



Project workshop on 15 and 16 April 2024 in Hamburg

Results of the "Establishment and long-term continuation of CoVE" working groups

For each CoVE, a working group was formed by the project partners who develop and operate the CoVE. As only one partner from Spain took part in the workshop, no working group was set up for COVE Spain. The working groups of CoVE Austria, Germany, Italy, Latvia, Lithuania, and Poland exchanged experiences on six questions and then presented the results listed in the table below in the plenary session.

Summary

In the 3LoE-project, eight Centers of Professional Excellence (CoVEs) were set up in Austria (AU), Germany (DE), Italy (IT), Latvia (LV), Lithuania (LT), Poland (PL), and Spain (ES) and developed with great success by the project partners. Cooperation in the CoVEs is based on binding cooperation agreements and, in one case (CoVE DE Hamburg), on a national law. Numerous other regional and national educational institutions and organisations are involved as partners in all CoVEs. The 8 CoVEs work intensively with companies, especially SMEs, which contribute their needs through direct contact, help shape funding and training programs, participate in trials, and carry out R&D projects with universities.

The CoVEs in the individual countries have been organised in such a way that all educational tasks can be carried out at EQF level 3 - 7, namely:

- Vocational schools, that provide initial vocational training in the dual system with companies, are involved in continuing vocational training and participate as educational partners in dual bachelor's degree programs.
- Chambers of Industry, Commerce and Crafts ensure the involvement of companies in all CoVE activities and encourage them to participate in dual vocational training and dual study programs. They are particularly active in continuing vocational training and provide ongoing advice to companies.
- Colleges and universities contribute to the development of curricula and teaching materials for initial and further vocational education and training and provide teaching staff for their implementation where necessary. They are particularly involved in the development and implementation of dual bachelor's degree programs and provide innovation support for companies in connection with this.
- The additional involvement of ministries in the CoVE of two countries (Latvia and Spain) has had a very positive effect on the work of all CoVEs. They have clarified legal regulations and played a key role in their development and implementation (e.g. creating state-recognised continuing education qualifications). They also helped with administrative matters and developed political strategy programs and carried out evaluations.

Cooperation within the individual CoVEs and internationally between all CoVEs is promoted through biannual workshops, four international conferences, and eight train-the-







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trainer seminars. All CoVEs have access to the provision of cooperation tools and models, are involved in online meetings and exchange information continuously. This support is essential, but even more effective for the development of regional and international cooperation was the simultaneous implementation of joint concrete work. Various tools and advisory programs, over 40 vocational training programs at EQF level 3 - 6 and R&D projects with and for SMEs were jointly developed and implemented.

The work was carried out in international cooperation between vocational schools, chambers with their educational institutions and universities. Partners from individual countries jointly developed tools, curricula, teaching materials, examination regulations, etc., which were tested and evaluated in several countries with different national conditions. The different material created were revised and finalised based on the evaluation results, and then adapted to national conditions. The results were transferred to all eight CoVEs, which received implementation advice. In this way, 36 comprehensive results were produced in the 3LoE project.

Each CoVE considers the national and regional development strategies of its context. Based on local and regional needs and challenges, the CoVEs make a decisive contribution to achieving the specific objectives and strategies for regional development, innovation, and smart specialisation. To this end, the individual CoVEs have held numerous events, conferences, workshops, and direct dialogues with the relevant regional stakeholders. Through the needs-oriented development and implementation of funding and education programs, strong effects were achieved for regional developments in accordance with the respective regional strengths and needs.

70 associated partners (chambers, associations, vocational schools, and universities from 13 countries) were involved in the international cooperation of the eight CoVEs. They have been sharing their experience and knowledge since the beginning of the project, taking part in workshops and conferences, advising on results, and planning their own implementations. The associated partners received all results and individual implementation advice as required.

All eight CoVEs will be continued in the long term and funding has been secured. They will continue to implement the education and advisory programs and develop new education programs, which have already been planned by the individual CoVEs.

International cooperation between the 8 CoVEs and with the 70 associated partners will also be continued in the long term; funding has also been secured for this and the Hanse-Parlament will take on coordination tasks.





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CoVE Austria	CoVE Germany Hamburg & Dresden	CoVE Italy	CoVE Lithuania	CoVE Latvia	CoVE Poland			
1st question								
-	How do you ensure the continuation of cooperation in your CoVE after the end of the 3LoE project? Are you planning to add new							
organisations? If so, which ones?								
The CoVE will be continued in its origi- nal form, without a new organisational form. Depending on market needs, addi- tional partners might be involved in the short term, such as: a) Roofer b) Chimney sweep c) Federal guild	The continuation of both CoVEs with the existing partners is se- cured, in Dresden based on co-operation agreements, and in Hamburg on a legal basis.	The CoVE will be continued. We are open to new organi- sations, for exam- ples the "ITS sys- tem". Chambers of other regions and other umbrella or- ganisations in green economy might join the CoVE.	The CoVE will be con- tinued after the project in this way: a) Joint activities, training, projects b) Development of training for education platform New partners from di- verse organisations might join the CoVE: a) Professional associ- ations b) Local industries c) VET schools d) Universities	The CoVE will be continued after the project in this way: a) Expanding based on similar fields, for example Riga Tech University b) Employer repre- sentatives, associa- tions c) possible expansion based on location d) partners that can provide general skills / knowledge (i.e. busi- ness management)	The CoVE will be con- tinued after the project with two new partners: a) Chamber of trade and industry Słupsk b) The Higher School of Economy in Słupsk			
2nd question Do you need a separate budget for the continuation of the cooperation in your CoVE after the end of the project? If so, how will it be financed? What funding do you need for this?								
No separate budget	No budget needed for	It will be necessary	No budget needed for	Measures already im-	Curricula, agenda, syl-			
needed.	continuing the existing CoVE, which can be fi- nanced with own con- tribution. To develop the CoVEs, additional budget needed with financing by country specific public funded:	to look for external funding. Specific funding will be needed depending on the specific ob- jectives (tools and methods for effective assessments for green needs etc.).	the existing CoVE. Budget will be needed if we want to maintain the quality and amount of work.	plemented; no further funding needed.	labus are available from the 3LoE project, they are implemented on an ongoing basis and courses and workshops are organ- ised. This generates income for the CoVE Association, which is			









	a) for pow Ca)/E initia				and will be used to fi-
	a) for new CoVE initia- tive	a) European (e. g. Erasmus +)			nance further develo
	b) as a broad platform	b) Foundations			ments and realisa-
	of skills	(Banks)			tions.
	c) for association &	c) National funding			uons.
	secretariat	(cover by plan fund)			
		d) Regional funding			
3rd question					
-	e the development and o	8 8 1	on of promotional and e	educational measures a	after the end of the
	ng do you need for this?			1	1
a) Mainly by the chamber of Com- merce, industry, and crafts b) Additional EU ten- ders	Financing via a) national funds, e.g. vocational schools, and universities b) for further education via participant fees c) Grants for further training courses from national funds	Some training courses need to go to market. The tests have been done, now they are ready for companies. Dual programs in the university could go to market (stu- dents) and find sponsors (compa- nies). Applying for ten- ders/calls that are valuable for all / some members.	a) Own resources b) EU funding c) National programs, research council of Lithuania	a) Own earnings b) Additional funding may be possible due to calls foe related projects	Barter Model: a) Own resources b) Own contribution c) Companies Mixed financed: a) self-financed b) sponsored by cor panies c) product sponsore (by manufactures)
4th question		•		•	
-	e international cooperati	on after the end of the	e project? What are vo	u planning in this regar	d and how will you
finance it?	······		, ,		
a) International co-	International coopera-	We will enhance the	International coopera-	International coopera-	International coope
operation will be	tion will be continued	international cooper-	tion will be continued	tion will be continued	tion will be continue
continued intensively	intensively:	ation through the de-	intensively:	intensively based on	intensively with owr
with funding from the		velopment of inter-		the type of organisa-	resources: New pro
		national clusters of		tion (i. e. school –	jects – new initiative







company's own re- sources. b) R&D projects are carried out interna- tionally with interna- tional funding.	 a) Ongoing exchange of know-how & experi- ences b) Joint events, courses, workshops etc. c) CoVE Hamburg will continue the Summer School with the CoVE Poland on a regular basis Financing: public at na- tional level and EU funding 	business support or- ganisations. Goal: Green Economy.	a) International pro- jects b) Student exchange c) Mobility exchange for teachers, staff	school, chamber – chamber). It will be financed by projects.	(e. g. student ex- change) – new net- works.
	educational measures th ct? How will you finance Continuing jointly de- veloped education and training measures. CoVE Dresden will continue intensively these trainings: a) Energy efficiency adviser training b) Building owner train- ing They will be financed via participant fees.	-	•	 BLOE project do you int Continuing jointly developed education and training measures. a) RSU: study module, no further funding needed. b) RSU: further development into study program, funding will be needed. c) LAK: Implementing curricula into master qualification training, possible individual qualification, and 	Continuing jointly de- veloped education and training measures. Among other things: a) Technician training "Green solutions in Logistics" b) Dual study "Green supply chains" Financing with na- tional funding and own contribution.







				d) LVT: Digital, green, and business man- agement themes have been worked into the curricula and will continue to be im- plemented.			
6th question	6th question						
Are you already plar	Are you already planning to develop and implement new support and educational measures after the end of the project? If yes,						
which ones and how	which ones and how will you finance them?						
 a) Further green tech trainings under development, e.g. PY-Domain b) Promotion Life- long Learning c) Master curriculum "Service Technician" d) Development of microcredit qualifica- tion certificates. 	CoVE Hamburg: New study program "Nurs- ing Science" (BSc), public financed.	 a) Increase and up- date curricula on green skills for work- ers and entrepre- neurs (manager in- cluded). b) Specific contents to answer specific needs for sustaina- bility in companies. 	a) Update dual studies programs b) New trainings for SMEs c) New VET Modules / Curricula.	Further development based on needs of the field.	Two new dual study programs: a) IT b) Security Sciences.		







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Three-level Centers of Professional Excellence: Qualification, Entrepreneurship, and Innovation in the Green Economy (3LoE)



Summary CoVE Austria

CoVE Austria (CoVE AU) is formed and supported by

- Institute for Applied Business Research of the Austrian Federal Economic Chamber
- Economic Development Institute of the Steiermark Chamber of Commerce (Coordinator of the CoVE)
- Campus 02 University of Applied Sciences of the Styrian Chamber of Commerce

All of these 3LoE partners are already organisationally linked to each other via the Chamber of Commerce, and a binding cooperation agreement has also been concluded. Other educational institutions and organisations, as well as numerous sectoral business associations and guilds from all over Austria are also involved at regional and national level, particularly via the chambers of commerce.

The CoVE AU has benefited greatly from the 3LoE project and international cooperation and has developed and implemented extensive further education programs, dual study programs and recognised further education qualifications at EQF Level 5. It has also carried out R&D projects with SMEs.

The CoVE and international cooperation will continue in the long term; funding has been secured. Further partners will be included in the cooperation in the future; some have already been specifically approached and have agreed to participate. The funding and education programs developed in the project will continue to be implemented after the end of the project. The development of new educational programs, including their financing, is already planned.

Summary CoVEs Germany

In the 3LoE project, only the development of a CoVE in Dresden was initially planned, which could be set up with the support of the project partners from Hamburg Hanse-Parlament (PP1) and Hamburg Vocational Academy (PP3). During the project implementation, a second CoVE was developed in Hamburg in Germany. Both CoVE cooperate intensively with each other.

Summary CoVE DE Dresden

At the start of the project, the Dresden Chamber of Skilled Crafts used national funding to build extensive new premises and technical equipment for an Energy Efficiency advice and training centre. This Energy Efficiency Centre - Competence Centre for the Green Economy was developed by the CoVE Dresden as part of the 3LoE project. The following partners are involved through binding cooperation agreements:

- Vocational School Centre for Technology "Gustav Anton Zeuner" Dresden
- EIPOS GmbH, an institution of the Technical University of Dresden
- Risa University of Cooperative Education







The CoVE Dresden works very closely with SMEs via the Dresden Chamber of Crafts. Consultancy and training programs (EQF Level 4 - 6) with a thematic focus on energy

efficiency have been developed and implemented.

At international level, CoVE Dresden has contributed its extensive experience, curricula, teaching materials, etc. in dual vocational training and master craftsman training. It has provided advice on the implementation of dual vocational training by other CoVEs in countries where vocational training has so far been predominantly schoolbased.

The long-term continuation of CoVE Dresden, including funding, the further implementation of the advisory and educational programs developed in the project and the development and implementation of new educational measures are assured. CoVE Dresden cooperates closely with CoVE Hamburg and will also continue its international cooperation with all other CoVEs and the 70 associated partners from 13 countries after the end of the project.

Summary CoVE DE Hamburg

As North German universities of applied sciences and universities were not prepared to offer dual bachelor's degree programs at the time, the Hanse-Parlament approved the establishment of the Hamburg University of Cooperative Education with the Hamburg Chamber of Crafts. The Hamburg University of Cooperative Education successfully runs dual study programs for SMEs and was involved in the 3LOE project as partner no. 3.

At the start of the project, the federal state of Hamburg decided to establish a state vocational university to run dual bachelor's degree programs, which began operating in 2023. The academic staff and degree programs of the Hamburg University of Cooperative Education were transferred to the new Hamburg Vocational University, which was included as a new partner in the 3LoE project.

The CoVE principles were anchored in a law on the foundation and operation of the Vocational University Hamburg. The Vocational University is obliged to cooperate with vocational schools and to implement educational programs together with SMEs as training partners on an equal footing. Chambers, associations, and other stakeholders are bindingly involved in the committees of the Vocational University Hamburg.

The CoVE, which is thus established on a legal basis, is dedicated to the following tasks:

- Implementation of dual vocational training (EQF Level 3 and 4) by vocational schools and SMEs with the support of the Vocational University.
- Development and implementation of further vocational training programs (EQF level 5 to 6) by vocational schools and other partners (chambers, associations, etc.) with the support of the Vocational University.
- Development and implementation of dual Bachelor's degree programs by the Vocational University together with the training partners companies and vocational schools.







In conjunction with dual Bachelor's degree programs, innovation promotion for companies by the Vocational University.

CoVE Hamburg has been very successful in developing and implementing dual study programs and carrying out R&D tasks. A new dual Bachelor program "Business Administration & Sustainable Management of SMEs" has been developed.

In international cooperation with the other CoVEs, CoVE Hamburg has contributed its extensive experience, curricula etc. to dual study programs. The existing dual study programs "Management of Renewable Building Energy Technology" and "Business Administration for SMEs" as well as four study modules "Green Economy" were prepared and transferred to the other CoVEs. CoVE Hamburg provided comprehensive advice on implementation in countries that previously had no dual study programs, such as Lithuania. The development and implementation of other new dual study programs by CoVE Austria, Latvia, Lithuania, and Poland were comprehensively advised and supported.

The continuation of CoVE Hamburg, including funding, has been secured. The further education courses and degree programs developed in the project will continue to be carried out. The development of new degree programs has already begun, and a new degree program is to be implemented from October 2024, or 2025 at the latest.

CoVE Hamburg has developed and implemented a summer school with CoVE Poland, which will be continued after the end of the project and expanded to other countries. The CoVE Hamburg plays a significant role and will continue to be active in the international cooperation with all CoVEs and the 70 associated partners after the end of the project.

Summary CoVE Italy

The CoVE Italy is formed and supported by:

- Trasferimento Tecnologico e Innovazione Scarl, a development, consultancy and education institution of the Northern Italian Chambers of Commerce and Industry
- Sistemi Formative Confindustria SCPA, a business association from Rome
- Vocational school Emilio Sereni in Rome (Coordinator of the CoVE)

Colleges and universities were not initially involved. The greater distance between the partner from northern Italy and the two partners from Rome may appear to be a difficulty at first glance, but it proved to be a stroke of luck. Several chambers of commerce and industry, other vocational schools and various universities were involved in CoVE Italy through cooperation agreements, resulting in a dense, active, large-scale CoVE network from northern Italy to Rome. Companies are intensively involved in all CoVE activities via this network.

CoVE Italy has dedicated itself to the following tasks in particular:

Developing and introducing dual vocational training in the agricultural sector with a particular focus on the green economy.







- Implementing comprehensive vocational training programs in cooperation with universities to a particularly high degree.
- Together with universities, implementing green economy study modules and preparing dual bachelor's degree programs.
- > Implementing R&D tasks for SMEs by the universities involved.

CoVE Italy is particularly interested in international cooperation with all CoVEs and has particularly benefited from the development and implementation of dual vocational training and dual courses of study, as well as from the transfer of continuing vocational training programs.

The long-term continuation of CoVE Italy with all partners has been secured, including the financing. Dual vocational training and further vocational training will continue, and the implementation of dual courses of study will be actively promoted. International cooperation will be stepped up; new development projects with CoVEs in other countries have already been prepared.

Summary CoVE Latvia

The CoVE Latvia is formed and supported by:

- Vocational school Profesionālās izglītības kompetences centrs "Liepājas Valsts tehnikums" (Coordinator of the CoVE)
- Latvian Chamber of Crafts
- Rigas Stradina Universitate
- Valsts izglitibas satura centrs (National Center for Education)

The cooperation is based on binding cooperation agreements, in which the Latvian Chamber of Commerce and Industry, Riga Technical University, Latvian University and other vocational schools have been involved as the project progresses. Intensive cooperation with companies is ensured via the participating chambers.

CoVE Latvia has dedicated itself to the following tasks in particular:

- Development and introduction of dual vocational training.
- > Development of vocational training programs together with other CoVEs.
- Transfer and implementation of vocational training and master craftsman training to a large extent.
- Development of a new dual bachelor's degree program "Entrepreneurship & Innovation in Green Economy", which will be implemented starting October 2024.
- > Development of political strategy programs and implementation of evaluations.

CoVE Latvia has strongly benefited from international cooperation, especially regarding the transfer of curricula and the implementation of dual vocational training, the transfer and implementation of continuing vocational training programs and the development and introduction of dual bachelor's degree programs.

The continuation of CoVE Latvia with all partners has been secured, including funding. Dual vocational training, continuing education programs, dual bachelor's degree courses and R&D projects with SMEs will be continued intensively. The development







and implementation of new further education programs for SMEs, as well as the transfer and implementation of further dual bachelor's degree courses are already being prepared. CoVE Latvia will also continue to cooperate intensively with the seven other CoVEs and the 70 associated partners from 13 countries after the end of the project.

Summary CoVE Lithuania

The CoVE Lithuania is formed and supported by:

- Vocational school Verslo ir svetingumo profesinės karjeros centras (Coordinator of the CoVE)
- Panevezys Chamber of Commerce, Industries and Crafts
- Panevezys University of applied science

The cooperation is based on a binding cooperation agreement, in which additional partners (professional associations, local industries, VET schools and universities) have been involved.

CoVE Lithuania has organised many regional conferences and workshops with companies and stakeholders, and has dedicated itself to the following tasks in particular:

- > Development, introduction, and implementation of dual vocational training.
- Development and implementation of specific dual training programs for young people with practical talents and theoretical weaknesses.
- > Development and implementation of vocational training programs.
- Transfer and implementation of a dual bachelor's degree program "Business Administration for SMEs" and development and implementation of a dual degree program "Electrical and Automatic Equipment."
- Realisation of R&D projects with SMEs.

CoVE Lithuania has been heavily involved in international cooperation with all other CoVEs and has particularly benefited from:

- > Transfer and implementation of dual vocational training.
- > Transfer and implementation of numerous further education programs.
- > Transfer and implementation of dual bachelor's degree programs.
- Joint development and international support in the development of curricula for dual vocational training, continuing vocational training and dual bachelor's degree programs.

The long-term continuation, including funding, of CoVE Lithuania has been secured. The dual vocational training, further training programs and dual bachelor's degree courses developed in the project will continue to be implemented in the future. An update of the dual bachelor's degree programs and the development and implementation of new further education programs for SMEs are already being prepared. The continuation of international cooperation with all other CoVE and the 70 associated partners from 13 countries is also assured. The realisation of international projects, student exchanges and teacher and staff mobility exchanges are planned.

Summary CoVE Poland

Co-funded by the Erasmus+ Programme of the European Union







The CoVE Poland is formed and supported by:

- Chamber of Crafts Szczecin
- Vocational school Zespół Szkół Mechanicznych i Logistycznych im. Tadeusza Tańskiego (Coordinator of the CoVE)
- University Akademia Pomorska w Słupsku

The cooperation is based on a binding cooperation agreement, which later included the Chamber of trade and industry Słupsk and the higher school of economy in Słupsk. The creation of an independent legal form for CoVE Poland is currently being examined.

CoVE Poland has dedicated itself to the following tasks in particular:

- Transfer and introduction of dual vocational training and development and implementation of dual vocational training programs "Electrician" and "Fitter of fixtures and fittings in building industry".
- New development and implementation of a five-year dual technician training program "Ecologic Solutions in Logistics".
- > Transfer and implementation of numerous vocational training programs.
- Transfer of the system of dual bachelor's degree programs and new development and implementation of a dual degree program "Logistics - Green Supply Chains".
- Development and implementation of a summer school together with the Hamburg University of Cooperative Education.

CoVE Poland is particularly involved in international cooperation and has benefited in particular from:

- > Transfer and implementation of dual vocational training.
- > Transfer and implementation of further education programs.
- > Transfer and implementation of dual Bachelor programs.
- International summer school.

The continuation of CoVE Poland is assured, including funding. All educational programs developed in the project will also be implemented in the future. The planning and preparations of two new dual study programs "IT" and "Security Sciences" as well as the development and implementation of a new five-year technician training program are already well advanced. The continuation of international cooperation with all other CoVEs and the 70 associated partners is also assured and will be financed with own resources. New projects, initiatives (e.g. student exchange) and networks are concretely being planned.

Summary CoVE Spain

The CoVE Spain is formed and supported by:

- Ministry of Education of Catalonia
- Vocational school Institut Pere Martell (Coordinator of the CoVE)







- Hanse-Parlament
- Sociedad General De Aguas De Barcelona S.A., a large national and international water management company that develops and organises many vocational training courses

The collaboration is based on a binding cooperation agreement. At the start of the project, no university or chamber of commerce was involved in CoVE Spain. In the course of CoVE's development, CoVE work was incorporated, and binding co-operation agreements were concluded with Tarragona Chamber of Commerce and Industry and with the Universitas Rovira i Virgili.

CoVE Spain has dedicated itself to the following tasks in particular:

- Transfer and introduction of the dual system of vocational training and development and implementation of the dual training program "Electromecanico".
- Transfer and implementation of additional qualifications for young people with strong learning skills during vocational training.
- Transfer and implementation of many further training programs in the green economy.
- Conducting manageable R&D projects for SMEs.

CoVE Spain is extensively involved in international cooperation with all other CoVEs and has particularly benefited from the transfer and introduction of the dual system of vocational training, the transfer of further training programs and from joint development work.

The long-term continuation of CoVE Spain, including funding, has been secured. Dual vocational training will be continued and extended to other professions, the further training programs developed will also be implemented in the future and the realisation of dual bachelor's degree courses will be examined together with the university involved in the CoVE.

CoVE Spain is very interested in international cooperation and will continue to be heavily involved in this in the future.

Experience with three-level CoVE

Three main actors (vocational schools, chambers, and universities) are involved in the work of the Centres of Vocational Excellence together with a wide range of local partners, such as other vocational education and training providers, enterprises, research centres, development agencies and employment services (among others). Together, they developed "competence ecosystems" that contribute to regional, economic, and social development and far-reaching promotions for SMEs.

All CoVE partners report that the cooperation between vocational schools, chambers and universities is extremely enriching with strong cross-fertilisation aspects. According to the experience of the project partners, the three-stage CoVE structure with the inclusion of universities and full cover of EQF levels 3 to 7 is essential for the following reasons.

To attract enough skilled workers and young entrepreneurs, the attractiveness of vocational education and training must be significantly increased. A central





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starting point for this is the creation of complete permeability between vocational and higher education as well establishing a framework which will allow the crediting and recognition of already acquired competences within various EQF level courses.

- More and more school leavers want to pursue higher education especially at the strong insistence of their parents. This massive demand for skilled workers has not been filled due to the general view that vocational further education degrees are considered by many to be "pseudo-university degrees", for example, comparing the vocational master craftsman training with the degree "Bachelor professional".
- The competence requirements for entrepreneurs and skilled workers are high and growing. However, SMEs are only able to attract a very limited number of new recruits from the large number of conventional courses study graduates, because although they are theoretically well qualified, they do not have the urgently required practical skills and professional experience. With dual courses of study, which combine vocational training with a bachelor's degree, or with trial courses of study, which combine vocational training, further education and higher education, SMEs can attract and gain the urgently needed next generation of highly qualified entrepreneurs and skilled workers and can overcome the excessive shortage in this respect.
- Traditional courses of study have high drop-out rates. In Germany, for example, the drop-out rate is over 30% on average and even reaches 50% in technical courses. In combined vocational and higher education courses, the dropout rates are demonstrably reduced. The remaining, much smaller proportion of dropouts in dual study programs obtain at least a vocational qualification.
- In several EU countries, for example in Poland and the Baltic states, the human, spatial and technical capacities for continuing education are severely limited. These existing bottlenecks can be overcome by involving colleges/universities in continuing vocational education and training.
- New learning content and methods need to be urgently implemented in vocational education and training. This makes it essential for universities to be involved in the corresponding development and implementation work, and for teachers to be appropriately qualified.
- In SMEs, there is a great need for research and development in general and for its realisation with the help of digital technologies. In this regard, colleges/universities must be strongly committed and make decisive contributions to solutions.
- Collaboration between universities and SMEs has been far too limited to date, and there is a great need for assistance and support in SMEs. In connection with dual courses of study, in which SMEs are equal training partners of the universities, comprehensive and precise innovation promotion of SMEs by universities can and must be realised at the same time.

