. I would like to tell you how we live sustainability in our school. We pay special attention to waste separation, we carpool, and we also try to use laptops in our lessons. Our timetables are digital, so we can see changes in lessons directly. Important messages are not sent by post, but via messenger directly to our mobile phones. All rooms in our school have a beamer and most teachers also have a tablet. We are constantly working on equipping every room with the necessary technical equipment. We can access so-called teaching platforms in class and use them at home to revise lesson content. I know from the carpenters in our school that regional products are also used for the wood that is processed in class. The students first must create cutting patterns before they are allowed to cut the wood, so care is taken not to produce unnecessary wood waste. In the automotive area, we have electric cars; every pupil who works in this area is allowed and required to learn about them and work on them under the supervision of a teacher. Our teachers are very keen to teach us about sustainability in everyday life. They teach us about renewable energies using various examples, including solar panels. We have drinking water dispensers at our school that dispense tap water with or without carbon dioxide, so everyone has something to their liking and can do without bringing water bottles that end up in the rubbish afterwards. It also improves the daily water intake of most of us. We also have the opportunity, supported by the Erasmus + mobility program, to do an internship abroad and thus learn internationally and globally. As student representatives, we are very pleased that the district of Uelzen will be building a new sustainability-oriented vocational school campus by 2025. We are happy to be able to contribute our ideas in the planning process.

There are certainly more points that distinguish us as a centre of excellence, but we students see the points mentioned above so far as the most significant developments in the school system.

Above all, Corona has been a huge turning point for our school. Classes are digitalised, and we can submit our homework online. The digitalisation of everyone has been improved beyond average. Our teachers have adapted to being able to give lessons online. For example, as a final year class, we receive a barcode via the beamer that we can scan. This allows us to take part in class-internal surveys or to read and compose texts under a created link.

As a last point, I would like to talk about possible improvements. The internet is sometimes quite bad because many students access it at the same time. Us students would like to have more freedom, for example, that we could also have a say in the lesson planning, for instance, which learning phases could take place at home and what needs to be deepened in class. Particularly during Corona, block teaching would make sense in order to not expose ourselves to the danger of a Corona infection."

From a European perspective, Mr. Matthäus Fandrejewski, as spokesperson of CESI Youth, the trade union youth and trainee representatives, contributed:

"Dear participants - thank you very much for the invitation to your conference.

First of all, a big compliment on this conference.

I think it is great to see that you have already held a conference with parents and parent organisations. We all know that parents are super important in the decision-making process about their childrens' vocational education - often they have a big influence on it.

It is important to get their opinion on how vocational education programs should be supported by the competence centres.

But the form of today's conference, or rather the whole DunE-BB-EU project, brings this crucial issue on our, the Youth representatives' agenda: "How should regional digitally-supported and sustainability-oriented VET Centres of Excellence be designed from a youth perspective?

We as youth representatives must be actively involved in the design of the centres of excellence!

For me it is important that the regional Centres of Excellence in Vocational Education and Training in Europe are up to date in terms of digitalisation and sustainability!

Both topics are constantly changing, and developments in digitalisation have been rapid in recent years.

This means being technically up to date, but also staff of the VET providers and teachers need to be trained continuously.

The same applies to the topic of sustainability, however, and there are constant innovations here as well.

The regional centres of excellence are very important and help shape European VET for the future!"

3. DunE-BB-EU Dialogue Forum with Counsellors and School Social Work 05.05.2021

"Why does a digitally supported and sustainability-oriented centre of excellence for vocational education and training in Europe need excellent guidance? Which forms of guidance play a significant role?"

The topic of guidance is a very large subject area, as the dialogue forum on 05.05.2021 showed. The presentations are available on the project website. Only excerpts of some text passages are shown here:

Excerpt from the speech by Ms Anke Szurowski, school social worker BBS I Uelzen:

"Zukunftsperspektive

- Intensive supervision and project work with pupils of the vocational introductory school to the extent of 10 hours per week per class
- Creating space for low-threshold contact offers for students and teachers for example, the concept of a "pedagogical island
- More information and prevention projects internally and in cooperation with external experts and specialised services

- Further expanding school in diversity and strengthening the participation of all pupils in the transition from school to work / inclusion in working life

Structural requirements for excellent school social work

- Premises resources

Central contact point with low-threshold contact offer, possibility for confidential talks in individual counselling rooms, room for group talks/offers, office with storage room for experiential education materials and files

- Personnel resources based on the number of pupils

6 classes of the introductory vocational school need at least 60 hrs., another 1700 pupils, approx. 100 teachers and approx. 10 persons with inclusion needs require at least 80 hours.

- Financial resources

Budget for working materials and projects, instructors, social training, inservice training, supervision/collegial counselling

- Regional conditions and resources

Good transport connections, sufficient therapeutic care, good offers from youth welfare and other specialised services".

Contribution by the BBS I Uelzen student representatives counselling teachers Ms Sarah Bastemeyer and Mr Mathias Botz:

"Excellent counselling at the BBS 1 Uelzen



Spatial aspects

- √ Room selection
- ✓ Light & ventilation
- ✓ Seating & tables
- ✓ Media
- √ Size adapted to participants

Social aspects

- ✓ Appreciation of the students: Greeting, round of introductions, scheduling of the discussion, trusting relationship, possibly reference to confidentiality, allowing accompaniment, transparent record keeping,...
- ✓ **Developing problem-solving strategies:** active listening, encouraging the students to take action, offering support (if necessary), appropriate choice of methods,...
- ✓ **Further support possibilities:** Contacting school social work, specialist staff in the school, external advisors,...
- ✓ Evaluation of counselling: feedback from students, follow-up counselling/new appointments,...

Ecological aspects

- ✓ Check online counselling options
- ✓ Schedule a meeting without having to travel to the school separately
- ✓ Avoiding paper by using relevant media
- ✓ Regular ventilation...

Economical aspects

- ✓ Counselling efficiency
- ✓ Goal-oriented moderation
- ✓ Appropriate discussion structure & culture
- √ "as few as possible as many as necessary" multiplier principle of the students
- **√** ...

Coaching of our class representatives

- ✓ Explanation of the tasks, rights, and duties of class representatives before election.
- ✓ Handing out the school's internal handout for class representatives.
- ✓ Class representatives are always coached on request by the class representatives.

- ✓ Class representatives always respect hierarchical principles; subject teacher, class teacher, head of department and head of school.
- ✓ Support for the class representatives to find their own solution strategies
- ✓ Explanation of existing support options in the school
- ✓ Protection of the privacy of all participants
- ✓ Respectful, trusting and appreciative interaction while maintaining neutrality".

Contribution by the guidance counsellor Mr Jan Hupke, BBS I Uelzen:

"What is excellent counselling for me?"

Individual counselling

- The focus is on the person seeking advice and his or her concerns.
- The guidance counsellor (BL) takes time and listens.
- The BL is obliging and also demands it
- Honest words and thoughts are expressed
- Possible support services outside and inside the school are used (networks).
- Empathy and understanding in conflict situations (change of perspective)
- The counselling environment must radiate a "welcome".

Systemic counselling

- Implementation of workshops, projects and further training
- Contact person for colleagues

What needs to be improved in order to realise excellent guidance at a digitally supported and sustainability-oriented centre of excellence for vocational education and training in Europe?

Social sustainability refers to the state of health of social systems. Maintaining the state of health (vitality, organisation and resilience) is of particular importance.

BBS I Uelzen is a complex social system and must be strengthened and improved as a sustainability-oriented centre of excellence for vocational education and training through the targeted use of existing support systems (school social work, SV confidence teachers and guidance teachers). Each satisfied actor contributes to the success of the social system on his or her own responsibility. The framework conditions for this must be oriented towards the needs of all actors. Both the technical equipment, the spatial design, the personnel resources and the strengthening of social values are of decisive importance for this.

This is the identified room for improvement:

- Low contact barriers for those seeking advice (use digital channels).
- Training of additional counselling teachers
- ❖ Appropriate counselling environment (own counselling room)
- Strengthening the social and pedagogical competences of students and teachers".

The program and other interesting presentations by other counsellors working in the context of vocational education and training can be found on the project website: https://www.bbs1uelzen.de/netzwerke-und-kooperationen/eu-berufsbildungsnetzwerk/

Dialogue results

In the dialogue forum it became apparent that there is a variety of guidance forms and actors. The need for guidance, especially at vocational schools, has increased. From the point of view of the school guidance counsellors, more time contingents and also staff reinforcements must be provided directly at the vocational education and training learning venues. In addition, digital assistance systems (Al call centres) should also be invested in to help relieve the workload of the counsellors.

It would make a lot of sense to make the existing portfolio of all regional guidance opportunities and other guidance opportunities transparent on VET online platforms of regional centres of excellence and on national VET online platforms.

4th DunE-BB-EU Dialogue Forum video dialogues with supporters

19.05.2021

DunE-BB-EU VET Network Dialogue Forum **"Excellent support: local-regional-national-international?!"**

The programme and interesting presentations on guidance are deposited on the project website:

https://www.bbs1uelzen.de/netzwerke-und-kooperationen/eu-berufsbildungsnetzwerk/

In contrast to the international VET partners, who usually have the support - as in-house staff - directly available in their own VET centre, the VET schools could refer to an astonishing 72 external supporters. Unfortunately, due to a lack of coordination time, it is usually not possible to coordinate with these very good cooperation partners and connect them directly to the VET schools. It simply needs much more coordination time to reliably develop these meaningful partnerships.

In Lower Saxony, for example, the current coordination time budget of 7 credit hours for department heads should be doubled to 14 credit hours and at least one additional department head position for sustainability-oriented innovation and research projects (cooperative VET research and interdisciplinary/international VET education...) should be allocated to the regional VET centres of excellence!

5th DunE-BB-EU Dialogue Forum on Learning Venue Cooperation 02.06.2021

DunE-BB-EU Vocational Education and Training Network "Excellent networking (cooperation) between the learning venues of vocational education and training: Vocational school-outside the company training centre-teacher training-university of applied science-university".

The programme and other interesting presentations by the speakers from the respective learning venues can be found on the project website:

https://www.bbs1uelzen.de/netzwerke-und-kooperationen/eu-berufsbildungsnetzwerk/

In the context of this dialogue forum, the previous practice of learning venue cooperation of the learning venues of vocational education and training was jointly examined and possibilities for improved interlinking of the VET stakeholders were identified.

Mr. Mathias Kollmann, Managing Director of the Bohlenser Mühle company from the district of Uelzen and also a board member of the Federal Association for Sustainable Business www.bnw-bundesverband.de, pointed out that the Bohlsener Mühle was awarded the German Sustainability Prize in 2015.

He reported on his ideas as a regional dual vocational training partner and referred to the sustainability report https://nachhaltigkeit.bohlsener-muehle.de/

Excerpt from the presentation:

"Learning location cooperation

Our trainees attend the following schools:

- Berufsbildende Schulen I in Uelzen industrial clerks, bakers as well as warehouse logistics operators
- Berufsbildende Schulen III in Lüneburg food technology specialists
- Berufsbildende Schulen II Müllerschule in Wittingen Process technologists in the milling and grain industry (miller)

There are currently no cooperation projects with the above-mentioned vocational schools.

Our vision for the future

- Training must be offered holistically according to the principles of sustainable business management. There must be a visible link between ecology, economy and social responsibility.
- Ecology: Contents must be ecologically oriented.
- Economy: profit maximisation versus meaningful economic activity
- Social: working conditions, etc.
- Training in the triad of these 3 building blocks".

After the presentation Mr Kollmann was asked:

Why are there no cooperation projects with the vocational schools?

Answer: "It seems that the dual VET partners do not have the time - yet!

In the further dialogue, all representatives of the learning venues of vocational school-outside the company training centre-teacher training centre-university- agreed that networking in the sense of a VET chain and jointly designed cooperation and innovation projects would make sense for the design of excellent VET. It would have to be clarified how the coordination - regional vocational training office within the centre of excellence for vocational training? - and the necessary provision of working hours could be arranged. In a new working time model for vocational school teachers, coordinators and school headmasters, these and other necessary working time quotas could be designated and corresponding financing and investment plans could be drawn up.

The following text excerpts from: "Mapping of Centres of Vocational Excellence (CoVEs) ET 2020 Working Group on Vocational Education and Training (VET)", Manuscript completed in October 2019,

http://www.scformazione.org/wp-content/uploads/2019/12/KE0119739ENN.en .pdf

largely coincide with the findings of the DunE-BB dialogue forum.

"Developing vocational excellence in regional development

Vocational excellence means going beyond what VET would normally be expected to do. It means, in particular: • being a proactive player with systematic approaches to engaging with local and regional agendas for sustainability and social and economic development • having two-way reciprocal exchanges with stakeholders, based on partnerships • using sustainable funding models involving strong and reliable stakeholder contributions • ensuring integration of activities, especially between research and teaching and learning. VET can contribute to regional development thanks to a number of factors: • its close and practical linkages to businesses – these can be a source of practical innovative solutions to economic issues • its links to all sectors of industry, traditional as well as hi-tech - these, links give it the potential to help fill gaps in regional development which tends to focus on technology or innovation-driven sectors • its role in skills development at all levels – skills at low and intermediate levels have a vital role to play in supporting innovation, and at higher levels VET is on the increase, combining practical training and theoretical knowledge that complements higher education • a client group that includes learners from the widest range of social backgrounds including people who have not succeeded in general academic education and migrants - this gives VET a unique position to address social topics and to enable industry to tap in to a previously under-utilised resource."

"How the EU can support CoVE development

EU level policy, funding and coordination can add value to what is already being done in the following ways:

- i. Enabling upward convergence by:
 - facilitating networking and exchanges of good practices at European level many CoVEs would benefit from support to move up the value chain of VET excellence; bringing together partners at different stages of VET excellence development, e.g. through a European platform or hub; implementing a self-assessment tool based on the maturity model this would enable VET providers

to identify areas for development and to access relevant support, e.g. good practice examples, peer learning activities.

ii. Building capacity to address European priorities and fill gaps by:

• linking European platforms of CoVEs to sectoral blueprints and sector skills alliances, with a view to developing innovative methodologies for teaching and learning; • setting up European platforms or hubs with a focus on social issues of concern at European level, e.g. migration and early school leaving; • dedicating a CoVE platform to the development of excellence in the internationalisation of VET which could focus on, e.g. developing advice and guidance on internationalisation strategies, and trans-national joint curricula and international campuses."

"8.1 Understanding vocational excellence

The mapping exercise enables the formulation of a deeper understanding of vocational excellence that takes into account (a) how it is currently understood across Europe, where there are different approaches to VET and where VET sits in different contexts and (b) the ambitions expressed by Member States through the Copenhagen process and other strategic documents, such as ET 2020, to improve the quality and excellence of VET provision. On this basis, vocational excellence involves going beyond what VET would normally be expected to do. Vocational excellence means going beyond provision that is well tuned to the needs to the labour market, and which meets the needs of citizens for professional career pathways through lifelong learning. It means having in place strategic and systematic plans and processes for engaging with local and regional agendas for sustainability and social and economic development. It means moving from a position of passive responsiveness to the needs of stakeholders, to being a proactive player in skills anticipation and the formulation and implementation of regional development and innovation strategies. The dominant modus operandi is two-way reciprocal exchanges with stakeholders, based on partnerships and sustainable funding models involving strong and reliable stakeholder contributions. Participation in innovation hubs, technology diffusion centres and business incubators is part of everyday practice. Developing innovative solutions to social, economic and environmental issues is the norm, and there are feedback loops in place so that VET providers continually learn, innovate and adjust their provision through research into the most appropriate teaching and learning methods, leading to the creation of new knowledge.

Distinctions between IVET and CVET disappear, whilst pathways to higher levels of ducation and training are widely available and easy to access. There is a systematic approach to internationalisation of provision.

8.2 VET as a key player in regional development

There are a number of features of VET which make (or could make) it well positioned to contribute to regional development processes. First, VET has close and practical linkages to businesses. These links give it the potential to apply innovations and knowledge to economic and social issues in practical ways. VET also has links to all sectors of industry, traditional as well as hi-tech or highly innovative ones, and this means VET has potential to help fill gaps in regional development, innovation and smart specialisation strategies which tend to focus on technology or innovation-driven sectors. Finally, VET develops skills at all levels. Traditionally, it has been focused in most countries on skills at low and intermediate levels, and these are frequently overlooked in knowledge triangles even though they have a vital role to

play in supporting innovation in the wider economy. Furthermore, VET at higher levels is on the increase across Europe, and its combination of practical training and theoretical knowledge means it is well positioned to complement the orientation of much higher education.

8.3 Applying the CoVE concept to societal challenges

The mapping has clearly highlighted the focus of CoVEs on economic, rather than social challenges. VET is well placed to correct this imbalance. In many countries, the 'traditional' client group of VET comes from those people who have not succeeded in general academic education, which gives it a unique position to address social topics and to enable industry to tap in to a previously under-utilised resource. Widening access and opening up pathways to higher VET are already on the VET agenda. The mapping has also identified examples where attention has been directed not at the development of new business products or processes (where companies' profit motive naturally plays a part), but on the application of new technologies and processes to social issues such as ageing (where the profit motive may be weaker). The incentive to undertake such activities probably needs to come from the public sector, by seeking ways of both identifying the most important social topics to address and finding appropriate funding. Many of the biggest social issues are pan-European (e.g. migration, early school leaving) and this suggests that EU intervention could add value.

8.4 How the EU can support CoVE development

The mapping has highlighted that there are clearly weaker and stronger countries when it comes not just to the development of activities, but to the development of coherent packages of activities and overall approaches to vocational excellence that ensure the strong integration of activities. It is such integration, and the presence of feedback between practice and research, that separate the more advanced CoVEs from the rest. The mapping has also shone a light on the gaps that exist. These gaps are social and sectoral, as just mentioned, but also include the international/European dimension of most centres, where there is typically scope to build up activities. An important question is, in what way can EU level support (policy and funding) and coordination add value to what is already being done – including what a platform could do and what value would it add?

On the basis of the foregoing, there are two main areas where EU level support and coordination could add value.

(i) Enabling upward convergence

Many centres would benefit from support to reach beyond the core aspects of their work and move up the value chain of VET excellence. CoVEs are at various positions on the maturity model described in Table 6.2. To make progress, VET providers need appropriate support to integrate higher added value activities, such as innovation hubs and business incubators, and the creation of new knowledge into their existing provision, such as through the exchange of good practices at European level. There is also a need to stimulate a European-wide improvement of VET provision and contribution to local development. This could be done by bringing together partners at different stages of VET excellence development. An EU-funded European hub could play an important role in such processes. Furthermore, a self-assessment tool based on the maturity model would enable VET providers to plot their position on the different elements of excellence and to access relevant support materials, such as good practice examples or peer learning activities.

(ii) Building capacity to address European priorities and fill gaps

Regional and national CoVE networks add a level of capacity to enable the pursuit of VET excellence tied to regional and national priorities. A valuable tier of capacity could be added at European level to address three needs that have been identified through the mapping exercise.

First, linkages between CoVEs at European level currently depend on European project funding, leading to a pattern of involvement that varies across sectors and countries and which, naturally, does not systematically address European sectoral needs. Europe has a number of needs in relation to the development of sectors to enable it to be competitive in global markets. It would add value to harness vocational excellence at European level in pursuit of these goals. European platforms of CoVEs could be linked, for example, to sectoral blueprints and sector skills alliances, with a view to developing innovative methodologies for teaching and learning.

Secondly, **CoVEs currently tend to focus on economic rather than social issues**. European platforms could be set up with a focus on social issues of concern at European level, e.g. **migration and early school leaving**. This would support the development and propagation of new ways of addressing these topics in VET, as well as **raising the profile of the topics**.

Thirdly, international activity is a priority for CoVEs, but is often in the process of development, which could be aided through EU-level action. A CoVE platform could be dedicated to the development of excellence in the internationalisation of VET, building on the EU level work already done on how to achieve excellence in transnational mobility. It could focus on developing advice and guidance on the implementation of internationalisation strategies, and specifically on how to design and implement transnational joint curricula and international campuses. Links could be made between this platform and the platforms on social and economic issues described above."

Source: "Mapping of Centres of Vocational Excellence (CoVEs) ET 2020 Working Group on Vocational Education and Training (VET)"

http://www.scformazione.org/wp-content/uploads/2019/12/KE0119739ENN.en_.pdf
Manuscript completed in October 2019

You can find more interesting presentations about already existing and further desired learning place cooperations on the project website.

https://www.bbs1uelzen.de/netzwerke-und-kooperationen/eu-berufsbildungsnetzwerk/

6th DunE-BB-EU Dialogue Forum on VET Administration

16.06.2021

DunE-BB-EU VET Network "Excellent VET Administration: local-regional-national-international?!"

Findings from the DunE-BB-EU dialogue forum on excellent VET administration:

In the dialogue forum it was found that in most countries there is a complex and bureaucratic VET administration. In Germany, the complexity is even higher because in many cases - with the exception of Hamburg and Schleswig-Holstein - time-consuming coordination with the administration of general education and resource allocation discussions still hinder proactive and timely further development of VET.

In smaller countries without federal structures, such as Malta and Estonia, VET administration takes place directly with the nationally responsible ministries. The network partners in these countries appreciate the "short path" and the agile VET administration with little bureaucracy.

In Germany, Austria and Switzerland there is a multitude of administrative actors and committees with bureaucratic/time-consuming work and coordination processes.

Within the framework of the dialogue forum, a three-level model was presented in which various administrative activities, including a regional centre of excellence for vocational education and training (1st level), were listed. During the dialogue forum, an ideal picture was drawn for a more efficient and coherent VET administration in Germany, Austria, which is very close to the Swiss 3-level model presented by Dr. Christoph Thomann, BCH President of VET Switzerland. According to Thomann, the Swiss VET/PET administration still needs to develop national and international cooperation at level 3.

Dr. Thomann's presentation is available on the project website:

https://www.bbs1uelzen.de/netzwerke-und-kooperationen/eu-berufsbildungsnetzwerk/

Ideal three-level model for excellent VET administration

Level 1: Vocational training centre

Administration work

Class administration and counselling by teachers, pupil administration in the office, building administration - caretaker, personnel and financial administration, timetable and project planning, quality and sustainability management/organisation of ESD-BESD project management and quality assurance, organisation of inclusion and integration, conflict management and counselling, application for material and equipment budgets, application for funding for international mobilities such as Erasmus +, Engagement Global ENSA, training worldwide, ..., regional-national-international cooperation and projects, participation in model projects and VET research, preparation of sustainability reports by department heads and school heads.

Participation in regional VET committees

Dialogue result

More digital and personal assistance is required for the listed administrative tasks. Furthermore, working time assessments need to be updated and modern working time models need to be developed. For this purpose, the network partners will develop specific examples of working time arrangements at regional centres of excellence in vocational education and training by the end of the project in mid-2022, present them publicly and document them in the final report.

2nd level:

Regional school authorities or vocational school authorities - e.g. Nuremberg - cooperate with state institutes - e.g. Schleswig-Holstein Institute of Vocational Education and Training (SHIBB) or Hamburg Institute of Vocational Education and Training (HIBB).

The organisation of these two regional institutes of vocational education and training, which are exemplary from the point of view of the DunE-BB-EU network partners, is described below.

The HIBB, which has been in existence since 2007 and has been very successful, and which also supported the establishment of the SHIBB, presents itself on film and illustrates in excerpts the wide range and challenges of vocational education and training in Hamburg:

Film: https://hibb.hamburg.de/ueber-uns/hibb-film/

"Mission of the HIBB

The Hamburg Institute for Vocational Education and Training (HIBB) aims to ensure that all young people and adults, irrespective of their cultural, religious, social and individual prerequisites, can participate in vocational education, work and society without restriction or barriers. Vocational education and training in this sense enables young people and adults to acquire, maintain and expand their ability to act in a vocational capacity and thus to shape their lives in a self-responsible manner. HIBB is constantly developing vocational education and training in Hamburg in line with the changing world of life and work. HIBB pursues these goals with its training partners in the spirit of shared responsibility between the state and industry and involves all relevant stakeholders with their expertise."

"The Hamburg Institute for Vocational Education and Training is an independent state enterprise of the Hamburg Authority for Schools and Vocational Training (BSB). It comprises the 31 state vocational schools and the central office."

Structure and tasks of the HIBB head office

The tasks of the HIBB Central Office are to manage, advise and support the vocational schools and colleges, as well as to further develop vocational education and training and to supervise schools.

The management of the HIBB is subordinate to the authority management. The BSB concludes a target and performance agreement with the HIBB. The management is operationally autonomous and reports to the HIBB Board of Trustees.

The HIBB central office performs its tasks in four business areas:

- School development/steering and guidance
- Transition from school to work
- Personnel and Finance and
- Extracurricular vocational education and training and continuing education and training and the staff unit
 - Strategic Controlling, Citizenship Affairs and Public Relations.

The divisions provide, among other things

- Legal and technical supervision of vocational schools,
- Performing all ministerial tasks and fundamental matters relating to vocational education and training and continuing education and training,
- Supreme Land authority under the BBiG/ HwO and Supreme Land authority under the AFBG

- Supervision of school headmasters,
- advising and supporting vocational schools,
- Ensuring cooperation between school-based and non-school-based vocational education and training,
- partner of the Hamburg Youth Employment Agency,
- Further development of existing support structures,
 - steering the VET schools through target and performance agreements, quality development, controlling and reporting, and
 - Preparation of the business plan and the annual financial statements as well as the distribution of individual budgets to the schools.

HIBB in figures

- Hamburg's largest state enterprise with around 2,950 employees; of which
- 2,529 teaching staff at vocational schools,
- 259 full-time employees in the fields of educational and therapeutic staff, technical and administrative staff,
- 159 employees at the HIBB head office
- o (Employees: as of 2019)
 - Annual turnover in 2019 around 358 million euros
 - 31 state vocational schools
 - around 49,300 pupils; of which
- o 80 percent in the vocational training sector,
- 8 per cent in continuing vocational education and training,
- 8 per cent in training preparation,
- 5 per cent in courses of education leading to the higher education entrance qualification.

(amount of pupils school year survey 2019)

Quelle: https://hibb.hamburg.de/ueber-uns/1531-2/

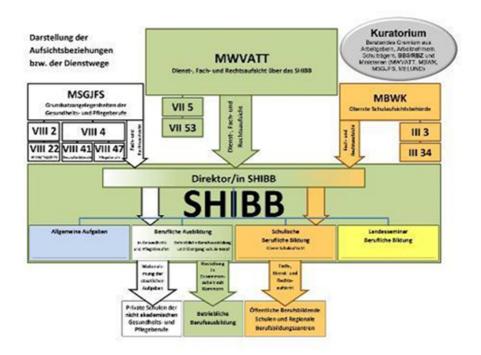
"Schleswig-Holstein Institute for Vocational Education and Training (SHIBB)

SHIBB | State Office

In Schleswig-Holstein, a new organisational structure for vocational education and training was developed with the establishment of the Schleswig-Holstein Institute for Vocational Education and Training (SHIBB). Located as a state office at the Ministry of Economics,

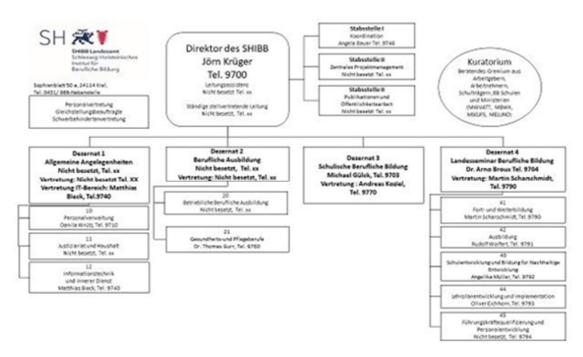
Transport, Labour, Technology and Tourism, responsibilities have been newly bundled since 1 January 2021.

Everything under one roof



©SHIBB

After the state government decided in the coalition agreement to establish a SHIBB at the Ministry of Economics, the establishment of this new organisational unit was coordinated and realised by the project group "Affairs SHIBB". The aim was to combine all responsibilities for vocational education and training in the Ministry of Economics and Labour and to form a higher school supervisory authority for vocational schools (BBS) and regional vocational centres (RBZ). The supreme school supervision remains in the Ministry of Education.



©SHIBB

By bundling school-based and out-of-school vocational education and training and integrating the State Vocational Training Seminar (LSBB) under one roof, the greatest possible synergy effects can be achieved. The reorganisation and consolidation in one area of responsibility offers the state government the opportunity to achieve quality improvements in the system of vocational education and training, to secure training also in the countryside as well as to secure skilled labour and better management of the transition from school to work".

https://www.schleswig-

holstein.de/DE/Landesregierung/SHIBB/Behoerde/behoerde node.html

The Power-Point-Presentation of the SHIBB Director, Mr Jörn Krüger, of the Schleswig-Holstein Institute of Vocational Education and Training (SHiBB) is available on the DunE-BB-EU project website:

https://www.bbs1uelzen.de/netzwerke-und-kooperationen/eu-berufsbildungsnetzwerk/

Dialogue result

In the discussion it was pointed out, among other things, that the establishment of a Lower Saxony Institute of Vocational Education and Training (NIBB) has also been under discussion in the federal state of Lower Saxony for some time. The state institute issue was also discussed recently in Bremen.

Particularly for federally organised nation states, a nationwide establishment of state institutes is seen as necessary in order to be able to organise excellent vocational education and training coherently at national and European level. Taking Germany as an example, this would mean that 16 federal state institutes with the Federal Institute for Vocational Education and Training could successfully and coherently develop excellent vocational education and training together with the European vocational education and training administrations in a more agile manner.

3rd level:

National-international cooperation of VET administrations for excellent VET.

An idea for Germany:

The Hamburg Institute of Vocational Education and Training (HIBB), the Schleswig-Holstein Institute of Vocational Education and Training (SHIBB), the Lower Saxony Institute of Vocational Education and Training (NIBB) and 13 other possible federal state institutes of vocational education and training work together with the Federal Institute for Vocational Education and Training (BiBB) and strongly networked with the EU Commission - Directorate-General for Employment, Social Affairs and Inclusion and UNESCO-UNEVOC to create the necessary framework conditions for excellent vocational education and training and to provide the best possible support for the transformation of vocational education and training learning venues into regional centres of excellence in vocational education and training.

Dialogue result

The added value of the three-level model is a consistently better interlinking of all relevant VET administrations. This was emphasised several times in the discussion, but a need for structuring at the school, municipal and national-international VET administration was also identified.

Further good advice on this can be found in the guideline "Shaping education together".

https://www.transferagentur-hessen.de/fileadmin/user_upload/201506_Leitfaden_Bildung-gemeinsam-gestalten.pdf

7th DunE-BB-EU Dialogue Forum with Trade Unions

30.06.2021

Joint Declaration on the Design of Regional Centres of Excellence in Vocational Education and Training in Europe

The DunE-BB-EU project supporters, the German-speaking trade unions of VET teachers - Berufsbildung Schweiz BCH, GÖD BmHS (Austria), Bundesverband der Lehrkräfte für Berufsbildung BvLB (Germany) - have been involved in the conferences and dialogues since the project started in November 2019. They presented the insights gained and trade union demands on 30.06.2021. The "Joint Declaration on the Design of Regional Centres of Excellence in Vocational Education and Training" has been published several times in the meantime:

https://www.bvlb.de/aktuelles/news/gemeinsame-erklaerung-zur-gestaltung-regionaler-exzellenzzentren-beruflicher-bildung-in-europa/

https://www.dbb.de/artikel/berufliche-bildung-staerkung-der-exzellenzzentren-in-europa.html
https://www.cesi.org/posts/vocational-training-boosting-europes-centres-of-excellence/

The DunE-BB-EU project supporter German Teachers' Association has also published the statement in its DL Press Review week 29.

In the last dialogue forum on 30.06.2021, the following insights were gained:

Regional centres of excellence in vocational education and training are places of knowledge and innovation. Here, local, regional, national and international partners and providers of education, vocational training, higher education come together to use all competences for the

design of high-quality - excellent - VET in a learner-centred way. Learners have the opportunity to obtain general and vocational education qualifications from EQF 1 to EQF 8 - Doctorate, see Vocational Education and Training Centre MCAST Malta.

Together, strategies for the transition from school to work are developed. Sustainability-oriented business models and entrepreneurship are tested in student companies and, at best, these are developed into real start-ups. The associated job creation promotes regional sustainable growth and also increases social cohesion.

 At regional centres of excellence for vocational education and training in all German-speaking countries, learners and trainees must be entitled to 100% educational time and instruction!

The educational mandate is currently not being fully realised in Europe's vocational schools, among other things in value-oriented, foreign language and vocational subject teaching. More posts for vocational school teachers are urgently needed!

 Digitalisation, sustainability and internationalisation are already changing living and working environments. The places of learning in vocational education and training, including vocational schools, must at any rate adapt to the new conditions in terms of organisation and structure. Political decision-makers at all levels of government must invest in sustainability-oriented and modern equipment and buildings, as well as in the cooperative training and further education of incompany VET and university teaching staff.

In addition to the Erasmus Plus investments, the national states must promptly set up their own investment and support funds for the design of regional digitally-supported centres of excellence in vocational education and training with 360-degree sustainability education https://www.bne-

portal.de/files/BNE Handreichungen%20Bildungsbereich%202018 Nachhaltigkeit beruflich e%20Bildung web.pdf.

- Regional Centres of Excellence in Vocational Education and Training enable members of the school community to engage in local-regionalnational and global learning in the spirit of Education for Sustainable Development (ESD). The Berlin Declaration for ESD of 2021 is also a guideline for action in this context. https://www.bneportal.de/files/berliner_erklaerung.pdf
- School laws, training regulations and curricular specifications must describe binding framework conditions for digitisation, sustainability and internationalisation so that a reliable organisation of excellent digitally-supported and sustainability-oriented vocational education and training can take place at the learning locations.

For a systematic organisation, sustainability management must be implemented and an annual sustainability report must be written.

The work in regional and cross-border partnerships or education and VET networks enables an intensive exchange of excellent teaching practice and learning venue organisation. Digitally supported and sustainability-oriented excellence projects - also in the direction of applied VET research - are developed jointly. Corresponding working time budgeting must take place for these valuable cooperations.

- Regional centres of excellence in VET need an efficient and coherent VET administration. Federal and Länder institutes of vocational education and training must be set up nationwide and cooperate in a more networked manner to enable administration that is low in bureaucracy and provides the best possible support.
 - Excellent VET is characterised by flexibility and high adaptability, therefore lifelong learning is a key to success for a sustainable future.

Dialogue result

Digital local-national-international work platforms / cooperation platforms, such as Goethe-Institut, Foraus, Education21, BNE-Portal, and other digital portals or work platforms... already offer many possibilities for digitally supported and cooperative collaboration. From the point of view of the DunE-BB-EU VET network, it is necessary to create a general overview and to make a systematic topic-related structuring in an umbrella portal (networking of the portals) in the sense of improved knowledge management.

Further findings: It is not only in Europe that the quality characteristics of CoVEs are discussed. The following general statements from New Zealand are in line with the findings of the DunE-BB-EU VET network.

"... each CoVE is a genuine centre of excellence, bringing together the right people to identify opportunities, solve problems, and drive innovation.

CoVEs must:

- Support the growth of excellent vocational education with a focus on teaching, learning and research
- Support the development and sharing of high-quality curriculum and programme design
- Be a consortium with expert representation from industry, the wider sector, and a range of other areas, for example iwi and vocational education representatives
- Have a national focus
- Be hosted by a regional campus of Te Pūkenga or a wānanga
- Address issues and opportunities with a significant strategic impact, ideally with widereaching benefits across the sector
- Solve real problems and grasp viable opportunities

CoVEs may:

(These are examples only)

• Provide training support for employers to improve their skills-building ability

- Share applied research with providers and industry to improve knowledge exchange
- Improve pathways through vocational education including from school
- Provide learning technologies across the network to minimise cost and duplication
- Provide advice to providers and employers on best practice pastoral care to support learners
- Devise and implement other innovative solutions and opportunities as determined by the CoVE consortium"

Source: https://www.tec.govt.nz/rove/coves/

Next conference in Hanover:

Public presentation of the DunE-BB-EU Guide

03.09.2021 to 05.09.2021

Re 4: What other information is helpful for the transformation of vocational education and training learning venues into regional centres of excellence?

The handout "Berufsschule digital" offers very good advice on how to structure digitally-supported learning venues in vocational education and training.

https://www.telekom-stiftung.de/sites/default/files/files/abschlussbericht-ifib.pdf

"Concepts for digital teaching, learning and working

What do vocational schools have to teach young people for living and working in the digitalised world? What technical tools and learning management systems do they need for this? And how do they manage to train their teachers accordingly? The Deutsche Telekom Foundation explored questions like these with ten vocational schools from 2018 to 2019.

When it comes to educating future generations, vocational schools are of particular importance. On the one hand, they have to tie in with the different levels of media and IT competence of their heterogeneous student body; on the other hand, it is their task to promote both the cross-occupational and the occupation-specific competences of the students.

In the project, the ten selected schools worked together on the conditions under which these goals can best be achieved. Special attention was paid to aspects that can be generalised and adopted by other schools for their own digital school development. The project was scientifically accompanied by the Institute for Information Management (ifib) at the University of Bremen and the Institute Technology and Education (ITB) at the University of Bremen.

The project results are available to other schools free of charge as an online handout."

https://www.telekom-stiftung.de/aktivitaeten/berufsschule-digital

In addition, the publication "Education, School, Digitisation" offers further valuable information.

https://www.waxmann.com/index.php?eID=download&buchnr=4246

The handouts present very well the aspects for the design of digitally supported learning venues for vocational education and training. However, the topic of sustainability remains largely unconsidered. Topics such as Green IT and Green Cloud are to be included in the design of CoVEs both organisationally and didactically - a topic of Vocational Education and Training Sustainable Development (BBNE).

The following sources provide very good information on the design of sustainability-oriented learning venues for vocational education and training.

https://nachhaltiges-handwerk.de/

https://www.nachhaltigkeitsallianz.de/wp-content/uploads/2018/12/Handwerk-als-Nachhaltigkeitsmotor-Brosch%C3%BCre.pdf

Report of the ET 2020 Working Group on Vocational Education and Training (VET) on the results of a stocktaking of Centres of Vocational Excellence (CoVEs).

Chapter 1 presents further relevant key findings:

- "Centres of Vocational Excellence (CoVEs) are developing into an important component of EU VET policy."
- "CoVEs have the freedom to adapt to local/regional and sectoral needs in terms of structures, stakeholders and activities, with the aim of increasing VET's responsiveness.

Notwithstanding this diversity, two broad types of CoVEs can be identified:

- 1. CoVEs that are 'purpose built' or designated entities as part of national/regional arrangements for vocational excellence, and;
- 2. CoVEs that are individual VET providers, functioning as CoVEs for a region, subregion or sector.

CoVEs vary in their sectoral coverage. Since CoVE networks reflect national and regional economic priorities, they tend to cover sectors undergoing rapid technological and innovation-driven change that countries and regions wish to develop. This means CoVEs may be missing opportunities for innovation in certain fields, e.g. eco-tourism or the transformation of delivery systems in retail.

Teaching and Learning

Areas of teaching and learning where CoVEs are typically active include: developing and/or implementing innovative

teaching and training methodologies, including those based on digital technologies (e.g. MOOCs, simulators, etc.); project-based learning; curricula that develop transversal as well as technical skills; provision of both IVET and CVET based on

lifelong learning principles, and; collaborations with higher education, from sharing facilities to offering joint qualifications. It

is less common for CoVEs to offer transnational joint VET curricula, continuing professional development for teachers and

trainers and guidance and validation of prior learning services.

CoVEs vary in their ambition. Some CoVEs make small, one-off changes to practice whilst others lead large-scale change

programmes. In general CoVEs add value to their activities through integration, especially of practice and research."

http://www.scformazione.org/wp-content/uploads/2019/12/KE0119739ENN.en .pdf

The report describes the very high importance and impact of cooperation and partnerships:

"CoVEs engage in a range of cooperative activities from the provision of placements for students by businesses to sharing equipment and expertise, and, more advanced still, innovation and business incubation activities. The latter activities require the greatest commitment and resources and are less commonly found. Most CoVEs participate in new knowledge creation, but they do so to highly varying degrees. It is rare to find CoVEs with their own research capacity.

International cooperation is common amongst CoVEs. CoVEs are often involved over many years in multiple EU-funded mobility activities and development projects. Most CoVEs are seeking to increase their international activities. Some CoVE networks are themselves international rather than national/regional networks. Participation in national and international skills competitions is a useful tool for raising the attractiveness of and excellence in VET.

Making sure VET provision closely matches the needs of the labour market is a key driver for CoVEs. However, excellence means doing more than this, by deepening exchanges with business and developing more synergistic relationships. In this way VET can become an essential and proactive element of skills ecosystems."

http://www.scformazione.org/wp-content/uploads/2019/12/KE0119739ENN.en .pdf

The DunE-BB-EU VET network partner MCAST is a Maltese VET centre involved in VET research. Here, it is already possible to obtain a Bachelor's degree (EQF 6) and a Master's degree (EQF 7) after completing vocational training. Soon there will be the possibility to do a doctorate there (EQF 8). At MCAST it is thus possible to achieve all vocational qualification levels EQF 1 to EQF 8. The German InnoVET project "Berufliche Hochschule Hamburg" pursues a similar goal in Germany. Following on from the Hamburg vocational schools, immediate follow-up training courses are to be designed at the EQF 5 - 8 level.

Re 5: Necessary framework conditions for the successful transformation of vocational education and training learning venues into centres of vocational excellence (CoVEs)

Note: In the following text excerpts, we have highlighted in bold what we consider to be significant text passages with which we agree. They are not highlighted in the original source!

Governance and Funding

CoVEs vary in the degree to which they are 'embedded' in policies for regional development, innovation and smart specialisation. Linking CoVEs to national/regional policies ensures coverage of (sectoral) priorities at this level, but sub-regional priorities might

receive less attention. Where there are no national or regional networks, there is a risk of a patchy CoVE landscape when viewed across a country as a whole.

Partnerships form a central component of CoVE governance. They ensure shared ownership of goals and activities, and a common commitment to achieving them, by pooling and sharing resources. CoVEs often form different partnerships for different purposes/activities.

CoVE networks are coordinated to varying degrees and hence sharing takes place across the networks in different ways and to varying extents. Such sharing is probably not available to individual providers acting as CoVEs.

Core public funding for CoVEs tends to be supplemented with project funding and contributions from companies, either through the provision of staff and equipment and other infrastructure (in cash or 'in kind') or by paying for services. European funding plays an important role for CoVEs: it not only supplements funds, but supports innovation in VET.

Source: "Mapping of Centres of Vocational Excellence (CoVEs) ET 2020 Working Group on Vocational Education and Training (VET)", Manuscript completed in October 2019,

http://www.scformazione.org/wp-content/uploads/2019/12/KE0119739ENN.en .pdf

Designing reliable and coherent funding

The DunE-BB-EU VET partners see the need for reliable coherent funding, oriented towards the EU funding plan Erasmus+ 2021 to 2027, also in the national states. A systematic six-year co-financing of EU funding would have to be initiated by national and regional political decision-makers through national and regional investment funds for the further development of excellent vocational education and training and for the transformation of vocational education and training learning venues into regional centres of excellence.

For regional-national-international partnerships, working hours must be reassessed and working time budgets must be financed.

In order to achieve the important UN Sustainable Development Goal 17 and also the goals of the Osnabrück Declaration, which are geared towards stronger cooperation, are very forward-looking, as the regional vocational training centres can only gain in quality in networks and can develop into regional digitally-supported centres of excellence in vocational education and training with 360 degrees of sustainability education. It is therefore necessary that those with political responsibility provide and finance corresponding working time budgets.

The actors in vocational education and training, especially at the vocational training centres, must be allocated significantly more personnel and financial resources for the planning, implementation and evaluation of mobilities and the systematic establishment and maintenance of vocational training partnerships.

Our DunE-BB-EU project supporter, the Federal Association of Teachers for Vocational Education and Training (BvLB), outlined the requirements in this important field of work in an "Eight Point Programme - Position Paper - on 20 November 2020:

 $\underline{\text{https://www.bvlb.de/aktuelles/news/acht-punkte-programm-europaeische-berufsbildendeschulen-nachhaltig-staerken/}$

"The most 'advanced' CoVEs are not only contributing to regional development and smart specialisation strategies, and acting as drivers of innovation in local ecosystems, but are also making an active contribution to the generation of new knowledge."

Source:

"Mapping of Centres of Vocational Excellence (CoVEs) ET 2020 Working Group on Vocational Education and Training (VET)", Manuscript completed in October 2019,

http://www.scformazione.org/wp-content/uploads/2019/12/KE0119739ENN.en .pdf

The amount of funding required for the regional innovation drivers will be specified in further dialogue rounds over the next few months and documented in the final report at the end of the DunE-BB-EU project in 2022.

Preliminary conclusion

This guideline provides the political decision-makers, but also the places of learning in vocational education and training that are undergoing transformation, with a very good orientation and concrete design information in order to be able to successfully set up regional digitally-supported and sustainability-oriented centres of excellence in vocational education and training in Europe.

In order to successfully shape the EU Education Area 2025, national action and investment plans (5-year plans) for the transformation of as many vocational education and training learning venues as possible into regional centres of excellence must be drawn up in the national states as early as this year. To achieve the 17 sustainability goals of the United Nations' Agenda 2030, a further half-decade action and investment plan (2026 to 2030) is needed after 2025 to be able to set up the regional centres of excellence in vocational education and training with 360 degrees of sustainability education. Sustainability-oriented construction measures and equipment, such as ergonomic chairs, desks and other facilities that promote movement and health, are also to be considered in order to make the regional Centres of Excellence for Vocational Education and Training exemplary "climate-positive" and "oriented towards health and safety". The planned BBS Campus Uelzen is a very good example of sustainability-oriented building planning.

https://www.zukunftsraum-schule.de/pdf/kongress-2019/VRfL/100_VRfL_LIESTMANN_PW.pdf

In recent years, at least in Germany, there have been a numerous pilot projects on the subject of vocational education and training for sustainable development (BBNE). In further initiatives and pilot projects, digitisation has been advanced in the learning venues of general and vocational education. Very good ideas were exchanged and recommendations for action on the design of digitally supported learning places were written.

Based on the diverse findings and very good recommendations for the design of digitally supported and sustainability-oriented places of learning, it is time for those with political responsibility to initiate a nationwide transformation process.

The transformation on the ground is particularly challenging for the management staff. In order for sustainability management, BBNE project management and sustainability reports to be implemented, especially at the vocational school learning sites, the management staff and also the teaching staff need, on the one hand, the mandate in school law and, on the other hand, appropriate further training and administrative support. Efficient and agile state institutes for vocational education and training, such as HIBB and SHIBB, are regarded by the VET network as exemplary supporters. In Germany and in other national states in Europe with a funding structure, similarly structured and excellent regional institutes for vocational education and training should be set up.

Since the Hattie study at the latest, it has been known that continuous and close relationship work is necessary for successful and excellent education and vocational work. Time must be taken for mutual communication, especially in the area of learning location cooperation.

It therefore makes sense to hold the DunE-BB-EU dialogue forum "Excellent networking (cooperation) between the learning venues of vocational education and training: vocational school-company-outside company training centre-teacher training seminar-university of applied science-university", because in this format it is possible to engage in joint further and continuing training and to design excellence projects in vocational education and training.

The actors of the DunE-BB-EU VET network intend to continue after 2022 and to align themselves globally. Further, VET network partners from Africa, Asia and other interested international VET partners are to be included in the further quality discussion on the sustainable development of the regional VET centres of excellence.

"DunE-BB-2025: Learning together and from each other - globally!

Personal acknowledgement of the Dune-BB-EU vocational training network manager

I would like to thank our patron Ms. Lena Düpont, MEP, and the DunE-BB-EU organisation team of the BBS I Uelzen

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for their excellent project work and support in helping to produce the guide.

Please find attached **an overview of the DunE-BB stakeholders - see attached pdf**, to whom I would also like to express my sincere gratitude!

Attachments: **Reference to DunE-BB-EU Interim Report 2020**Please find the DunE-BB-Eu Interim Report 2020 under the following link: https://www.bbs1uelzen.de/netzwerke-und-kooperationen/eu-berufsbildungsnetzwerk/

Attachment: DUNE-2019-2021-Konferenzen.pdf

Note: Checklist for CoVE design - still in progress until 03.09.2021