

# **INNOVATIVE PRACTICES IN DUAL EDUCATION**

A HANDBOOK FOR COMPANIES AND  
EDUCATIONAL INSTITUTIONS

**New Design University / Austria**

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## FOREWORD

New Design University is a private university owned by the Lower Austrian Chamber of Commerce (WKNO). This is a legal representative of the interests of more than 100,000 member companies in Lower Austria. Dual training is a fundamental component of WKNÖ and its companies. Teaching in companies and schools is the basis for the successful development of companies. One of the connecting zones between NDU and WKNÖ is the Manual & Material Culture bachelor's programme. In particular, the combination of the study course with the design craft should be mentioned here. With the instrument of "artistic aptitude", apprentices without a school-leaving examination can attend the course after having passed a positive entrance examination. This provides for an inhomogeneous student cohort, in which learning from one another already occupies an essential and fertile position. Craft skills are placed on an equal footing with traditional cognitive skills and create a stable foundation for the "thinking hand" of the designers of the future. These are thus equipped for the design work on moving targets of the future.

We are proud that our Head of Studies, Prof. Stefan Moritsch, and our research associate and sociologist, Julia Pintsuk-Christof, were able to deal intensively with the dual education in our region and beyond in the Alpine region to explore future possibilities and limits in the context of the EU-Interreg project DuALPlus. The further development of dual education from an academic and design perspective is a serious concern for us and we want to continue to offer modern training opportunities to professionally skilled people with creative talents and the need for professional development in the future.

Committed work and a critical examination of existing structures and regulations is the basis for development and innovation.

*Johannes Zederbauer*

Vice-Rector and Managing Director, New Design University

## SUMMARY

Improving educational systems requires rethinking what teachers do each day and this is particularly true with regard to dual education. Dual education systems are in fact complex systems where heterogeneous actors have to interact and coordinate together in order to guarantee the best learning experience possible.

The DuALPlus project represented a good occasion to study the key factors for bringing innovation and quality in dual education.

The presented Handbook is the result of this study. It outlines the **key results of the research, evaluation** as well as **activities** and **best practice examples** from the project. The Handbook is composed of 6 chapters: the first introduces the **project**, its **objectives** and **outputs**; the second presents an overview of **dual education systems in the six partner countries** thus to provide a better contextual understanding; the three subsequent chapters represent the key part of the study and the last one draws some final conclusions.

The core of the document is threefold: Chapter 3 reports the **results and recommendations from a need assessment/analysis** addressed to SME representatives and aimed at investigating the key factors needed to ensure high-quality training for apprentices; Chapter 4 shows **best-practice examples** of **innovative training activities** and programmes in the EU as well as in the nine partner regions; Chapter 5 is about improved existing training formats and new programmes developed and partly already tested and evaluated by six of the project partners during the project lifetime. It is, in fact, our strong belief that there is no innovation without experimentation. The same chapter therefore ends with a proposal for an **innovative tutor's training programme** partly based on the aforementioned experimentation and corresponding to current needs of potential apprentices, SMEs as well as the labour market.

Finally, the Handbook concludes with a **summary of recommendations for innovative practices** in dual education and includes an Annex where the **regional best practices and the training formats** are provided in the German, Italian, Slovenian and French languages.

## ZUSAMMENFASSUNG

Die Verbesserung der Bildungssysteme erfordert ein Überdenken dessen, was Ausbilder\*innen jeden Tag tun, und dies gilt insbesondere für die duale Ausbildung. Duale Bildungssysteme sind komplexe Systeme, in denen verschiedenartige Akteur\*innen miteinander interagieren und Abläufe und Inhalte koordinieren müssen, um die bestmögliche Lernerfahrung zu gewährleisten.

Das DuALPlus-Projekt war eine gute Gelegenheit, die Schlüsselfaktoren für Innovation und Qualität in der dualen Ausbildung zu untersuchen.

Das vorliegende Handbuch ist das Ergebnis dieser Studie. Es skizziert die **wichtigsten Ergebnisse der Forschung, Evaluierung sowie Aktivitäten und Best-Practice-Beispiele** aus dem Projekt. Das Handbuch besteht aus sechs Kapiteln: Das erste präsentiert das **Projekt selbst**, seine **Ziele und Ergebnisse**; das zweite stellt einen Überblick über **duale Bildungssysteme in den sechs Partnerländern** zur Verfügung, um so ein besseres kontextbezogenes Verständnis zu schaffen; Die drei folgenden Kapitel stellen den Hauptteil der Studie dar und das letzte zieht einige abschließende Schlussfolgerungen.

Der Hauptteil des Dokuments besteht aus drei Kapiteln: Im Kapitel 3 werden die **Ergebnisse und Empfehlungen einer an KMU-Vertreter\*innen gerichteten Bedarfsbewertung/-analyse** zur Untersuchung der Schlüsselfaktoren für eine qualitativ hochwertige Ausbildung von Auszubildenden vorgestellt; Kapitel 4 zeigt **Best-Practice-Beispiele für innovative Ausbildungsmaßnahmen** und -programme in der EU sowie in den neun Partnerregionen; Kapitel 5 handelt von verbesserten bestehenden

Ausbildungsformaten und/oder neuen Programmen, die von sechs Projektpartner\*innen während der Projektlaufzeit entwickelt und teilweise bereits getestet und evaluiert wurden. Wir sind überzeugt, dass es keine Innovation ohne Experimente gibt. Das gleiche Kapitel endet mit einem Vorschlag für ein **innovatives Ausbildungsprogramm für Tutor\*innen**, das teilweise auf den zuvor erwähnten Experimenten basiert und den aktuellen Bedürfnissen potenzieller Auszubildender, KMU sowie des Arbeitsmarktes entspricht.

Das Handbuch schließt mit einer **Zusammenfassung von Empfehlungen für innovative Praktiken in der dualen Ausbildung** und enthält einen Anhang, in dem die regionalen **Best-Practice-Beispiele und die Ausbildungsformate** in deutscher, italienischer, slowenischer und französischer Sprache bereitgestellt werden.

## SINTESI

I sistemi di formazione duale sono sistemi complessi in cui attori eterogenei devono interagire e coordinarsi tra di loro per garantire la migliore esperienza di apprendimento possibile.

Il progetto DuALPlus ha rappresentato una buona occasione per studiare i fattori chiave per sostenere l'innovazione e la qualità del sistema duale.

L'Handbook qui presentato è il risultato di questo studio e delinea, oltre ai **risultati chiave della ricerca e della valutazione**, le **attività** e gli **esempi di buone pratiche** emersi nel corso del progetto. L'Handbook si compone di 6 capitoli: il primo introduce il **progetto**, i suoi **obiettivi** e i **risultati**; il secondo presenta una panoramica dei **sistemi di formazione duale nei sei paesi partner** per fornire una migliore comprensione del contesto; i tre capitoli successivi rappresentano la parte fondamentale dello studio e l'ultimo riporta alcune conclusioni finali.

La parte centrale del documento affronta tre aspetti: il Capitolo 3 riporta i **risultati** e le **raccomandazioni emersi da una valutazione/analisi dei bisogni** rivolta ai rappresentanti delle PMI con lo scopo di studiare i fattori necessari per garantire agli apprendisti una formazione di alta qualità; il Capitolo 4 mostra **esempi di buone pratiche di attività e programmi di formazione innovativi** sia nell'UE sia nelle nove regioni partner; il Capitolo 5 riguarda il miglioramento di programmi di formazione esistenti e lo sviluppo di nuovi format in parte già sperimentati e valutati da sei partner nel corso del progetto stesso. È, infatti, nostra forte convinzione che non esista innovazione senza sperimentazione. Lo stesso capitolo si conclude quindi con una **proposta di formazione per i tutor aziendali**, basata in parte sulla suddetta sperimentazione e rispondente ai bisogni attuali dei potenziali apprendisti, delle PMI e del mercato del lavoro.

Infine, l'Handbook si conclude con una **sintesi delle raccomandazioni per le pratiche innovative nella formazione duale** e include un'Appendice che descrive le **migliori pratiche a livello regionale** e i **format di formazione** nelle lingue tedesca, italiana, slovena e francese.

## POVZETEK

Če želimo izboljšave na področju dualnega sistema izobraževanja, potem se moramo najprej vprašati, kaj je tisto, s čimer se učitelji/mentorji spopadajo in kakšen je njihov vsakdan. Dualni sistem izobraževanja je kompleksen sistem, kjer heterogeni akterji sodelujejo in se usklajujejo, da bi učencem zagotovili najboljšo učno izkušnjo.

Projekt DuALPlus je odlična priložnost za preučitev ključnih dejavnikov za spodbujanje inovativnosti in kakovosti dualnega izobraževanja.

Predstavljeni priročnik je rezultat te študije. **Poudarja ključne rezultate raziskave, evalvacijo**, kot tudi njene **aktivnosti in primere najboljših praks** iz projekta. Sestavljen je iz 6 poglavij: v prvem poglavju najdemo **osnovne informacije o projektu ter cilje in rezultate projekta**, drugo

poglavje predstavlja **pregled sistemov dualnega izobraževanja v šestih partnerskih državah**, z namenom lažjega razumevanje konteksta, sledi jedro dokumenta, sestavljeno iz treh poglavij in vsebuje ključne dele študije, v zadnjem delu pa so navedene zaključne ugotovitve.

Kot omenjeno, je jedro dokumenta sestavljeno iz treh poglavij: v 3. poglavju najdemo poročilo o **rezultatih in predlaganih priporočilih**, pridobljenih na podlagi ocene oziroma narejene analize potreb malih in srednje velikih podjetij (v nadaljevanju: MSP) in katere namen je bil raziskati ključne dejavnike, potrebne za zagotovitev visokokakovostnega usposabljanja vajencev; Poglavje 4 prikazuje **primere najboljših praks inovativnih dejavnosti in programov usposabljanja** v EU in v devetih partnerskih regijah; Poglavje 5 govori o **izboljšanih obstoječih oblikah usposabljanja in novih programih**, ki jih je v času trajanja projekta razvilo in delno že preizkusilo in ocenilo šest projektnih partnerjev (prepričani smo, da brez testiranja novosti ni inovacij). Poglavje se konča s predlogi za inovativni program usposabljanja mentorjev, ki ustreza trenutnim potrebam vajencev, MSP in zahtevam na trgu dela.

Na koncu priročnika je tudi **povzetek s priporočili za inovativne prakse** v dualnem sistemu izobraževanja in vključuje priložo, z najboljšimi **praksami iz posameznih regij ter različni formati usposabljanj** v nemškem, italijanskem, slovenskem in francoskem jeziku.

## SOMMAIRE

L'amélioration des systèmes éducatifs nécessite une actualisation des missions et tâches quotidiennes des enseignants, notamment pour l'alternance. En effet, ce mode d'enseignement dual nécessite l'interaction de divers intervenants qui doivent se coordonner afin d'optimiser la formation, ce qui le rend plus complexe.

Le projet DuALPlus a été une bonne occasion d'étudier les facteurs clés d'amélioration et d'innovation de la qualité dans cette éducation duale.



Le Manuel présenté est le résultat de cette étude. Il décrit les principaux résultats des travaux de recherche, d'évaluation et d'élaboration de bonnes pratiques engendrés par ce projet. Il comprend 6 chapitres

- Le premier présente le projet, ses objectifs et ses résultats
- Le second présente une vue d'ensemble des systèmes d'éducation duale dans les six pays partenaires, afin de fournir une meilleure compréhension contextuelle
- Les trois chapitres suivants constituent l'élément clé de l'étude et le dernier tire quelques conclusions finales :

**Le chapitre 3** présente les résultats et les recommandations d'une évaluation/analyse des besoins adressée aux chefs d'entreprises (maîtres d'apprentissage) et vise à identifier les facteurs clés nécessaires à une formation de haute qualité pour les apprentis.

**le chapitre 4** présente l'excellence à partir d'exemples pratiques d'activités et de programmes de formation innovants dans l'UE ainsi que dans les neuf régions partenaires;

**le chapitre 5** traite de l'amélioration des formats de formation existants et des nouveaux programmes développés et, pour certains, déjà testés et évalués par six partenaires du projet pendant toute sa durée. Globalement, nous sommes convaincus qu'il n'y a pas d'innovation sans expérimentation, ce qui nous amène à finaliser ce chapitre en proposant un programme de formation des tuteurs innovant, élaboré à partir de l'expérimentation de nouveaux modules et répondant à l'évolution des besoins des apprentis, des entreprises et du marché du travail.

Enfin, le manuel se termine par une liste de recommandations liées aux pratiques innovantes en matière d'apprentissage et comprend une annexe dans laquelle les meilleures pratiques régionales et les formats de formation sont fournis en allemand, italien, slovène et français.



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## 1. INTRODUCTION

The present handbook was developed as part of the EU Interreg project “DuALPlus – Promoting excellence in dual education”, which ran from 2018 to 2021. It is the output of one of the three main parts of the project, which focussed on innovation and quality in dual education.

### 1.1. ABOUT THIS HANDBOOK

The handbook outlines the key results of the research, evaluation and activities and presents best practice examples from the DuALPlus project. It shows the innovative capacity of dual education in the crafts and trades sector in the Alpine Space.

The handbook is addressed in particular to SMEs and professional associations in the crafts and trades sector. A further target audience is educational institutions, for which it provides suggestions and recommendations to enhance the value and quality of dual education and training as well as transferable and replicable examples.

To provide a better contextual understanding, the publication starts by briefly introducing the DuALPlus project. Next, the dual education systems of the six Alpine countries involved in the project are described. The following section outlines the key results and recommendations of a needs assessment analysis and evaluation of existing training formats conducted with SMEs in the crafts and trades sector. The handbook then focusses on researched best practice examples of dual education and training in the Alpine countries. On the basis of this research, six innovative training formats were developed, which are presented in chapter 5. The second part of this chapter introduces the proposal for an innovative tutor’s training programme, which was developed as part of the project.



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The handbook concludes by providing guidelines for activities to improve the value and quality of dual education and training.

The “communities of practice” are another important activity related to innovation and quality in dual education that had an impact on other tasks. These working groups consisting of different stakeholders (e.g. master crafts(wo)men, trainers, tutors) were established in each of the project regions and actively contributed to current project processes. During regional meetings, they supported the project team with collection of data, interpretation of results and development of policy suggestions as well as innovative training formats.

## 1.2. THE DUALPLUS PROJECT

Since this handbook is the output of a project, it is important to give a short overview of the project to provide the context in which it was developed.

Policymakers and stakeholders at the national and EU levels recognise the important role of dual education in addressing difficulties in the transition phase from education to work, improving the skills supply and fostering entrepreneurship and innovation. However, countries in Europe and the Alpine Space are in very different starting positions. Even well performing dual education systems face challenges, such as engaging employers, inclusion of marginalized groups, demographic change and innovation and adaptation to new professional realities. One of the strengths of the Alpine economy is its strongly rooted tradition in the skilled crafts and trades sector. In order for SMEs in this sector to remain competitive, they need a skilled workforce that is able to keep up with technological, social, business and design innovations. Yet SMEs in this field find it increasingly difficult to find new apprentices.

DuALPlus broke new ground to address these challenges as well as to increase the attractiveness of dual education for skilled crafts and trades in the Alpine Space. The outputs and results of the project will directly benefit young individuals who choose a career in the skilled crafts and trades

sector. They will also benefit SMEs, tutors and master crafts(wo)men who want to upgrade their teaching and technical skills.

The project brought together SMEs, educational institutions, business support organisations such as handicraft clusters and chambers of commerce, universities and design institutes and regional public authorities from six Alpine countries: Regional Development Vorarlberg eGen (AT), New Design University (NDU), St. Pölten (AT), Technical University of Applied Sciences Rosenheim (DE), Chamber of Trade and Crafts for Munich and Upper Bavaria (DE), Autonomous Province of Trento (IT), Ivh-Education and Service cooperation (IT), Chamber of Craft and Small Business of Slovenia, Auvergne-Rhône-Alpes Regional Chamber of Crafts (FR) as well as Valais School of Art (CH). New Design University was the leader of the activities on innovation and quality in dual education.

The **project regions** include **Vorarlberg** and **Lower Austria/Vienna** in Austria, **Bavaria** (Munich and Rosenheim) in Germany, the autonomous provinces **Bolzano** and **Trento** in Italy, **Slovenia**, **Auvergne-Rhône-Alpes** in France as well as **Switzerland**.

### 1.3. OBJECTIVES AND OUTPUTS

DuALPlus pursued three objectives. First, the project aimed to improve career guidance of young people and public recognition of dual education as a valuable learning path. Second, it strived to promote innovation and quality in dual education. Finally, it attempted to enhance the framework conditions for innovation by increasing the horizontal and vertical permeability of the dual education system.

To reach these goals, the project was divided into three work packages resulting in the following outputs drawn up by the nine partners:

- ▶ **Multilingual career guidance toolbox** for organisations, coaches and trainers that provide career guidance for young people
- ▶ **Handbook on innovative practices** in dual education presenting key results and best practice examples from the project
- ▶ **Policy suggestions** for increasing the horizontal and vertical permeability of dual education in the Alpine Space

- ▶ **Catalogue of modules** facilitating permeability in higher education in order to ease the transfer of the modules in the Alpine Space

The outputs are available at the project homepage: <https://www.alpine-space.eu/projects/dualplus/en/project-results>.

Furthermore, they are presented on an **online platform** catering to the specific needs of SME masters, trainers, teachers and advisors: [www.duaeducationfinder.eu](http://www.duaeducationfinder.eu).

## 2. DUAL EDUCATION IN THE ALPINE SPACE

To provide the context for the results of the surveys and expert interviews, it is necessary to describe the dual education systems of the partners' countries.<sup>1</sup>

### 2.1. AUSTRIA

Austria is composed of nine provinces with a certain level of autonomy. The federal government has the main responsibility for the vocational education system.

The success of the dual system is the result of a process involving many institutions and bodies at different levels. At the federal level, the Federal Ministry for Digital and Economic Affairs as well as the Federal Ministry for Education, Science and Research are significant. The latter defines the curriculum and partially finances the vocational schools. Each region has an Apprenticeship Office located at the Regional Economic Chamber but subordinate to the Federal Ministry for Digital and Economic Affairs.

Regional governments provide the financial resources for building and maintaining the vocational schools, purchasing equipment, machinery and teaching materials and (together with the federal government) co-fund the salaries of teachers and trainers. Companies and workers participate in the dual system through several bodies.

At the local level, businesses hire apprentices. The on-the-job training is delivered by authorised trainers or instructors. Vocational schools provide general and theoretical training as well as some practical training.



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<sup>1</sup> Source: INAPP (2019) Dual systems in the Regions of the Alpine Space. Final report. Trento.

Before businesses can hire trainees, they have to show they meet the legal requirements for suitable machinery and equipment as well as for the skills of the trainers or instructors providing the on-the-job training. The trainer may be the entrepreneur or another employee appointed by him or her. Trainers are required to have professional expertise in the specific trade or in a similar one and to have passed the initial training instructor examination.

Businesses can choose to train apprentices as part of training alliances with other companies as well. Since 2009, it has been possible to complete an apprenticeship through a supra-company training model if a student is not able to find a placement in a company.

Beyond the on-the-job training, the trainees have to attend a vocational school for one to one and a half days per week, i.e. for 20% of the time. Coursework at the vocational school can also be blocked, e.g. for eight consecutive weeks per year<sup>2</sup>. Curricula of vocational schools contain mainly basic knowledge and skills related to the chosen occupation. Though the curricula are defined at the federal level, the schools are allowed a certain degree of autonomy.

The apprenticeship period ends with a leaving (practical as well as theoretical) examination, which verifies that the trainee has properly acquired the required skills.

## 2.2. GERMANY

Germany is composed of 16 federal states that include three city-states with a level of autonomy. While education is regulated by the ministries of the regions, vocational and on-the-job training is a federal level responsibility.

Multiple bodies are involved in the dual system. At the federal level, the Ministry for Education and Research plays a coordinating role to ensure the system is consistent, while the Federal Ministry for Economic Affairs and Energy and other sector ministries act in agreement with the Minis-

try for Education and Research. The dual system is also supported by the Federal Institute for Vocational Education and Training.

Further, chambers of industry and commerce, handicrafts and agriculture ensure the success of the dual system. These associations with compulsory membership of the sector companies are established at a regional level with the organisation acting at a federal level as the association of German Chambers of Commerce and Industry and the German Confederation of Chambers of Skilled Crafts.

The competent bodies supervise the functioning of the dual system at the sector and territorial levels.

Before hiring apprentices, businesses have to meet certain requirements assessed by competent bodies. Since they have to be able to make trainees develop all the skills included in the training regulation, certain working processes and equipment have to be available. Further, an instructor with appropriate professional and pedagogical skills must be available. Instructors are required to have professional expertise in the specific trade or a similar one and to have passed an aptitude examination.

For on-the-job training, a detailed training plan based on the provisions of the training regulation is generally elaborated. Businesses can integrate more subjects and skills as well as provide additional qualifications. While large companies sometimes establish company training centres for their apprentices, instructors of small and medium companies often deal with apprentices in addition to their work. Competent bodies monitor the on-the-job training progress and offer counselling and support services for instructors.

In addition to the on-the-job training, trainees acquire the necessary theoretical and practical skills for their occupation at vocational schools. They attend school one or two days per week or in blocked weeks during the year. The general curriculum is agreed at federal level, but can be adapted.

The apprenticeship period finishes with a leaving examination that must be passed to obtain the qualification certificate.

<sup>2</sup> Scheduled in certain periods of the year for particular trades that are highly seasonal

### 2.3. ITALY

In Italy, a Type-1 apprenticeship<sup>3</sup> is based on multilevel governance. The main institutional actors are the state, the Ministry of Education, University and Research (MIUR) and the Ministry of Labour and Social Policies (MLPS) at the national level as well as the regions and autonomous provinces of Trento and Bolzano.

The state defines basic principles as well as minimum training standards that the regions must meet as they execute their specific competences related to the vocational education and training system. The cooperation between MLPS and MIUR ensure the general coordination, monitoring and assessment of the implementation of strategies and objectives set out in Type-1 apprenticeship legislation.

Regions have a simultaneous legislative power for education and an exclusive one for vocational training. The regions as well as the autonomous provinces of Trento and Bolzano are responsible for the Type-1 apprenticeship. Social partners are important as well, and they are appointed in tripartite commissions which define strategies and programmes concerning education and labour policies.

Before hiring apprentices, employers have to meet certain requirements, such as structural capacity, technical capacity and training capacity. The third includes the availability of one or more on-the-job tutors (instructors). However, there is no defined accreditation procedure for companies yet.

The apprenticeship training is organized into on-the-job training periods and off-the-job training periods. Curricula agreed upon by the training institutions as well as the employers are designed in view of specified national standards together with regional standards and implemented following this prior agreement. The training institutions and companies elaborate the individual training plan.

<sup>3</sup> Apprenticeship for vocational qualification and diploma. See Cedefop Database for more information.

The length of the training at the training institutions is prescribed by law. For regional vocational education and training paths, the off-the-job training cannot be more than 60% of the time established for ordinary courses in the first and second years and 50% in the third and fourth years.

The apprenticeship leaving examinations as well as the issuance of qualifications and certificates are conducted in accordance with legislation on the ordinary upper-secondary school and regional vocational education and training paths.

### 2.4. SLOVENIA

In Slovenia, the governance of the vocational and technical education programmes involves the state's central administration, the Ministry of Education, the Ministry of Labour, the Ministry of Economic Development, Chambers of Commerce, Industry and Craftsmanship and trade unions at the national level as well as businesses and schools at the local level. The Council of Experts of the Republic of Slovenia and in the Sector Committees for Occupational Standards act as social partners.

The basis for vocational education, occupational standards are updated every five years in response to the needs of the labour market. Normally, a vocational education programme refers to more than one standard and integrates general subjects as well. According to INAPP (2019), the educational and business sectors disagree on this point.

The Slovenian Institute for Vocational Education and Training is another body entrusted with important functions in the field of apprenticeship by the 2017 law. The institute acts in cooperation with experts on training and work and is in charge of tasks such as definition of system solutions for the development of the apprenticeship, coordination of the drawing up of the catalogues of knowledge and skills, promotion of development and dissemination of teaching materials or the monitoring and evaluation of the effectiveness of the system and the quality of the vocational training.

Vocational schools and businesses cooperate to guarantee the quality of training. Employers are responsible for the quality of on-the-job training, while the schools are responsible for the quality of school training.

On-the-job-training can be partially provided by intercompany training centres, which are organised by professional schools so students and local businesses can improve their technical capacities and skills. These centres are especially important when trainees are not able to develop all the skills required by the workplace. Businesses and vocational schools design training plans for the apprentices cooperatively and define the ways of cooperation.

The length of training cannot be longer than 8 hours per day and 36 hours per week. During school holidays, trainees have the possibility to attend on-the-job training provided that the employers can ensure the apprentices have at least six consecutive weeks of summer holidays and at least eight days of holidays throughout the year.

Though the apprenticeship training takes place in several learning venues (school classrooms and laboratories, the company, intercompany training centres), the training institutions are responsible for the final examinations. They are planned on the basis of the reference legislation on vocational education and training.

## 2.5. FRANCE

In France, the apprenticeship system is regulated by the state, the region, trade unions and employers' associations, jointly with other actors and intermediaries such as the Chambers of Commerce and Industry, Chambers of Craftsmanship and Agriculture as well as the bodies that collect taxes intended to fund the apprenticeship. According to INAPP (2019), the collaboration among these bodies as well as the mechanism of collection and provision of the resources dedicated to the apprenticeship are considered very complex, heterogeneous and dysfunctional.

The 2018 reform act has greatly changed the governance and management system of vocational training and apprenticeships. Further, the

system for funding apprenticeships has been simplified and centralised. New bodies will be responsible for funding training centres according to the number of apprentices participating in training and will have to enhance their provision of technical support to sectoral social partners as well as to companies.

At the regional level, the strategic framework and the policies for the development of vocational training and guidance will still be defined in the Regional Training and Vocational Guidance Development Plan Contract, which is valid for multiple years and structured on an annual basis. Such contracts are developed in the framework of the Regional Employment and Vocational Training Coordination Committee, which is composed of state representatives, representatives of regional assemblies, trade unions and employers' organisations as well as regional chambers of agriculture, commerce, industry, and craftsmanship. Trainees are required to take part in a training period in a business as well as a training centre for apprentices (CFA).

Before hiring apprentices, companies have to complete a declaration in which they certify the adequacy of the facility, equipment and security conditions on the basis of the needs for the apprentice's training. In this declaration, they also have to confirm that there is an apprenticeship instructor within the organisation or the team that has the pedagogical and professional skills required to mentor the trainee.

It is compulsory that each apprentice is trained by an instructor, who can be either the entrepreneur or an employee of the business entrusted with the task of coordinating the training team and the relationship with the CFA. The instructor has to be able to guide the trainee in the company and transfer her/his own expertise.

The 2018 reform act established that the trainees' number of hours for the external training at a CFA must be equal to at least to 25% of the total apprenticeship period.

Regarding the training plan, CFAs and training enterprises are responsible for making the standards of qualification an operational reality. At



the end of the apprenticeship period, trainees have to pass an examination to achieve their qualification.

## 2.6. SWITZERLAND

Switzerland is composed of 26 cantons with a certain level of autonomy. Cantons are the bodies primary responsible for education; the federal recognition of A-level certificates is governed by a confederation-cantons agreement. In consultation with the cantons and the economic sector, the confederation is entrusted with the legislative competence on vocational training. The federal training competence is assigned to the Secretariat for Training, Research and Innovation. Cantons participate in the definition and implementation of training policies through the Conference of Cantonal Ministers of Education.

The Vocational Training Act in cooperation with the Ordinance on Vocational Education and Training constitutes the legislative framework regulating all basic and tertiary vocational training and lifelong training.

At the cantonal level, there are 26 offices in charge of implementing vocational training which coordinate their activities as part of the Conference of Swiss VET Offices. Cantons manage vocational schools that provide opportunities for apprenticeships, full-time training programmes and preparatory courses for vocational baccalaureates.

The Swiss dual system includes training in the training companies that hire the apprentices, training in the vocational schools and additional training in sector intercompany courses.

Before offering apprenticeship opportunities, companies have to meet requirements such as suitable environments for training, instructors who meet the requirements prescribed by the regulations and attendance of the 40-hour training course. Additional requirements can also be provided for the accreditation issue at the cantonal level.

The objectives and content of on-the-job-training are established in the on-the-job training plan drawn up on the basis of the regulation. Instruc-

tors share the individual learning objectives with the trainees and provide them in a report.

The curricula of the vocational schools provide basic training and vocational knowledge as well as workshops for practical training. Each semester the apprentices receive evaluation notes reported in the school diary. These evaluations are important for the final examination.



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### 3. TRAINING NEEDS OF SMALL AND MEDIUM ENTERPRISES

As one part of the project DuALPlus, a needs assessment was conducted of in-company trainers. The aim was to identify what companies need to ensure high-quality training for apprentices. New social, technological and organisational work realities and their influence on dual education were taken into account.

This chapter gives an overview of the methodology, sample and key results of the analysis.

#### 3.1. METHODOLOGY AND SAMPLE

The methodology of the needs assessment consisted of an anonymous online survey addressed to master crafts(wo)men, trainers and tutors in SMEs (as the analysis pays particular attention to their perspectives) and qualitative expert interviews with SME trainers and tutors in each of the partner regions.

The results of the needs assessment are based on the responses of 342 training companies and 51 interviews with trainers. The project team focused on SMEs that had already launched and experimented with dual education schemes as the target group for the survey and expert interviews. In the expert interviews, the partners talked to SME trainers and tutors in decision-making positions in training, for example masters in higher positions if possible in the partner region.

#### 3.2. KEY RESULTS AND RECOMMENDATIONS

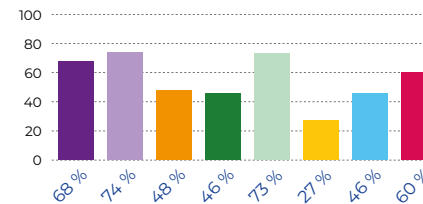
In spite of their different dual education systems (see chapter 2.2.), the partner regions partly struggle with similar challenges, which give insight into SME needs in the Alpine Space. While representatives of com-

panies emphasized the **link between theoretical and practical learning**, the **possibility of earlier entry on the labour market** as well as of **gaining work experiences and a sense of responsibility at a younger age** as positive aspects and strengths of dual education, they also referred to several critical issues and weaknesses. This section presents the key results and derives recommendations from a transnational point of view.

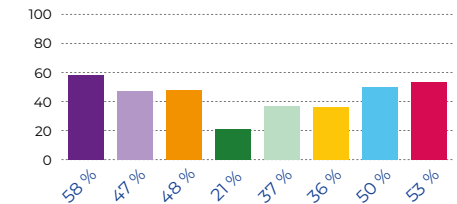
### 3.2.1. IMAGE AND VALUE OF AN APPRENTICESHIP

In the questionnaires as well as the expert interviews, the image problem of dual education in the Alpine Space was frequently discussed. The value of vocational training in crafts in particular appears to be underestimated in the partner regions, where parents and young people prefer higher education. Taking this issue into consideration, the SME representatives were asked which actions could be worked on to improve the attractiveness of dual education.

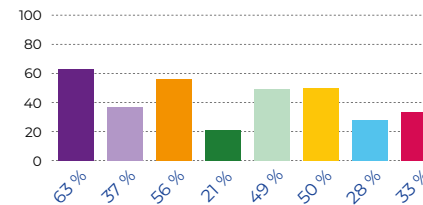
Strengthening the "image" (av. 55%)



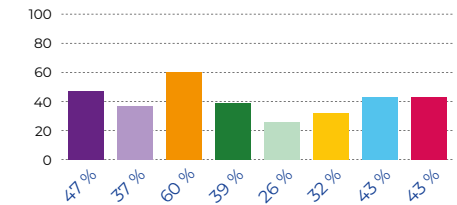
Enhancing attractiveness for families and young people (av. 44%)



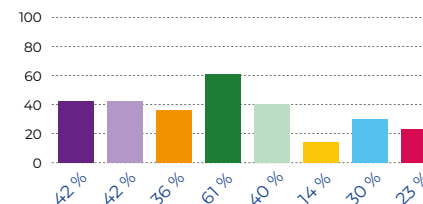
Improving attractiveness for youngsters (av. 42%)



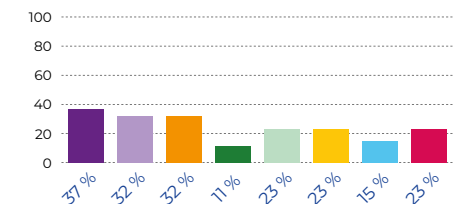
Developing guidance opportunities for young people (av. 41%)



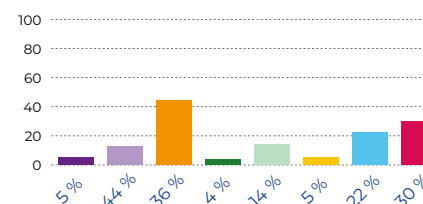
Increasing the number of education places (av. 36%)



Promoting opportunities (av. 24%)



Activating actions for matching apprentices/trainees and places available (av. 17%)



Improving attractiveness for companies (av. 18%)

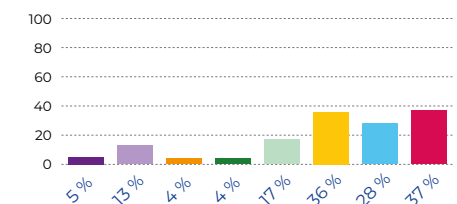


FIGURE 1: In order to improve the attractiveness of apprenticeship / Dual education system, which could be actions to work on? (Multiple answers possible)

- AUSTRIA/VORARLBERG
- AUSTRIA/VIENNA-LOWER AUSTRIA
- GERMANY/BAVARIA
- ITALY/TRENTO
- ITALY/BOLZANO
- SLOVENIA
- FRANCE
- SWITZERLAND

Source: Lime Survey, personal computation.  
Answers are ranked by average; other answers than the options shown av. 3 %.

The priority actions are similar in the partner regions. The strengthening of the image and value of dual education (average 55%) goes hand in hand with enhancing the attractiveness of dual education for families and young people (average 44%) as well as improving the attractiveness for young people (average 42%) in particular. The participants made a few suggestions for possible actions to increase the attractiveness of dual education, such as making it possible to combine vocational training with higher education (e.g. high school diploma), greater promotion of job information events and fairs, web portals for dual education formats or vocational orientation (e.g. as a school subject) in schools (levels 1 and 2). Furthermore, it could be promising to work on the guidance for students in transition between different school levels. Not least, presentations of success stories as well as case studies of successful crafts(women) could lead to a more positive image of dual education.

Increasing the number of education places is important in the autonomous province Trento (61%), Vorarlberg (42%) and Vienna and Lower Austria (42%). The development of guidance opportunities for young people is an issue especially in Bavaria (60%), France (44%) and Switzerland (43%). Promoting opportunities for dual education is central in Vorarlberg (37%), Bavaria (32%) and Vienna and Lower Austria (32%).

Improving the attractiveness for companies to train young people is an issue primarily in Switzerland (37%), Slovenia (36%) and France (28%). Respondents suggested offering SMEs more financial incentives to provide themselves as training companies.

## KEY RESULTS

The main issue discussed in each partner region was the poor public image of dual training in general and of crafts and trades in particular. In several countries, an increase in academic education can be observed, indirectly supported by schoolteachers and parents who encourage young people to work toward a higher education. Tertiary education and university degrees are considered a guarantee for a secure and well-paid job as well as multiple career possibilities. Furthermore, certain professions and trade industries have a low public reputation. Especially teenagers are not familiar with diverse professions. As a result, in countries like Austria,

primarily weaker students choose a dual education while more committed ones receive high school diplomas and attend universities. Another issue in this context is the lack of interest in completing an apprenticeship, which was described by SME representatives from Slovenia and Austria. Thus some trainees seem to consider education to be a stopover on career paths.

### Recommendations for improving the attractiveness of an apprenticeship:

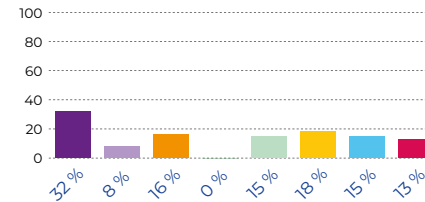
- ▶ Improve the public image of an apprenticeship and especially crafts and trades as well as media visibility (e.g. of certain initiatives, apprentice competitions)
- ▶ Create awareness of the value of dual training as well as crafts and trades by actions specifically addressed to teenagers, schools and parents (e.g. presentations of careers and further education options at schools or job fairs)
- ▶ Better promote job information events and fairs, web portals for dual education formats or vocational orientation in schools (levels 1 and 2)
- ▶ Encourage companies to invite students to get to know crafts and trades better and to try out different techniques (e.g. open days, internships, pre-apprenticeships)
- ▶ Increase the range of training places for potential trainees
- ▶ Make it possible to combine vocational training with higher education (e.g. high school diploma)
- ▶ Raise the wages of apprentices

### 3.2.2. QUALITY OF THE DUAL EDUCATION SYSTEMS

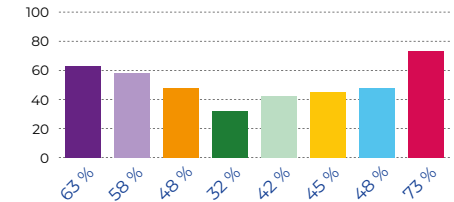
Another issue identified by the data gathering was guaranteeing dual education and training. The respondents from the partner regions mentioned certain actions to work on to ensure the quality of the dual education system, especially in light of changes in production systems and labour markets.

The priority actions are similar in the partner regions. Promotion of actions to increase the quality of training (average 51%) as well as implementation of more effective procedures for curricula updating (average 51%) are especially relevant in all partner regions. Other frequently mentioned actions were providing in-service training opportunities for teachers and trainers (average 35%) and redefining the balance between basic (key) and job-related skills (average 32%).

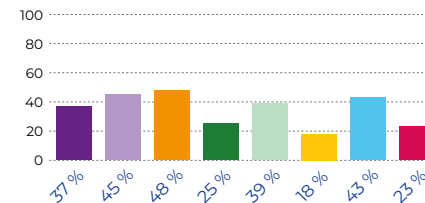
**Increasing the number of apprenticeship/ dual education pathways** (av. 15%)



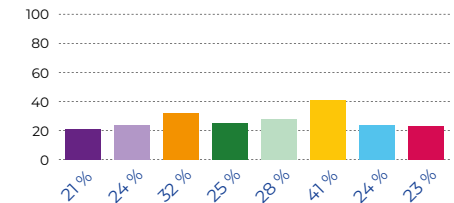
**Promoting actions to increase the quality of the training** (av. 51%)



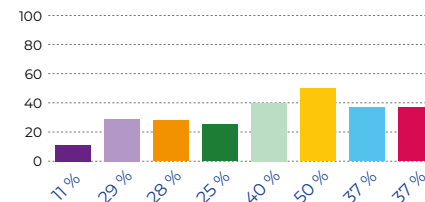
**Providing in-service training opportunities for teachers and trainers** (av. 35%)



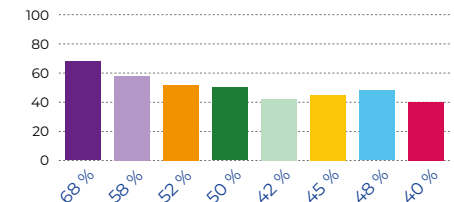
**Providing adequate funding and support services to the training providers** (av. 27%)



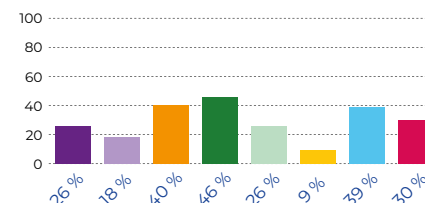
**Redefining the balance between basic (key) and job-related skills** (av. 32%)



**Implementing more effective procedures for curricula updating** (av. 51%)



**Strengthening skills-needs analyses on new occupations/ job profiles** (av. 29%)



**FIGURE 2: Which actions could be worked on to ensure the quality of the dual education system in light of changes in production systems and labour markets? (Multiple answers possible)**

- AUSTRIA/VORARLBERG
- AUSTRIA/VIENNA-LOWER AUSTRIA
- GERMANY/BAVARIA
- ITALY/TRENTO
- ITALY/BOLZANO
- SLOVENIA
- FRANCE
- SWITZERLAND

Source: Lime Survey, personal computation.  
Answers are ranked by average; other answers than the options shown av. 3 %.

Strengthening skills-needs analyses of new occupations and job profiles is important in Trento (46%), Bavaria (40%) and France (39%). Providing adequate funding and support services to the training providers is an issue primarily in Slovenia (41%), Bavaria (32%) and Bolzano (28%). Increasing the number of dual education pathways is desired in Vorarlberg (32%), Slovenia (18%) and Bavaria (16%).

Other measures included greater financial support of training companies, stronger promotion of training in the regions, revision of school curricula with regard to SME needs and the strengthening of crafts and trades.

### KEY RESULTS

SME representatives are mainly satisfied with the dual training system in their regions. Challenges are seen in the partial lack of cooperation between vocational schools and companies, the level of bureaucracy and standardization as well as limited government support.

The current dual education systems are primarily oriented to young people. SME representatives mentioned that their trainees are mainly male, 14 to 25 years old, and predominantly teenagers. Most of them have completed secondary or tertiary school as their highest level of education. Candidates older than teenagers as well as trainees with university entrance qualification are the most sought out target groups. The majority of SME representatives wish to win over more people as trainees in the future.

### Recommendations for improving the quality of dual education systems:

- ▶ Reform vocational school curricula to meet the present needs of the labour market and of companies (e.g. upper general education, improvement of technical skills, use of modern equipment)
- ▶ Redefine training objectives in alignment with the demands of the labour market and of companies (e.g. balance between basic and job-related skills)
- ▶ Greater balance between standardization of dual education and autonomy of companies (e.g. the limited choice of vocational schools in Austria)

- ▶ Support talented students and trainees who are socially disadvantaged
- ▶ Support apprentices with language barriers
- ▶ Provide adequate funding and support services to the training providers (e.g. higher financial support, support in administrative issues)
- ▶ Provide in-service training opportunities for teachers and trainers
- ▶ Increase the number of dual education pathways
- ▶ Improve dual training possibilities for adults and potential candidates with a higher education
- ▶ Improve mobility programs for apprentices as well as encourage them to broaden their perspectives and acquire work skills abroad
- ▶ Develop mobile programs for adult trainees as well as skilled workers

### 3.2.3. IMPROVEMENT OF THE DUAL EDUCATION PROCEDURE

To obtain a complete picture of the evaluation and demands of SMEs in the Alpine Space, it was important to take into account issues concerning both the dual education procedure and the cooperation between companies, schools and trainees.

On the average, 60% of the respondents are involved in the final assessment of their trainees, 47% participate in trilateral meetings between companies, schools and trainees and 45% are involved in the development of individual training plans.

As the dual education procedures in the partner regions differ considerably, the following results are those on the national level.

Most respondents from the Austrian region **Vorarlberg** participate in trilateral meetings and describe the communication between the companies, schools and trainees as being mainly good. However, it is desired that the parents of the younger trainees are better integrated.

In case of difficulties, the local economic chamber provides sufficient support. Educational support (e.g. coaching) can be organized by the chamber as well. A main challenge for SMEs is the lack of interest of many parents in the training of their children.

The respondents would find it enriching to obtain more insight into the training in other companies. SMEs could exchange experiences and broaden their perspectives. Some companies offer their trainees an individual training plan and expand it in response to the needs of the labour market. Most of them try to make the training as attractive as possible, e.g. by offering a bonus for good performance in the SME or at school.

Besides encouraging exchange with other companies, the respondents suggested creating a platform where all information and materials relating to vocational training are available. Furthermore, there should also be the opportunity for counselling meetings.

About half of the respondents from **Vienna and Lower Austria** participate in trilateral meetings (53%) and are involved in the development of individual training plans (45%) and/or in the final assessment of the trainees (45%).

Certain responses to the survey mentioned some difficulties in the cooperation between SMEs and trainees or their parents. Some crafts (e.g. orthopaedic shoemaker) are less known, while more traditional professions (e.g. carpenter) have greater visibility among teenagers in particular. Another problem in Vienna and Lower Austria is the negative image of dual education in general and training in crafts specifically. As a result, many parents seem to assume that their children need a higher education to find secure and well-paid employment. School teachers often share this attitude and show little interest in providing information about and promoting vocational training.

The respondents described a declining educational level in vocational schools, especially concerning mathematics. From the view of the SMEs, teaching content in the schools is rarely coordinated with the needs of the companies. Another problem mentioned was the lack of support for teenagers with language barriers.

Other concerns relate to the dual education system in Austria. First, the value of the training depends to a significant degree on the technical equipment of the SMEs as well as the professional and personal competences of the employees and human resource managers. Second, the Austrian law on the protection of workers greatly limits which activities may be performed. Teenagers are not allowed to use certain machines or tools whose handling is essential to training in certain professions.

About half of the respondents (48%) from **Bavaria** participate in trilateral meetings. They mentioned three main difficulties relating to the cooperation of companies, schools and trainees. First, the educational level in vocational schools is declining. Second, there is a gap between education on the job in companies and block teaching at professional schools. Third, small companies are unable to pay the same salary (training compensation) as large companies, and more support is needed if problems occur during dual education of the apprentices e.g. the training of refugees.

The respondents stated that they require better education at the secondary school level (“Mittelschule”) as well as educational support options for apprentices who are still in the asylum procedure or whose asylum application was rejected. As measures to meet these needs, they recommend aligning secondary schooling to the skills requirements in dual education. Educational support options for refugees should be financially covered by the regions and information on Generation Z/Alpha could be provided in a webinar.

From the perspective of the Bavarian respondents, the Ministry for Culture and Education does not fulfil its obligation to deliver suitably skilled graduates from the “Mittelschule”. The level of education and the standard at vocational schools should be raised.

About two thirds (64%) of the respondents are involved in the development of an individual training plan. Almost all respondents declared that they do not encounter any difficulties since there is an official training plan for each trade prescribed by the Chamber of Skilled Crafts and Trades. Only two respondents replied that it is a problem that the block training at the vocational schools and the training outside the company have increased. This represents a burden for effective in-company training since too little time is spent in the companies. Another respondent encountered difficulties with setting up a training plan for migrants given the language barrier.

Most respondents stated that they do not require any further training in this regard. The others mentioned that they would like further training, particularly in practical customer and project oriented learning material. A few respondents stated that they would welcome an exchange between in-company tutors/companies on this subject and higher standard wages.

Three strengths of the current process of developing individual training plans were mentioned: first, the well-balanced practical and theoretical education; second, closely linked vocational school and practical in-company training; third, training and education specially tailored to the machines and parts present at the company as well as the intensity of the training.

Weaknesses were also identified. First, the requirement level is seen as partially very high, particularly in the mathematical field. Second, the vocational school and businesses are not on the same level. Third, the trainees spend too little time working in the companies, and the quality of the training outside the company is too low. Respondents referred here to lack of innovation and too many repetitions. Fourth, SME workshops are available, but the theoretical and practical training material is not available or has been produced by the company. This is described as taking a lot of time. Fifth, the wages are low and there are only a few seminars outside the company.

Three quarters of the Bavarian respondents (76%) are involved in the final assessment of the trainees. They mentioned three main difficulties with its process. First, the vocational preparation period is not considered in the final assessment of the apprentices. Second, it is a challenge to design the assessment questionnaire and evaluation sheet in a way that all participants are satisfied with it. Third, apprentices often cannot understand the interrelations of the assessment.

Some of the respondents wish to have more information and training with regard to the motivation of trainees, targeted support for tackling the weaknesses of the trainees as well as assessment criteria and subjects of assessment. They suggested in-house training for all apprenticeship supervisors as well as more time to deepen knowledge instead of internships abroad.

The respondents mentioned three strengths of the evaluation process in Bavaria. First, they indicated the independence of the training company. Second, they referred to the broad basis training. Third, trainees also found it good to have the opportunity to work on theoretical and practical topics in the learning workshop in addition to at the vocational school, guild and construction site and to deepen their knowledge of these with the trainer on the construction site.

Certain challenges were also revealed. First, the real qualification of a trainee only becomes apparent at the end of training. Second, there



seems to be no possibility for young people with learning difficulties to complete a “training light”. Third, the assessments are often superficial. Fourth, time management is not strict with regard to the material to be conveyed and the consolidation of it. Fifth, weaker pupils are seen to slow down stronger ones, which often result in the disinterest of the latter. Sixth, there are too few opportunities to challenge the strongest students since there is only one classroom teacher and large classes.

In the Italian autonomous province **Bolzano**, about two thirds of the respondents (61%) are involved in the final assessment of the trainees. They advocate that not only the vocational schools but also the training companies should be allowed to give marks to the trainees.

In each case, about one third is involved in the development of individual training plans (30%) or participates in trilateral meetings (29%). Concerning the training plan, it is seen as challenging to develop individual training plans with the given time resources. SME representatives are partly satisfied with the cooperation with schools; some stated that the coordination between them on the school curricula should be improved.

In the autonomous province **Trento**, the final assessment is the most frequently shared activity between SMEs and schools (71%). Moreover, this seems to make sense because SMEs were responsible for a considerable part of the students' learning during the training period. This is what is referred to as the presence of the SMEs in the implementation phase. This presence was missing more in the previous phases designing and planning the learning activity (at least from a formal and theoretical point of view) is mostly a matter of schools.

In **Slovenia**, more than two thirds (68%) of the respondents participate in trilateral meetings. While they approve the cooperation with the schools, they made some suggestions for how to adapt the education system. First, the students should come to employers sooner to start learning earlier. Second, they suggested ensuring direct vertical transition of the education system to the higher schools. Third, they argued for increasing the duration of the apprenticeship, granting tax exceptions for apprenticeships and promoting staff scholarships combined with individual ap-

prenticeship contracts. Fourth, they suggested that actions to increase awareness of dual education should start in primary school. According to the responses, it is necessary to improve the system in Slovenia regarding vertical movement.

Two fifths of the Slovenian respondents (41%) are involved in the development of individual training plans. To improve the procedure, the SMEs need better information and guidance in practice. The respondents mentioned uncertainties concerning the needs of training plans.

In **France**, the participation of SMEs in trilateral meetings, the development of individual training plans and the final assessment of the trainees are all relatively low. Apprenticeship is regulated at the national level. The majority of the graduates prepared by the dual system are graduates of National Education. At the regional level, it is seen as impossible to intervene in the curriculum, the assessment and rating system.

In **Switzerland**, the majority of respondents participate in trilateral meetings (57%) and final assessments (73%).

They encountered some difficulties with the cooperation procedure such as a lack of apprentice motivation, lack of knowledge of SME professions in the whole sector or lack of apprentice focus. From the view of the respondents, many trainees do not assume responsibility. Further, practical requirements do not always meet the expectations of the school. Not least, many young people give up on their apprenticeship.

To counter these problems, the Swiss respondents gave suggestions such as spending more time with trainees, offering better school supervision, giving more information to students during lower secondary school, planning assignments for apprentices and motivating high level student for VET schools. Furthermore, they suggest improving the exchange between schools and SMEs in order to better target the expectations of SMEs and those of future apprentices. Moreover, they referred to an intense advertising campaign for apprenticeship as well as enhancement of the image of dual education among guidance counsellors.

Relating to the development of individual training plans, they mentioned three main difficulties. First, a lack of information (e.g. news, rules) for masters and trainers. Second, SMEs cannot always apply new laws concerning VET. Third, the goals of dual education are not in line with the reality of the working world. The respondents suggested that the training site should be able to compare itself, and a monitoring body should be set up to control it.

Swiss respondents also encountered difficulties with the final assessment of trainees. First, it is seen as challenging to adapt to the defined requirements of bureaucrats. Second, the requirements are not sufficiently well known. Third, the respondents described a lack of interest by the state. Fourth, the files for assessment are complicated. Fifth, the trainees' parents are seen as overprotective. Sixth, the respondents mentioned the lack of apprentice motivation. Seventh, since there seems to have been too much change, trainers and teachers don't know what is needed for the assessment.

The respondents indicated that they would favour self-assessment. Further, they suggested keeping assessments as simple as possible and not taking into account parents' opinions. From their point of view, a main issue is that Swiss dual education seems to be designed by people with only theoretical experience.

## KEY RESULTS

The majority of the SME representatives are involved in the final assessment of their trainees; in each case, about half participate in trilateral meetings between companies, schools and trainees or are involved in the development of individual training plans. Recommendations for improving the dual education procedure go hand in hand with the suggestions given above.

### Recommendations for improving the dual education procedure

- ▶ Provide stronger public (e.g. financial) support for SMEs, vocational schools and potential trainees
- ▶ Enhance the coordination between SMEs and schools
- ▶ Adjust the curricula in response to the needs of the labour market and SMEs
- ▶ Provide public or school support of trainees with language barriers and/or refugee status
- ▶ Encourage the involvement of younger trainees' parents
- ▶ Improve the exchange between SMEs and trainees
- ▶ Offer a regional or national platform where all information and materials relating to vocational training and contacts for personal consultations are available
- ▶ Explicitly regulate the procedure for developing individual training plans as well as the final assessment of trainees while allowing enough autonomy to meet the needs of SMEs, vocational schools and trainees

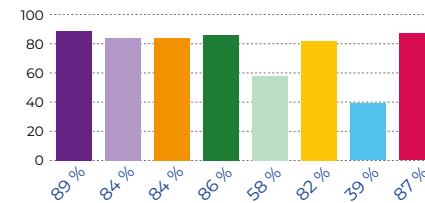
### 3.2.4. TRAINEES' SKILLS AND COMPETENCES NEEDED BY SMES

Not least, the skills and competences of (potential) trainees are important in generating a complete picture of SME needs in the partner regions.

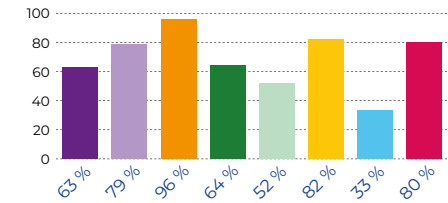
During the recruitment phase, three quarters of all respondents (average 76%) look for the potential trainee's willingness to learn, two thirds (average 69%) for the candidate's dependability and three fifths (62%) to the ability to work in teams. Further, the SME representatives attach importance mainly to punctuality (average 61%), sense of responsibility (average 60%) and good manners (average 52%) as well as the candidate's readiness for action (average 50%), social competences (average 50%) and technical skills (average 50%).

The relevance of the candidate's interest was mentioned mainly by SME representatives from Bolzano (73%), Switzerland (67%) and Bavaria (52%). The flexibility of the potential trainee is important primarily in Slovenia (73%) and to a lesser degree in France (44%) as well as Vienna and Lower Austria (37%). The ambition of potential trainees is central in Slovenia (50%) and Bavaria (40%) as well as in Vienna and Lower Austria (34%).

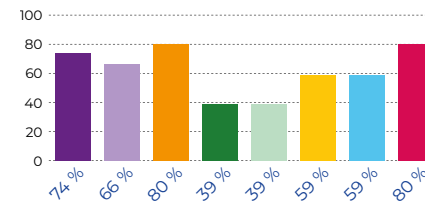
Willingness to learn (av.76%)



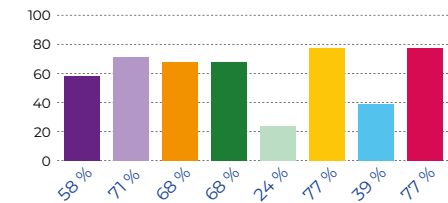
Dependability (av. 69%)



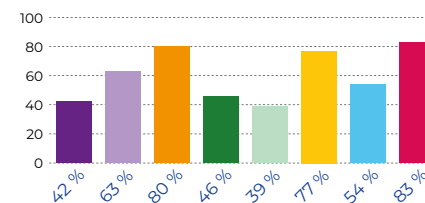
Ability to work in a team (av. 62%)



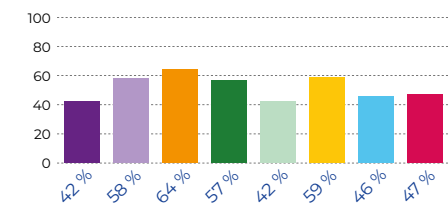
Sense of responsibility (av. 60%)



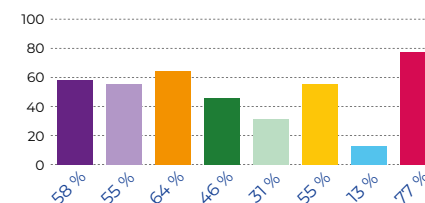
Punctuality (av. 61%)



Good manners (av. 52%)



Readiness for action (av. 50%)



Social competence (av. 50%)

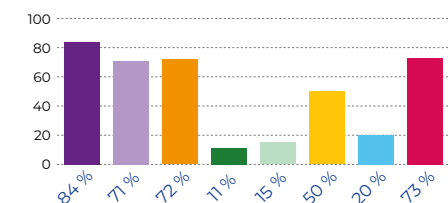
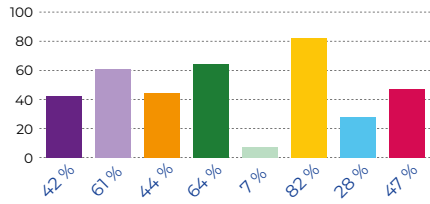


FIGURE 3: What type of skills do you look for during the recruitment phase? (Multiple answers possible)

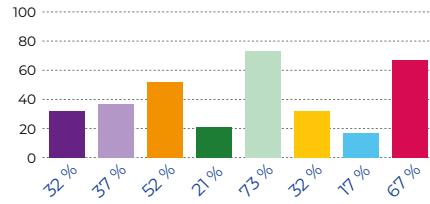
- AUSTRIA/VORARLBERG
- AUSTRIA/VIENNA-LOWER AUSTRIA
- GERMANY/BAVARIA
- ITALY/TRENTO
- ITALY/BOLZANO
- SLOVENIA
- FRANCE
- SWITZERLAND

Source: Lime Survey, personal computation.  
Answers are ranked by average; other answers than the options shown av. 6 %.

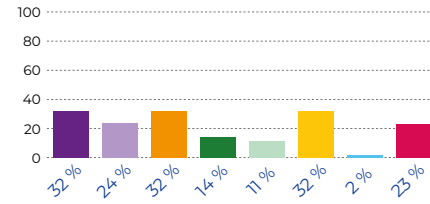
**Technical skills** (av. 47%)



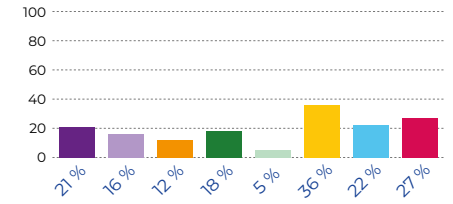
**Interests** (av. 41%)



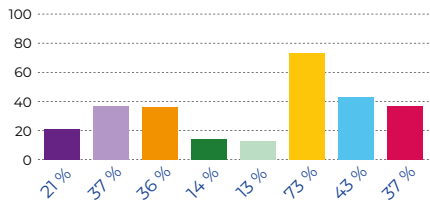
**Languages** (av. 21%)



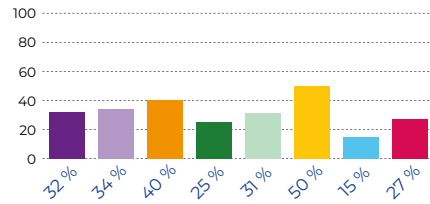
**Organizational talent** (av. 20%)



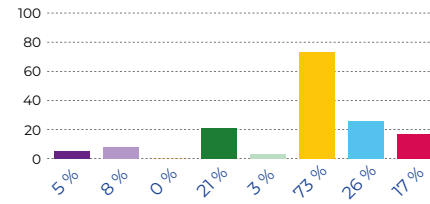
**Flexibility** (av. 34%)



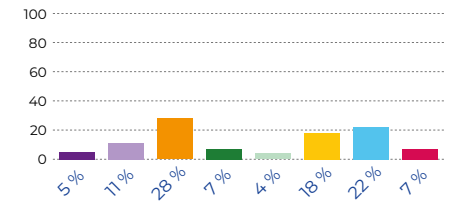
**Ambition** (av. 32%)



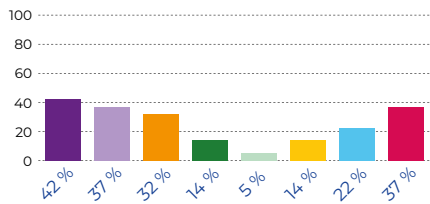
**Autonomy** (av. 19%)



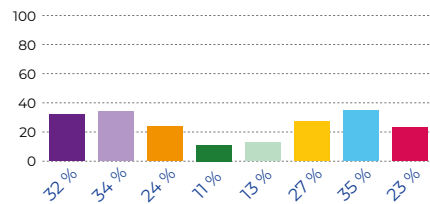
**Non cognitive skills** (av. 13%)



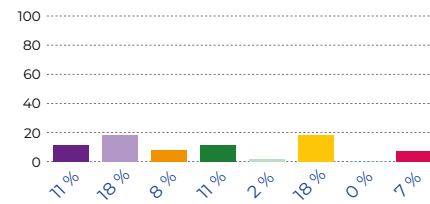
**Cognitive skills** (av. 25%)



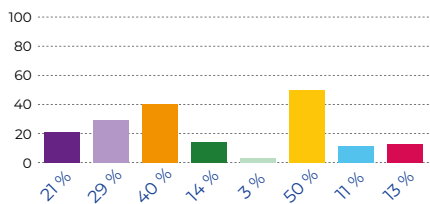
**Solid basic education** (av. 25%)



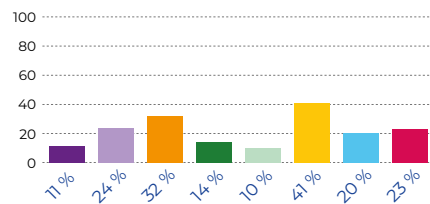
**Digital Skills** (av. 9%)



**Results-oriented** (av. 23%)



**Self confidence** (av. 22%)

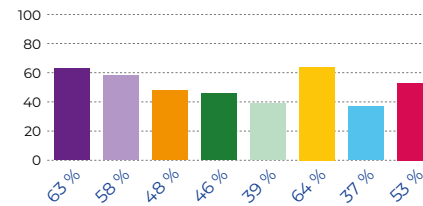


Other required skills that were mentioned include the candidate's respect for trainers, mathematical knowledge and the motivation to work in the SME where he/she has applied.

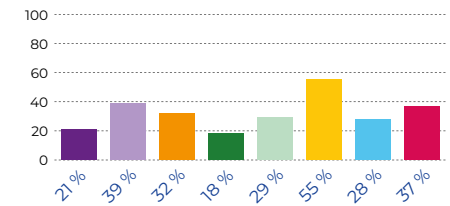
More than half (average 51%) of all respondents find that their candidates or trainees lack a sense of responsibility and in each case about one third a willingness to learn (average 32%) and dependability (average 29%). Further, the SME representatives of the partner regions mainly indicated their candidates or trainees lack ambition (average 27%), technical skills (average 26%) and a solid basic education (average 25%).

The readiness for action is primarily missed by respondents from Bolzano (42%), Trento (27%) and Switzerland (23%). The lack of good manners of candidates and trainees is an issue mainly in Vienna and Lower Austria (34%), Bavaria (32%) and Slovenia (27%). SME representatives from Vorarlberg (37%), Vienna and Lower Austria (37%) as well as Bavaria (24%) find that social competences are lacking. A lack of organizational talent is a problem in Slovenia (36%), Trento (36%) and Vienna and Lower Austria (21%).

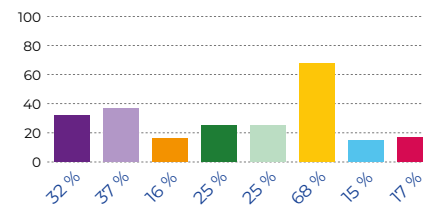
Sense of responsibility (av. 51%)



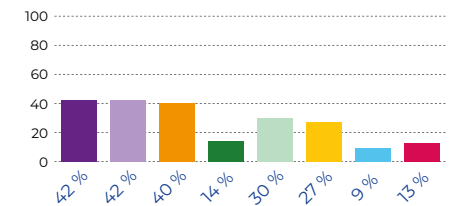
Willingness to learn (av. 32%)



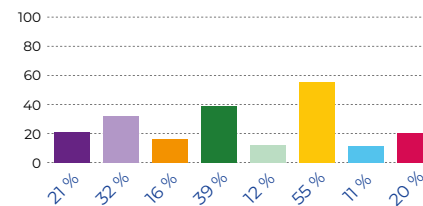
Dependability (av. 29%)



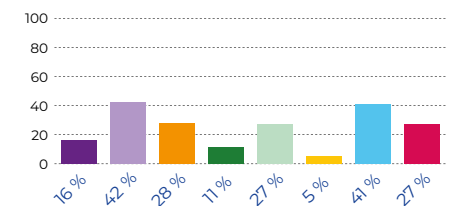
Ambition (av. 27%)



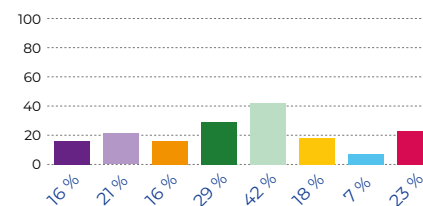
Technical skills (av. 26%)



Solid basic education (av. 25%)



Readiness for action (av. 22%)



Good manners (av. 21%)

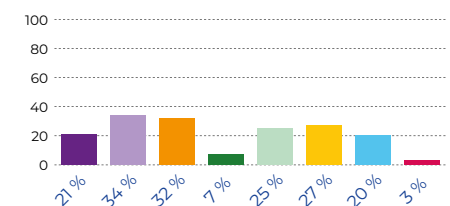
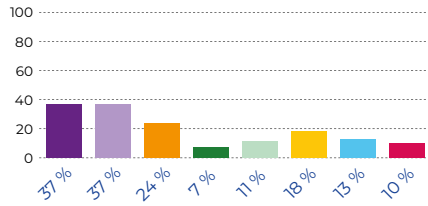


FIGURE 4: What skills do you find are lacking the most in candidates or enrolled trainees/apprentices? (Multiple answers possible)

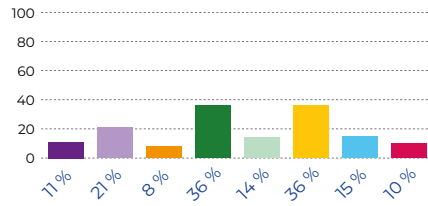
- AUSTRIA/VORARLBERG
- AUSTRIA/VIENNA-LOWER AUSTRIA
- GERMANY/BAVARIA
- ITALY/TRENTO
- ITALY/BOLZANO
- SLOVENIA
- FRANCE
- SWITZERLAND

Source: Lime Survey, personal computation.  
Answers are ranked by average; other answers than the options shown av. 3 %.

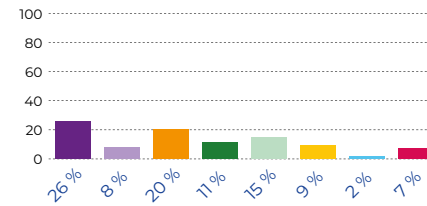
**Social competence** (av. 20%)



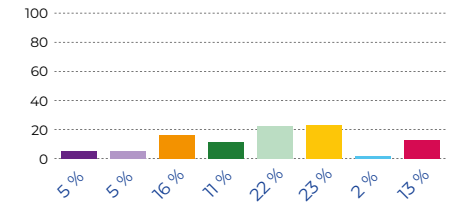
**Organizational talent** (av. 19%)



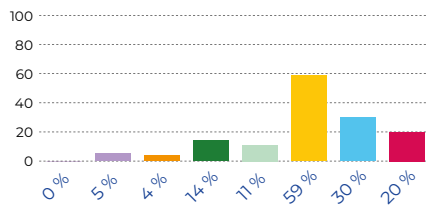
**Cognitive skills** (av. 12%)



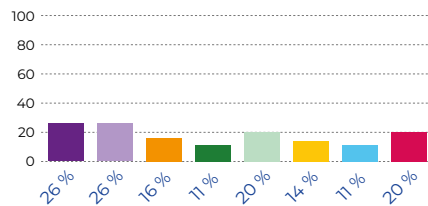
**Languages** (av. 12%)



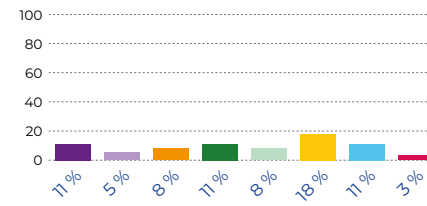
**Autonomy** (av. 18%)



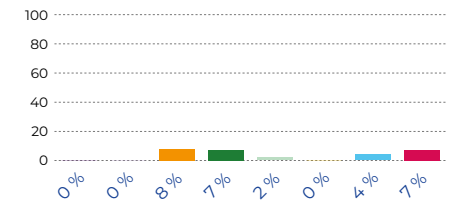
**Interests** (av. 18%)



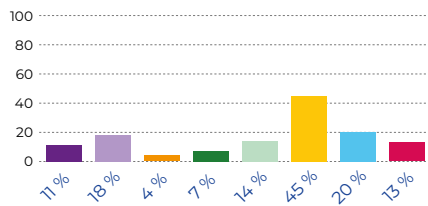
**Ability to work in a team** (av. 9%)



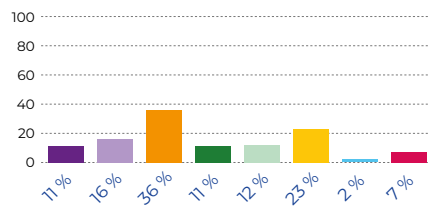
**Non cognitive skills** (av. 4%)



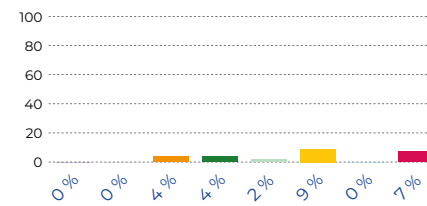
**Punctuality** (av. 17%)



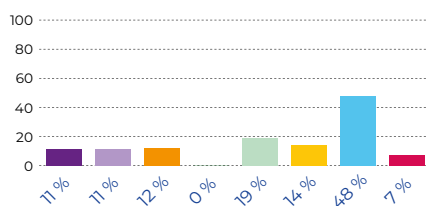
**Results-oriented** (av. 15%)



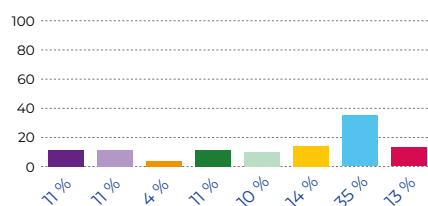
**Digital Skills** (av. 3%)



**Flexibility** (av. 15%)



**Self confidence** (av. 13%)



Other missing competences that were mentioned are mathematical knowledge, communication skills, determination, voluntary commitment as well as certain social skills such as helpfulness.

### KEY RESULTS

The majority of SME representatives find their candidates or trainees lack a sense of responsibility, a willingness to learn, dependability, ambition, technical skills and a solid basic education. Other missing competences that were mentioned are mathematical skills, communication skills, determination, voluntary commitment as well as certain social skills.

#### From the view of the SME representatives, the following competences should be outlined in the qualification profile of candidates/trainees

- ▶ Solid basic education (especially mathematics)
- ▶ Technical skills
- ▶ Motivation
- ▶ Willingness to learn
- ▶ Dependability
- ▶ Punctuality
- ▶ Sense of responsibility
- ▶ Social competences
- ▶ Good manners
- ▶ Ability to work in teams
- ▶ Readiness for action

### 3.2.5. QUALIFICATION PROFILE OF TRAINERS

Another issue identified by the data gathering was the qualification profile of trainers in the Alpine Space regions.

Besides professional and technical as well as didactic competences, **Austrian** interviewees emphasized the importance of social skills—such as openness, tolerance, empathy and conflict ability—as well as a certain degree of authority in a good trainer or mentor. Further, professional experiences in different fields as well as continuing education are advantageous to keep an integral view on training apprentices.

Most experts feel up to meeting the current challenges of dual education. From their perspective, regular advanced training for trainers is crucial for keeping up-to-date with new trends (e.g. digitalization) and prospering in the face of competition. In this context, it is important to receive support from the management concerning financial and time resources.

A frequently mentioned challenge was the communication and cooperation between SMEs, vocational schools and parents, which require an extensive commitment. Therefore, courses as well as support in the field of communications training are desirable. Further, the interviewees find it is psychologically challenging to engage with young. Due to the increasing proportion of migrants, language barriers have also become an issue.

**Bavarian** experts told to recognize a big change for trainers according to digitalization and using computers. Besides, now there are new teaching models, concepts and methods. All of them think that social competence and soft skills are becoming increasingly important. The need for knowledge of psychology is growing. A master crafts(wo)man should be relaxed and open-minded, have a high tolerance of frustration and be on good terms with the current young generation. Moreover, one should be able to deal with conflicts and different cultures.

The interviewees are convinced that the qualification of a master crafts(wo)man as a trainer is still sufficient and that they can deal with new challenges such as language barriers with asylum seekers or EU-foreigners. For teachers, it is difficult to teach using simple language and to include students with different educational backgrounds (refugees, students from middle school to grammar school). Moreover, more girls and women should be convinced to do an apprenticeship including in technical subjects. Programs such as “Strong for Apprenticeship”, which provides pedagogical and psychology training, are necessary to keep trainers up-to-date.

In **Trento**, there is no formal training for trainers at SMEs, where they are usually experts in a specific professional field inside the SMEs. The province organizes systematic meetings and seminars for trainers (called “tutors”; internal tutors are within the SMEs while schools tutors are within

the schools). In general, the interviewees said that trainers have a low level of knowledge of the learning process and a low level of skills to teach students on the job properly. Trainers often have no previous experience with dual education.

**Slovenian** experts agreed that the mentors must fully master all work processes and understand the circumstances of the work because that is the only way they can successfully transfer knowledge to young people. Primarily, the trainer needs pedagogical skills and social sense for young people, as well as the necessary experience, creativity, responsibility, reliability, technical inventiveness, accuracy, target orientation, communicativeness, organizational skills and computer knowledge (machines are changing and it is necessary to follow development). Further, materials, machines and diagnostic processes are constantly changing, so continuous training and knowledge renewal is required.

Interviewees see the greatest dangers as injuries at work and the challenges of transferring their knowledge and experience to young people. Much more patience and persistence are required and new ways of motivation are always required (apprentices need more and more encouragement to remain in the profession). They also see the challenge in the relationship between the mentor and the apprentice (knowledge needs to be transferred in a relaxed and friendly atmosphere that remains professional).

According to the majority, the qualification conditions are still appropriate for the time being; the independent training of mentors is influenced by the pressure of the market itself. The respondents are unanimous that mentors need additional and high quality pedagogical and potentially psychological training to help young people improve. Experts also suggest better cooperation and exchange of experience, skills and knowledge among individual mentors. The needs of the market and the ways of transferring knowledge to young people are constantly changing. They expect greater support from the state in co-financing the training of students/apprentices.

Small business owners can only educate one or two trainees at the same time; they see the problem in not having enough time to properly educate trainees.

In the future, experts see opportunities for more young women in traditionally male professions but fear that most of them will not remain in the profession after completing their schooling.

### KEY RESULTS

Today's dual educational systems as well as the needs of vocational schools, apprentices and the labour market highlight certain competences required of trainers:

- ▶ Professional, technical and didactic competences
- ▶ Professional experiences in different fields
- ▶ Social skills such as openness, tolerance, empathy and conflict ability as well as a certain degree of authority
- ▶ Continuing education to remain up-to-date concerning the professional field, dual training and technical innovations
- ▶ Courses as well as support in the field of communications training (trainees, employees, generational and cultural conflicts)
- ▶ Improved cooperation and exchange of experience, skills and knowledge among trainers

More details on the research process, sample, data and results in the individual regions as well as from a transnational perspective can be found in the "SME Needs Assessment Report" on the DuALPlus homepage: <https://www.alpine-space.eu/projects/dualplus/pdfs/results/dt22-sme-needs-assessment-report.pdf>.

This report provides an alpine-wide perspective on the training needs of SMEs in the skilled crafts and trades. The comprehensive results served as the basis for developing dual training formats in six regions as well as for proposing the innovative tutor training programme, which are both outlined in Chapter 5.





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## 4. INNOVATIVE TRAINING PROGRAMMES FOR DUAL EDUCATION

Another part of the DuALPlus project was the collection of successful examples of innovative dual training programmes from the Alpine Space as well as EU-wide activities. Because of the differences in the dual education systems of the six partner countries in general and in their current states of development, the project team included best practice examples describing renowned strategies for implementing and promoting dual education as well as concrete initiatives and programmes for dual education.

As criteria for “best practice” strategies, initiatives and programmes were chosen that are long-standing and well-established or unique in their region or country and/or have received awards.

### 4.1. INNOVATIVE ACTIVITIES ON DUAL EDUCATION IN THE EU

#### 4.1.1. DUAL EDUCATION IN EU COUNTRIES

European vocational education and training systems can rely on a well-developed network of vocational education and training (VET) providers, which are governed with the involvement of social partners. Such partners include employers and trade unions as well as different bodies, chambers, committees and councils.

Vocational education and training systems comprise initial and continuing vocational education and training. Initial vocational education and training (I-VET) usually takes place in either a school-based environment (e.g. classroom) or a work-based setting (e.g. training centres and companies). This differs within the EU countries and depends on national education training systems as well as economic structures (see chapter 2.2.).

Continuing vocational education and training (C-VET) usually follows initial education and training or takes place after the start of working life. Its goals are to upgrade knowledge, help citizens acquire new skills, retrain and further their personal and professional development. Continuing vocational education and training is primarily work-based with the majority of learning taking place in workplaces.

According to data of the European Commission<sup>4</sup>, on average 50% of European teenagers between 15 and 19 years old participate in initial vocational education and training at the upper secondary level. However, it should be noted that there are significant geographical differences in participation ranging from 15% to more than 70%.

#### 4.1.2. EU-WIDE BEST PRACTICE EXAMPLES

The Bruges Communiqué and the Riga Conclusions have further enhanced European cooperation on vocational education and training. EU institutions, member states, candidates and European Economic Area countries as well as social partners and European providers of vocational education and training agreed on a set of priorities and deliverables for the period 2015-2020. These include:

- ▶ Promotion of work-based learning in all its forms, with special attention to apprenticeships, by involving social partners, companies, chambers and vocational education and training providers as well as stimulation of innovation and entrepreneurship
- ▶ Further development of quality assurance mechanisms in vocational education and training in line with the Recommendation on the Establishment of a European Quality Assurance Reference Framework for Vocational Education and Training (EQAVET), and establishment of continuous information and feedback loops in I-VET and C-VET systems based on learning outcomes
- ▶ Enhancement of the access to vocational education and training and qualifications for all through more flexible and permeable systems,

notably by offering efficient and integrated guidance services and enabling the validation of non-formal and informal learning

- ▶ Strengthening of key competences in vocational education and training curricula and provision of more effective opportunities to acquire or develop those skills through I-VET and C-VET
- ▶ Introduction of systematic approaches to and opportunities for initial and continuous professional development for vocational education and training teachers, trainers and mentors in both school- and work-based settings

The commission's work on vocational education and training is supported by the European Centre for the Development of Vocational Training (Cedefop) as well as the European Training Foundation (ETF). Cedefop supports the development of European vocational education and training policies with its research, analyses and information on vocational education and training systems, policies and practices, skill needs and demands in the EU. ETF contributes to the development of professional skills and competences.<sup>5</sup>

There are several best practice examples at the EU level. In the following section, we introduce a selection of current cooperations and activities.

- ▶ **European Alliance for Apprenticeships (EaFA)**<sup>6</sup>: This multi-stakeholder platform unites governments and key stakeholders to strengthen the quality, supply and overall image of apprenticeships across Europe. Another aim is to promote the mobility of apprentices. Members can benefit from Apprenticeship Support Services, such as online resources and networking opportunities, which enable like-minded individuals to connect, learn and act. EaFA goals are promoted by national commitments and voluntary pledges from stakeholders. Members include national governments, companies and business organisations, chambers of industry, commerce and crafts, education and training providers, youth and non-

4 [https://ec.europa.eu/education/policies/eu-policy-in-the-field-of-vocational-education-and-training-vet\\_en](https://ec.europa.eu/education/policies/eu-policy-in-the-field-of-vocational-education-and-training-vet_en), last call: 28.10.19.

5 [https://ec.europa.eu/education/policies/eu-policy-in-the-field-of-vocational-education-and-training-vet\\_en](https://ec.europa.eu/education/policies/eu-policy-in-the-field-of-vocational-education-and-training-vet_en), last call: 28.10.19.

6 <https://ec.europa.eu/social/main.jsp?catId=1147>

profit organisations, regional and local authorities, social partners, professional bodies and networks as well as research institutes and think tanks. They are able to find partners, promote their events, develop new ideas and activities as well as provide access to the latest news and tools on apprenticeships.

The European Alliance for Apprenticeships is open to EU, EFTA and candidate countries as well as stakeholders from these countries. It promotes youth employment and supports the aim of the Youth Guarantee while reducing the disparity between skills supply and demand on the labour market.

- ▶ **European Apprentices Network (EAN)**<sup>7</sup>: This network of apprentices at the European level was established in 2017 with the aim of making sure that the voice of young apprentices is heard in discussions related to vocational education and training and to apprenticeships in particular. It is formed by current as well as former apprentices, representatives of student structures and representatives of youth labour unions. The network was created in cooperation with the European Youth Forum (OBESSU) and with the support of DG Employment of the European Commission.

The members meet four times a year alongside the meetings of European Alliance for Apprenticeships. They work in between the physical meetings by using online discussion spaces and participating individually in events.

The first role of the European Apprentices Network is to develop the views of young people on apprenticeships through exchange of experiences and best practices, discussion of challenges and sharing of information on important educational policies or research developments. Second, it functions as an informal consultative body to the European Commission on apprenticeships, especially for the EAfA, by providing input on EC proposals and initiatives, events or EAfA meetings. Third,

7 <https://apprenticesnetwork.eu/>

the network facilitates contacts between youth organisations and other actors of apprenticeships, in particular members of EAfA.

- ▶ **ET 2020 Working Group on Vocational Education and Training**<sup>8</sup>: ET 2020 working groups are set up as part of the EU policy cooperation process in education and training to support common policy objectives. They support policymaking at the EU and national levels and offer a forum for the exchange of experiences and best practices on ways to address the key challenges facing education and training systems.

Their members are government officials appointed by EU member states and other participating countries. Several representatives from stakeholder organisations and social partners are also appointed to the groups.

- ▶ The **Working Group on Vocational Education and Training** focuses on the role and potential of innovation, with an emphasis on digitalisation to create more flexible, sustainable and high-quality vocational education and training systems. Innovation and digitalisation are examined within vocational education and training and its link to other pathways, reflecting the impact of broader trends of innovation and digitalisation in the economy and labour markets on vocational education and training, such as industry 4.0, automation or artificial intelligence.

The aim is to enhance the employability and personal development of young learners and people of working age in vocational education and training and to contribute to the competitiveness of companies as well as sustainable growth and social cohesion. The main priority areas of the working group are: 1) establishing innovative teaching styles for teachers and trainers; 2) strengthening key competences by adapting curricula/training programmes and regulations that are responsive to rapidly changing labour markets; 3)

8 [https://ec.europa.eu/education/policies/european-policy-cooperation/et2020-working-groups\\_en](https://ec.europa.eu/education/policies/european-policy-cooperation/et2020-working-groups_en)

creating new learning environments and organisational developments in training institutions and companies; 4) ensuring the use of modern learning technologies in vocational education and training and higher vocational education and training; 5) fostering proactive and flexible vocational education and training systems that support smart specialisation strategies and cooperation through industry clusters; 6) promoting quality and excellence in vocational education and training; 7) reinforcing governance and financing via cost-sharing and investing in infrastructure; 8) supporting learning mobility in vocational education and training, careers without borders and the internationalisation of vocational education and training.

- ▶ **University Business Cooperation**<sup>9</sup>: The goal of this cooperation is to build closer links between business and academia that encourage the exchange and sharing of knowledge, create long-term partnerships and opportunities as well as drive innovation, entrepreneurship and creativity. Cooperation between universities and business is also able to support graduates in acquiring the right skills and mindsets required on the job market as well as for their own personal development.

There are numerous examples of successful cooperation between academia and industry in Europe. The form and extent of such cooperation differ considerably among countries, higher education institutions and academic disciplines.

- ▶ **University Business Forum (UB Forum)**<sup>10</sup>: This forum was established in 2008 as a part of the European Commission's initiative to support modernisation of higher education and strengthen cooperation between academia and business on a European level. It serves as a platform to bring closer the key drivers of the knowledge economy and those vital to the regeneration and competitiveness of Europe. The forum offers an opportunity for higher education institutions, companies, business associations, public institutions and students to

present and discuss common issues, share examples of good practice and explore the benefits and value of ongoing cooperation and its strengthening.

Following this insight into current EU activities, the next chapters focus on dual education as well as best practice models in the Alpine Space on three different levels.

9 [https://ec.europa.eu/education/policies/innovation-in-education/university-business-cooperation\\_en](https://ec.europa.eu/education/policies/innovation-in-education/university-business-cooperation_en)

10 <https://oead.at/de/veranstaltungen/detail/2019/02/14/european-university-business-forum/>

## 4.2. BEST PRACTICE EXAMPLES OF THE ALPINE SPACE

The goal of this section is to give an overview of current best practice models in the Alpine Space countries. The strategies, initiatives and programmes introduced below are representative examples of the partners' regions; no claim is made to completeness.

It is important to consider the current state of development of each of the dual education systems as well as their differences (see chapter 2.2.). While no best practice examples for the Italian Autonomous Provinces of Trento were available at the date of the DuALPlus "Best Practice Collection Report", the best practice examples of the other countries refer to successful strategies to implement, improve and promote dual education and training (Slovenia and France) or to concrete successful initiatives and programmes within and beyond classical apprenticeship (Austria, Bavaria and Switzerland).

The following strategies, initiatives and programmes differ in the purpose for which they were developed and are based on specific problems on the regional or local level.

### 4.2.1. AUSTRIA

#### CHALLENGES IN THE DUAL EDUCATION SYSTEM

The Austrian economy requires qualified workers, and trainees have primarily completed classical apprenticeships. Skilled workers are seen as the backbone of SMEs. According to the Economic Chamber Vorarlberg, the current lack of qualified workers in various professional fields is the biggest economic challenge. About three quarters of Austrian SMEs face problems in meeting their need for qualified employees.

As a result, dual education and apprenticeships in particular are especially important. SME demands for trainees are high, which leads to tensions between industry and commercial companies. Another issue is the continuously falling birth rate in Austria.



## PROMOTING DUAL EDUCATION

Various initiatives of the Austrian provinces, regional Economic Chambers, municipalities, schools and professional associations attempt to enhance the image and the visibility of apprenticeship as well as enable students to learn more about certain professions. Besides public relations work (e.g. print media and web articles or posters in public places), there are **job and career fairs**, **information and consultation days** in schools, **open days** in vocational schools as well as in training companies or **public apprentice competitions**. Furthermore, extracurricular education institutes (e.g. WIFI, BFI) offer **courses** to catch up on skills necessary for certain apprenticeships as well as the final apprenticeship examination and the master crafts(wo)man's certificate.

To win over potential trainees, companies present themselves at **job and career fairs** (e.g. annual career information fairs in Vienna and Vorarlberg) as well as in schools. They also use various media channels (e.g. newspapers, homepage, social media and radio) for promotion and evaluation purposes. Larger companies invite students to **open days** so they can become acquainted with their workshops and try out working with certain materials and technical tools. The possibilities for promotion and evaluation are more limited in smaller enterprises because of personnel, time as well as spatial resources.

## COOPERATION OF SMES

Since the 2000s there have been increased efforts to train apprentices at two or more SMEs. Therefore, trainees in heterogeneous professions are shared and trained or educated further at the local level.

Such cooperation provides dual education that is oriented to the future and to practice. Besides comprehensive specialist training in the company and vocational school, apprentices are educated in relevant key competences.

In Vorarlberg, the programme **HIPOS** was a role model for the development of various initiatives to enhance apprenticeships. It started in 2004 in Walgau and was awarded the Austrian State Award of Consulting in 2008. Best practice projects models in Austria as well as other countries followed.

## SUCCESSFUL DUAL EDUCATION INITIATIVES FOR STUDENTS AND APPRENTICES

There are numerous best practice examples addressed to students and apprentices in cooperation with schools, universities and training companies in the Austrian provinces. In this section, we introduce a representative selection of initiatives and programmes in **Vorarlberg**, **Vienna** and **Lower Austria**:

- ▶ **Digitale Lehrlingsmesse Montafon (Vorarlberg)**<sup>11</sup>: Due to the COVID-19 pandemic, the apprenticeship fair in the region Montafon was held online for the first time in 2020. Eleven businesses presented their training companies via Instagram livestream. After the event, the videos were uploaded to the WIGE Instagram Account @lehremontafon, where they can be watched at any time on demand.
- ▶ **AZV Ausbildungszentrum Vorarlberg (Vorarlberg)**<sup>12</sup>: Located in Hohenems and Rankweil, these training centres offer a classical dual apprenticeship for disadvantaged teenagers. After six to twelve months of basic training, they can complete a regular apprenticeship in a business.
- ▶ **Handelsschule + Lehre, Lustenau (Vorarlberg)**<sup>13</sup>: The market town of Lustenau developed this project linking higher vocational schools with apprenticeships in 2018. Students attend a school for three years while completing two years of training at one of twelve partner companies.
- ▶ **Werkraumschule Bregenzer Wald (Vorarlberg)**<sup>14</sup>: In the region Bregenzerwald, the project Werkraumschule merges school and apprenticeship. In cooperation with the higher vocational school Handelsschule Bezau and Werkraum Bregenzerwald, students attend a five-year dual education and training programme.
- ▶ **Lehre im Walgau (Vorarlberg)**<sup>15</sup>: The former HiPos-Lehrlingsoffensive (trainee offensive) in the region Walgau is a cooperation between 78

<sup>11</sup> [www.lehremontafon.at](http://www.lehremontafon.at)

<sup>12</sup> <http://www.ausbildungszentrum-vorarlberg.at/ausbildungszentrum-vorarlberg/azv-ausbildungszentrum-vorarlberg/>

<sup>13</sup> <https://bhak-lustenau.snv.at/schule/has/>

<sup>14</sup> <http://werkraum.at/werkraumschule/>

<sup>15</sup> <http://www.lehre-im-walgau.at/>

enterprises that are currently training 358 apprentices in 77 professions. The primary goal is to enable exchange and communication between training companies, apprentices, students, teachers as well as parents on issues concerning apprenticeships.

- ▶ **Extrix – Lehre am Kumma (Vorarlberg)**<sup>16</sup>: This initiative of Wirtschaft am Kumma in cooperation with the municipalities Altach, Götzis, Koblach and Mäder started in 2014. The main goal is to encourage the exchange and support of 32 training companies.
- ▶ **GASCHT – Die neue duale Tourismusausbildung (Vorarlberg)**<sup>17</sup>: This four-year tourism and gastronomy education programme in cooperation with 80 partners is located in Bezau, Bludenz as well as Hohenems.
- ▶ **Lehrlings-Potenzialprogramm “Kern-Zeit” (Vorarlberg)**<sup>18</sup>: The goal of this “potential programme” for apprentices is to enable them to explore their personality as well as to contribute their skills in their training companies and beyond, thereby strengthening the relationship between trainees and companies. The programme was developed by the Economic Chamber Vorarlberg in cooperation with “tag eins – büro für wandel”.
- ▶ **Duales Studienmodell – FH Vorarlberg**<sup>19</sup>: The Bachelor programme “WING” has ten dual study places. The programme “Wirtschaftsingenieurwesen Dual” links university education with practical training in one of fourteen partner training companies.
- ▶ **Überholz (Vorarlberg and Upper Austria)**<sup>20</sup>: The University of Art and Design Linz offers a two-year interdisciplinary dual Master programme in wooden structure in Dornbirn (Vorarlberg) and Linz (Upper Austria) in cooperation with partners Vorarlberger Architektur Institut (vai) in Vorarlberg and Architekturforum Oberösterreich (afo) in Upper Austria.

16 <http://www.extrix.at/>

17 <https://www.gascht.at>

18 <https://www.tageins.net/wp-content/uploads/2019/04/Kernzeit-Lehrlinge-Flyer-4.pdf>

19 <https://www.fhv.at/studium/technik/wirtschaftsingenieurwesen-berufsbegleitend-bsc/das-duale-studienmodell/>

20 <https://www.schlosshofen.at/bildung/technik-gestaltung/ueberholz-msc/>

- ▶ **Duale Akademie der WKV (Vorarlberg)**<sup>21</sup>: This project in the professions “Technics” (current focus: mechatronics, informatics and coding) starts in autumn 2019. The two and a half to three year dual education programmes are addressed to high school graduates. Cooperation with the university FH Vorarlberg is planned.
- ▶ **Projekt “TalenteCheck Berufsbildung” (Vienna)**<sup>22</sup>: In this project of the Economic Chamber Vienna and Department of Education Vienna, students (eighth grade) explore their personal skills and learn more about the needs of the labour market and recruitment by companies.
- ▶ **NÖ Begabungskompass (Lower Austria)**<sup>23</sup>: This regional project supports Lower Austrian students (seventh or eighth grade) in their professional as well as further educational orientation. During a “talent day”, they participate in structured ability and interest tests, personality and potential analyses as well as courses on career orientation. After that, there is a consultation with students and their parents.
- ▶ **Bildungsmeile Amstetten-Scheibbs (Lower Austria)**<sup>24</sup>: Over the course of two days, the Economic Chamber Lower Austria and certain partner training companies host visits by school classes, teenagers and parents, who receive insight into the tasks, materials and tools related to the professions.
- ▶ **DUO\*\*STARS SUMMERSchool (Lower Austria)**<sup>25</sup>: In the ETZ project DUO\*\*STARS, the Province of Lower Austria, the Economic Chamber of Lower Austria in cooperation with municipalities, schools and universities developed summer school programmes addressed to students from vocational schools. These programmes included career information and consultation as well as visits to educational institutions, training companies and workshops, where they could learn more about different educational paths and professions.

21 This programme is already implemented in Upper Austria: [https://www.wko.at/Content.Node/kampagnen/dualeakademie/A-WOOE-W18024\\_DA\\_Folder\\_Mechatronik.pdf](https://www.wko.at/Content.Node/kampagnen/dualeakademie/A-WOOE-W18024_DA_Folder_Mechatronik.pdf)

22 <https://www.talentecheckwien.at/>

23 [http://www.noe.gv.at/noe/Wissenschaft-Forschung/Noe\\_Begabungskompass.html](http://www.noe.gv.at/noe/Wissenschaft-Forschung/Noe_Begabungskompass.html)

24 <https://www.berufsinfo-noe.at/bildungsmeile-amstetten-scheibbs-2019>

25 <https://docplayer.org/43360093-Duo-stars-summer-school-jugendliche-tauchen-in-die-welt-der-industrie-ein-und-entdecken-faszinierendes.html>

- ▶ **Duales Studienmodell – FH Technikum Wien (Vienna)**<sup>26</sup>: The dual Bachelor programme “Informatik Dual” links university education with practical training in one of 23 partner training companies.
- ▶ **Duales Studienmodell – FH St. Pölten (Lower Austria)**<sup>27</sup>: In the Bachelor programme “Smart Engineering of Production Technologies and Processes”, students complete their university education as well as practical training in one of 63 partner companies.

### SUCCESSFUL DUAL EDUCATION INITIATIVES FOR IN-COMPANY TRAINERS

There are also a range of initiatives for (potential) in-company trainers such as advanced training courses (e.g. professional competences, personality training) and network meetings for the purpose of exchange at WIFI locations in Vorarlberg, Vienna and Lower Austria. In this section, we introduce several best practice examples addressed to trainers:

- ▶ **VEM Veranstaltungen (Vorarlberg)**<sup>28</sup>: The extracurricular education institute Vorarlberger Elektro- und Metallindustrie (VEM) offers leadership training courses and work groups in different fields (e.g. metal, electronics).
- ▶ **Akademie für Ausbilder (Vorarlberg)**<sup>29</sup>: The Internationale Bodensee Konferenz (IBK) is a cooperation between the cantons and regions Baden-Württemberg, Schaffhausen, Zürich, Thurgau, St. Gallen, Appenzell Ausserrhoden, Appenzell Innerhoden, Principality of Liechtenstein, Vorarlberg and Bavaria. The goals of this conference for in-company trainers are networking, exchange and issues such as self-competence and social competence.
- ▶ **Projekt Lehrstellenakquise Wien (Vienna)**<sup>30</sup>: The goal of this cooperative project between the Economic Chamber of Vienna and the Vienna Employment Promotion Fund (WAFF) is to provide free information and consultation for potential training companies.

26 <https://www.dualstudieren.at/hochschulen/fh-technikum-wien/>

27 <https://www.dualstudieren.at/hochschulen/fh-st-poelten/>

28 <https://technikland.at/>

29 <https://www.akademie-ausbilder.eu/vorarlberg/die-akademie/initiatoren/>

30 <http://docplayer.org/17663123-Projekt-lehrstellenakquise-wien-in-kooperation-mit-waff.html>

- ▶ **Lehrgang Dipl. Industrie-Ausbilder/innen (Lower Austria)**<sup>31</sup>: In cooperation with WIFI Lower Austria, the Economic Chamber Lower Austria offers this qualified training for in-company trainers in industrial professions. The curriculum is coordinated to the current needs of the labour market concerning professional, didactical as well as social competences.

31 <https://www.wko.at/branchen/noe/industrie/lehrgang-dipl-industrie-ausbilder-innen.html>





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## 4.2.2. BAVARIA

### AWARDING COMPANIES FOR HIGH QUALITY TRAINING

In 1993, the city of Munich, the regional Chamber of Skilled Crafts, the regional Chamber of Industry and Trade and the Association of Liberal Professions initiated the **Erasmus Grasser Preis**, a prize for training companies based in the city of Munich. It is awarded to training companies that provide high quality vocational education and training, apply innovative approaches in dual vocational education and training or continuously show high commitment to offering dual vocational education and training for a large number of young people.

The criteria for selecting training companies are statistical figures such as number of successful apprenticeships, number of trainees, voluntary work and engagement related to dual vocational education and training as well as diversity management and activities relating to social inclusion of marginalised and disabled individuals.

Before 2017, this prize could be only awarded to crafts businesses. This changed in 2018. Since 2018 all training companies in Munich have become eligible to apply for it. To participate, an application form must be filled in by the training companies and submitted to the city of Munich by a specific deadline (usually in August or September of every year). The prize is worth EUR 5,000, which can be shared by up to five award winners.

### SUCCESSFUL TRAINING IN COMPANIES

There are many training companies and initiatives providing exceptional dual vocational education and training in the state of Bavaria. The following list introduces a representative selection of best practice examples:

- ▶ **Kreiller<sup>32</sup>**: The company Kreiller is based in the district of Traunstein. More than 300 people are employed there, 32 of which are apprentices. Currently, they train apprentices at all their locations in com-

32 <https://www.kreiller.de/>

mercial and administrative job profiles as well as in logistics. Most of the apprentices are offered a permanent employment contract after successful termination of their apprenticeship.

Moreover, Kreiller offers their employees the opportunity to participate in a large number of further vocational education and training programmes, which are financially supported by the company and a large number of further career opportunities within the organisation.

Thanks to its special apprenticeship concept, Kreiller has won several awards for training companies, e.g. the Rudolf Egerer Prize initiated by the education and training centre of the Bavarian Trade and Economy Association. Kreiller was also ranked the third best training company in Bavaria by the economic magazine Focus Money in 2018.

Kreiller's apprenticeship concept intends to ease the access into professional life for young people and to ensure that they successfully complete their apprenticeships and receive the related training certificate.

This is achieved through complementary training programmes for the apprentices such as an introductory training week and product specific as well as general training throughout the apprenticeship.

Moreover, a mentoring concept is implemented at the organisation. This means that every apprentice in the organisation receives a mentor who supports the apprentice from the very first day in the company. The mentors answer questions, helps the apprentice to get familiar with the team and the organisational culture, supports him/her in work-related problems and issues and looks after the needs and interests of their apprentices.

In addition, the apprentices have the chance to assume a special responsibility in projects such as participation in exhibitions such as the biennial Truna and in the company internal trade fair where the apprentices organise, decorate and manage their own booth.

To increase the team spirit among the apprentices, an excursion takes place every year in September during which all apprentices have the

opportunity to get to know each other. Newcomers and older apprentices can share experiences.

Last but not least, intensive examination preparation for all apprentices is offered by company tutors and trainers before the final examination.

- ▶ **Bachner Elektro GmbH & Co KG (electrical trade)**<sup>33</sup>: This company in the electrical sector has trained apprentices since 1937. From the first day of their apprenticeship, all apprentices can rely on the support of a coordinator for trainees in the company, who is always available to deal with questions, needs, suggestions and problems that might come up in the course of the training programme. The company is particularly active in seeking out young women for an apprenticeship in the electrical trade, which are still dominated by men.

Thanks to its special performance and quality of apprentice training, it won the "Erasmus-Grasser-Preis" in 2018.

- ▶ **Martin Fassnacht GmbH (painting and varnishing)**<sup>34</sup>: This painting company also has a long tradition in offering apprenticeships to young people in the painting trade, to be precise since 1942. The company assumes particular social responsibility by systematically providing young migrants and young people with poor school-leaving certificates with the opportunity to complete an apprenticeship in their organisation. Moreover, the company is committed to sending very talented or committed young people in their third year of apprenticeships to advanced courses offered by the painting and varnishing guild in Munich. This gives the participants the opportunity to learn special skills and techniques beyond those foreseen in the normal training regulations. Thus, they become qualified for better job opportunities in the future.

Due to its special performance and quality of apprentice training their apprentices, the company won the "Erasmus-Grasser-Preis" in 2018.

33 <http://www.bachner.de/>

34 <https://www.maler-fassnacht.de/>

- ▶ **Ernst Pertler GmbH (building technology)**<sup>35</sup>: The company has trained apprentices for more than 30 years. It is particularly engaged in giving young people who have dropped out of school or previous apprenticeships another chance. Young people who do not have a school-leaving diploma or who have social problems can start an apprenticeship at the company.

Accordingly, the company also helps its trainees in social and private affairs, such as assisting in apartment searches and offering travel and subsistence allowances.

The company manager said that dual education and training nowadays has to go beyond the mere transfer of knowledge and skills. The role of the training company is also to support the entire personality development of the apprentices and to give them the self-confidence to succeed in their jobs as well as in their private lives.

Due to its special performance and quality of apprenticeship training, the company won the “Erasmus-Grasser-Preis” in 2018.

### SUCCESSFUL EDUCATION OFFERS FOR IN-COMPANY TUTORS AND INSTRUCTORS

There are also offers for in-company tutors and instructors to support them in training apprentices. This section introduces two representative best practice examples:

- ▶ **Stark für Ausbildung**<sup>36</sup>: “Strong apprenticeship” is an initiative brought into being by the Chambers of Skilled Crafts and the Chambers of Trade and is financially supported by the German Ministry of Economy and Energy. Its mission is to strengthen and support dual vocational education in general and the people directly involved in it in particular, for example the training companies, the tutors/instructors and the trainees.

35 <http://www.pertler.de/>

36 [www.stark-fuer-ausbildung.de](http://www.stark-fuer-ausbildung.de)

The initiative runs a web platform and a knowledge database offering a broad range of information and educational content relevant to tutors, trainers and trainees. It helps them cope with difficult situations within the educational process at the training companies, e.g. how to deal with different cultural backgrounds and integrate migrants. In addition, the initiative offers targeted training to strengthen the communication and leadership skills of the in-company tutors and help them better organise the dual education process within their companies and deal with all kinds of trainees, even those from a “difficult” social background.

Moreover, the initiative tries to foster a dialogue about the further development of the in-company training part of dual education in Bavaria as well as the exchange of experience and expertise among tutors.

- ▶ **Ausbilderakademie**<sup>37</sup>: The “Academy for In-company Trainers” of the Chambers of Industry and Trades in Bavaria offers a basic qualification programme for in-company tutors and trainers including a highly recognised certificate at the national level.

Furthermore, the academy offers a broad range of further vocational education and training programmes and seminars in almost all competence areas. Examples of areas include work techniques and specific problem-related training such as trainee retention after completion of the dual education programme, coaching and supervision of trainees, training methodology and didactics, writing reference letters and certificates, managing assessment conversations, managing recruiting processes and selecting the right candidates, leadership skills, understanding the needs of the current Generation Z, marketing and promotion of dual education, legal basics related to dual education, digital skills in dual education and time and self-management.

There are also vocational education and training offers for developing the personality of the tutors and trainers including communication skills training, conflict management, motivating and managing staff,

37 <https://ausbilden.bihk.de/>

project management techniques, elocution, small talk in business life, intercultural awareness and integrating refugees/ migrants as well as handling difficult or critical situations.

The Academy for In-Company Tutors and Trainers was financially supported by the EFRE until 2013.

### 4.2.3. ITALY

In the DuALPlus project, the focus is on the Italian autonomous regions Bolzano and Trento.

#### BOLZANO

In Bolzano, there are four examples to highlight as best practices for the region:

- ▶ The **Talent Center Bolzano**<sup>38</sup> tests students in secondary school and above for their abilities and strengths in order to support them in their choice of studies and careers and serves as an impulse to take a closer look at their own potential. A standardized test procedure is used to identify the young people's strengths, interests and potential. Based on the results, the students receive important input for their future skills development, which can serve as a basis for an individual counselling interview at the Office for Educational and Vocational Guidance. The Talent Center tests the students of one year – approximately 5,000 young people – over the course of one school year. The test stations provided allow approximately 30 young people to be tested at the same time.
- ▶ The **“Futurum”**<sup>39</sup> digital education fair aims to provide guidance on educational paths from high school through higher education to further education and to present professional activities. Its offerings support young people in their educational and professional decisions.

In 2020, the fair took place online due to the exceptional situation caused by COVID-19, offering three days of webinars in live streaming and providing numerous webinars on the topics of training, studies, recognition of study and professional titles, occupations and applications.

- ▶ At **JobInfo**<sup>40</sup>, South Tyrolean companies from a wide variety of sectors and size categories can provide information about their professional

38 <https://www.camcom.bz.it/en/node/5735>

39 <http://www.provinz.bz.it/bildung-sprache/ausbildungs-studien-berufsberatung/futurum.asp>

40 <https://www.handelskammer.bz.it/de/bildungsmesse-futurum-jobinfo>



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activities, describe the job profiles in the company and highlight training and continuing education opportunities. The participating companies come into direct contact with young people and adults.

- ▶ The **MINT**<sup>41</sup> (mathematics, computer science, natural sciences and technology) initiative has set itself the goal of sensitizing students and the general population to scientific and technical areas of knowledge and business as well as awakening or increasing interest in a scientific culture.

The Office for Educational and Vocational Guidance coordinates the MINT initiative in South Tyrol and cooperates with various partners. All participants have been awakening curiosity for the MINT field for years and are active—from kindergarten to school to university and in continuing education—in providing the population with insight into science and technology, theory, practice and research.

The German, Italian and Ladin Directorates of Education, for example, offer subject-specific orientation for young people, further training for pedagogical staff and projects and initiatives to promote giftedness in the MINT subjects.

### TRENTO

Since its development in the Trentino region, the dual education/apprenticeship system has seen the schools as the dominant partners for all those aspects linked to the design and organization of apprenticeship paths: matching students with companies, preparing individual training plans, etc. In order to foster dual apprenticeship and make it more effective, there is a need to reinforce the companies' point of view and role and to create opportunities for collaboration at the institutional level and at the level of the actors.

41 <http://www.provinz.bz.it/bildung-sprache/ausbildungs-studien-berufsberatung/mint.asp>

### SYNERGIES BETWEEN SCHOOLS AND THE PROFESSIONAL WORLD

A step in this direction is the creation of significant synergies at the regional level between strategic stakeholders from both the schools and the professional world. For this reason, in August 2020, the Department of Education and Culture of the Autonomous Province of Trento signed an agreement with the Chamber of Commerce of Trento with the goal of developing, consolidating and strengthening dual education by favouring tightly coupled relationships between vocational schools and companies. This is achieved through the preparation and publication of specific announcements that call for proposals from schools to design and realize—with the involvement of at least one company—innovative, successful and high-quality dual education paths. The proposals concern different actions:

- ▶ Recruitment of companies and apprentices (e.g. creation of digital tools such as apps and/or websites to facilitate the matching between the demand and supply of dual apprenticeships)
- ▶ Design of dual apprenticeship paths
  - Definition of actions-measures-guidance tools (information material, promotion campaigns, info days, etc.) aimed at students and their families
  - Definition of training courses for teaching staff and/or company tutors involved in the dual courses
  - Development of individual training plans for apprentices in coordination with companies
  - Preparation of assessment and self-assessment tools for learning;
- ▶ Realization of the designed apprenticeship paths
  - Internal and external training of the apprentice
  - Implementation of training courses for teaching staff and company tutors Use of assessment tools and self-assessment of learning.

### EXPECTED RESULTS

The main results expected are:

- ▶ The increase in the qualification (upskilling) of the “dual system” through the co-design of projects aimed at supporting initiatives involving students and entrepreneurs
- ▶ The reduction of the mismatch between supply and demand of labour
- ▶ Greater awareness of new technologies among the local companies through the digital skills of students
- ▶ The activation of processes aimed at consolidating and/or strengthening the competitiveness of companies on the labour market;
- ▶ The opportunity for students to achieve a degree consistent with the technical and professional skills required by the world of work

The call for proposals has been published in May 2021 and candidate projects can be submitted within the period 5 to 23 July 2021. The evaluation of the proposals will be based on the number of companies involved, the apprenticeship paths to be started and the novelty of the proposal. The successful projects will start in September 2021. See <https://www.wifo.bz.it/de/news/events/21-jobinfo-auf-der-bildungsmesse-futurum-digital.html> for further information.



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#### 4.2.4. SLOVENIA

In Slovenia, the basis for conducting practical training while working in a real environment is a catalogue of practical training. The representatives of chambers, who are the experts in their individual fields, participated in the creation of this basic document.

The apprenticeship plan is a tool for the successful practical training for the mentors, apprentices and schools. This document lists the content that the apprentices have to acquire before a certain deadline. Moreover, it lists the content that the mentor has to give to the apprentice by the deadline. The employer evaluates the apprentice alongside the organizer of the practical program. For easier conduct, the apprenticeship plan contains evaluation sheets, which is a supporting document for the employer.

The apprenticeship plan is not explicitly defined and can be changed from an individual educational program to the school where the educational program is held. The apprenticeship plan is an individual document of the apprentice, employer and the school. The responsible chambers are also involved with the preparation of this document.

The apprentice has to keep a daily apprenticeship diary, where all the events and content performed during the practical training are noted down. The apprenticeship diary is also a document that is submitted at the midterm.

The success and the knowledge of apprentices are verified once during the time of the apprenticeship relationship, usually at the end of second year. The midterm is not an exam and is not assessed. Primarily, the midterm serves as a tool that provides advice and gathers information about the apprentice. The chambers also account for the execution of the midterm. The midterm is held where the apprentice receives practical training. The employer and the apprentice are informed on the content of the midterm at least one week before it commences. The midterm checks the current state of the apprentice in regard to the apprenticeship plan. The student should submit the apprenticeship diary from the first and second years to the expert supervisor or the commission at the midterm

test. The completed midterm is a condition for an apprentice to be able to enrol in the next year.

The **instructions on how to conduct the midterm** that ensure quality implementation and additional help for the committee are an example of good practice.

- ▶ The midterm is carried out in the company in the real working environment
- ▶ The chamber coordinates the date of the midterm with the employer/mentor and the expert supervisor.
- ▶ The expert supervisor and the employer/mentor agree upon the exact date.
- ▶ The initial interview, the apprentice's and the employer's/mentor's documentation and the determination of the way of documenting the apprentice's skill and knowledge can take up to 15 minutes.
- ▶ The midterm may take up to 60 minutes. It includes the defence and a conversation that is not linked to the working test, product or service.
- ▶ The interview about the apprenticeships with the employer/mentor can take up to 15 minutes.
- ▶ The employer/mentor has to ensure the same working conditions as during the practical training. The emphasis is on the protection of health and safety at work.
- ▶ Should the apprentice not abide by the safety regulations, the mentor can terminate the midterm.
- ▶ Before the midterm, the employer completes the Catalogue of Practical Training. The realization of professional content needs to be shown.
- ▶ The employer/mentor prepares a set of work tests (3-5 tests) taking into consideration the objectives realizations from the Catalogue of Practical Training.
- ▶ The professional supervisor selects 3 working tests from the set of tests that the employer/mentor has previously prepared.
- ▶ The professional supervisor sets the working test and the apprentice can begin completing it.
- ▶ The employer/mentor makes sure that the apprentice has all the necessary tools, machines and devices that are needed at hand.
- ▶ The professional supervisor reviews:
  - ▶ The apprenticeship diary from the first and second years

- ▶ The evaluation sheets/collection of assessments that are integral to the apprenticeship
- ▶ The completed catalogue of practical work-related training
- ▶ The professional supervisor completes a professional conversation with the apprentice and the employer/mentor.
- ▶ Upon the completion of the interview, the professional supervisor has to complete a written review of the midterm. The professional supervisor gives an opinion on the success of the midterm and orally informs the apprentice and the employer/mentor.
- ▶ Three copies are made of the written review. One copy is received by the employer/mentor, one by the apprentice and one by the chamber.
- ▶ The apprentice attaches the review to the apprenticeship diary.
- ▶ The apprentice continues the education by passing the midterm.

The criteria for the **observation** of the apprentices during the process of the midterm include:

- ▶ How did the apprentice prepare for the evaluation?
- ▶ Did the apprentice comply with all the health and safety at work regulations?
- ▶ How does the apprentice choose the tools and prepare the means for work?
- ▶ How does the apprentice seek and transfer the dimensions from the plan onto the product?
- ▶ Did the apprentice follow the technological process in accordance with the apprenticeship diary?
- ▶ How quickly did the apprentice perform the work test?
- ▶ How accurate was the apprentice during the performance?

Not least, the criteria for the **professional conversation** during the midterm embrace:

- ▶ How does the apprentice explain the process of the work test?
- ▶ Can the apprentice use the professional terms, and can the apprentice understand the conversational language in the company?
- ▶ How did the apprentice fit into the team? Does he/she get along well with the co-workers?
- ▶ How well does the apprentice know the rules and the organization of the company?



- ▶ How well does the apprentice know the production/services of the company overall?
- ▶ How many departments has the apprentice worked with?
- ▶ Where does the apprentice see his/her practical training next year?

#### 4.2.5. FRANCE

As soon as the Chamber of Trades and Crafts (CMA) was created, the Crafts Code gave it competence in matters of guidance. This competence has resulted in the establishment of **Decision Support Centres** (CAD – Centres d'Aide à la Décision) within the chamber which implement the desire of the CMA to contribute to the Regional Guidance Service (SPRO – Service Public Régional d'Orientation).

#### PROMOTING DUAL EDUCATION

The CAD carry out job promotion activities to better meet the needs of young people, families, craft businesses and schools so that people are made aware of the reality of the trades and businesses. The CAD also contributes to information on vocational training sectors and on apprenticeships in particular.

The nationally defined missions for the CAD of the CMA network are: 1) promoting trades and crafts; 2) informing young people and their families about trades and training, employment and career outlook, changes in job techniques and working conditions; 3) supporting young people in their orientation and the construction of their personal and professional projects; 4) building the partnerships necessary to carry out projects, particularly with the various AIO (Accueil Information Orientation / Welcome Information Orientation) networks; 5) supporting companies in their reception and training processes.

The CAD are actively involved in policies for information on trades, discovery of business, promotion of entrepreneurship, access to training and employment for young people, hang-up in training, integration of disabled people and gender diversity in the different professions.

#### SUCCESSFUL DUAL EDUCATION INITIATIVES

Every year, nearly 7,000 young people in Auvergne-Rhône-Alpes take advantage of the various actions led by the CAD. The Auvergne-Rhône-Alpes Regional Council, the academies of Clermont-Ferrand, Grenoble and Lyon and the CRMA Auvergne-Rhône-Alpes wish to continue their cooperation in the field of the School-Enterprise relation from 2019 to 2021.



© Detlev Müller

The partnership between the Auvergne-Rhône-Alpes Region, the academies of Clermont-Ferrand, Grenoble and Lyon and the Auvergne-Rhône-Alpes Regional Chamber of Crafts pursues the following objective: support young people in the construction of their vocational training and professional integration within the framework of the SPRO – Regional Public Service of Guidance.

In France, the **axes of intervention** are to be mentioned as best practice examples. Within the framework of a shared steering committee, the Regional Council Auvergne-Rhône-Alpes, the academies of Clermont-Ferrand, Grenoble and Lyon and the CRMA Auvergne-Rhône-Alpes have agreed to deploy the axes defined below:

► **Axis 1 – Bravo les artisans**<sup>42</sup>

- Objectives: The aim of the “Bravo to the Artisans” operation is to introduce students from secondary schools to the reality of a craft enterprise. The pupils go to the companies to carry out a project and then pass on to their classmates the knowledge and information they have acquired during their presence in the company. This last point allows a multiplication with other pupils and strong involvement of the teaching teams.
- Target groups: The target audiences for this action are 4<sup>o</sup>, 3<sup>o</sup>, and secondary school students (general, vocational or technological high schools).
- Implementation of the actions: The action aims to reach as many young people as possible through a double approach:
- By establishment initially with the presentation of the trades and the craft enterprise as well as the outline of the action to all the classes of a level within each establishment concerned by the action.
- By class: with the deepening of two different trades per class through an immersion of students in an enterprise.
- The operation directly involves the educational teams and the participating craft companies and thus contributes to the logic of school-enterprise rapprochement. The parents of immersion students in the workplace are also made aware of the projects led by the students.

42 <https://www.crma-auvergnerhonealpes.fr/se-former/bravo-les-artisans>

► **Axis 2 – Development of the consular internships**<sup>43</sup>

- Objectives: The aim of this action is to increase the number of internships offered in craft companies to young people in Auvergne-Rhône-Alpes. This presents different interests for young people in the context of their orientation according to their problem by allowing them to discover a trade, validate a professional project and test a host company in the context of an apprenticeship contract or vocational training.
- Target groups: The target audience for this action is young people in school who are at least 14 years old. This directly applies to pupils in the last two levels of secondary education, pupils in secondary schools (general, vocational or technological secondary schools) during school holidays as well as students in higher education outside the weeks reserved for courses and knowledge testing.

► **Axis 3 – Promotion of crafts and trades**<sup>44</sup>

- Objectives: Promote craft trades, craft SMEs, training and employment opportunities within the sector
- Target groups: This action is aimed at young people in school and their families as part of their orientation to promote the training and vocational integration opportunities offered by the craft sector.
- Implementation of the actions: 1) Through collective information sessions within the CMA, in institutions or on forums including the “Mondial des Métiers (World of Trades)”; 2) Through individual interviews at the Chamber of Crafts and positioning procedures in the context of a vocational training project related to crafts
- Depending on partnerships with different institutions, other cross-disciplinary themes can be more specifically addressed, such as diversity, gender diversity or disability.
- To achieve this, CAD is mobilizing nationally developed tools to promote the sector:
  - Trade sheets from the national website [www.artisanat.info](http://www.artisanat.info)
  - Module developed in partnership with ONISEP to initiate a first

level of reflection on its project of orientation type “questionnaire of interest”: [www.oriente-metiers.org](http://www.oriente-metiers.org);

- Deployment of “artimobiles” and their tools to promote trades in colleges
- Valuation of “craft viruses” to introduce the four sectors of craft activity in a fun way

43 <https://www.crma-auvergnerhonealpes.fr/se-former/mini-stages-decouverte>

44 <https://www.crma-auvergnerhonealpes.fr/se-former/decouvrir-les-metiers>



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#### 4.2.6. SWITZERLAND

The dual track system of vocational and professional education and training (VET/PET) in Switzerland owes its success largely to the fact that the Confederation, the cantons and professional organizations share their responsibilities and work together to ensure high-quality VET/PET and sufficient apprenticeship places.

The federal government acts as a steering and development authority for vocational education and training. Two institutions are available to help it in this regard:

- ▶ **The State Secretariat for Education, Research and Innovation (SERI)**<sup>45</sup> regulates vocational education and training, jointly funds it, promotes the further development of new educational programs and the vocational baccalaureate. More so, SERI is involved in vocational education and training on the international scene.
- ▶ **The Swiss Federal Institute for Vocational Education and Training (SFIVET)**<sup>46</sup> offers training and continuing education for vocational education and training officers and examination experts. In addition, it is in charge of the scientific monitoring of vocational education and training (research, pilot tests).

The “Organisationen der Arbeitswelt” or organisations of the labour world, professional organisations, are professional associations, branch associations and social partners. They define the educational content of basic vocational training, are responsible for in-company courses, provide higher vocational training courses and participate in the further development of vocational training.

Cantons implement and supervise vocational education and training. They issue educational permits for companies, run vocational schools, approve apprenticeship contracts and provide vocational, academic and career counselling services.

45 <https://www.sbf.admin.ch/sbf/en/home.html>

46 <https://www.sfivet.swiss>

Such cooperation can already be considered a best practice example.

- ▶ **BerufsbildungPlus**<sup>47</sup>, the umbrella campaign for Swiss vocational training, was launched in 2007 by the federal government, cantons and organisations in the world of work to strengthen vocational training and to publicise its importance to the economy and society. With slogans such as “Learn to be an electrician, become an electrical engineer” or “Learn to be a hairdresser, become a biologist”, the current campaign draws attention to the high permeability of the Swiss education system.
- ▶ **Berufsbildung 2030**<sup>48</sup> is a joint initiative of the Swiss confederation, the cantons and organisations in the world of work with the aim of anticipating social and professional market-specific changes and making vocational training sustainable.

Prioritized focus areas<sup>49</sup> have been defined in a mission statement as an orientation framework; with the start of the implementation phase in 2018, 30 projects were developed and will be implemented in the partnership. The projects are divided into the following sub-areas: *life-long learning, digitization, information and advice, flexibilization of educational offers, reduction of bureaucracy and governance.*

Some of the projects developed are:

- **Blended learning: Basics and framework conditions**<sup>50</sup>: The project aims to offer innovative forms of learning (here: blended learning) on a well-established basis through mutually agreed upon framework conditions. These framework conditions guarantee the quality and uniformity of the implementation of blended learning sequences and ensure efficiency and legal security when blended learning sequences are introduced as part of the reform process.

- **Orientation aid for digital transformation in basic vocational training**<sup>51</sup>: This project is developing an orientation aid for the bodies responsible for basic vocational training. The aid is a tool for the sponsors to recognize the digital skills required by the labour market and to incorporate them into basic vocational training. To ensure that the topic of digital transformation is included in the five-year reviews, SERI is integrating this topic as an aspect of professional development in the *Process of Professional Development in Basic Vocational Training* handbook.
- **Flexible vocational training from the perspective of the world of work**<sup>52</sup>: A network of several organisations of the labour world with the involvement of the confederation and the cantons is defining a common understanding of future flexible basic vocational training and developing a basis for subsequent model developments.

Due to technological change and digitization, basic education training content is subject to ever shorter life cycles. At the same time, more and more basic skills are becoming relevant beyond individual professional groups.

These changed requirements call for new training structures, models and tools that enable organisations of the labour world to adapt basic vocational training flexibly, efficiently and outside of the usual revision processes.

- **Lehrverbund Schreinermacher (apprenticeship company associations)**<sup>53</sup> is a good example of an association of apprenticeship companies and was founded in 2005. It is made up of 24 specialist

47 <https://www.berufsbildungplus.ch>

48 <https://berufsbildung2030.ch/de/>

49 [https://berufsbildung2030.ch/images/\\_pdf\\_de\\_en/vision2030\\_d.pdf](https://berufsbildung2030.ch/images/_pdf_de_en/vision2030_d.pdf)

50 <https://berufsbildung2030.ch/de/projekte/21-projekte-de/241-blended-learning-grundlagen-und-rahmenbedingungen>

51 <https://berufsbildung2030.ch/de/projekte/21-projekte-de/48-orientierungshilfe-digitale-transformation-in-der-beruflichen-grundbildung>

52 <https://berufsbildung2030.ch/de/projekte/21-projekte-de/45-flexible-berufsausbildung-arbeitswelt>

53 <https://www.schreinermacher.swiss/index.html>

companies and aims to counteract the effects of the decline in carpenter apprenticeship positions and the increasing changes seen in companies.

The apprentices are given comprehensive training either in a single company or in rotations at several companies. In this way, companies are included that can only cover part of the training spectrum for the carpenter's profession while still getting involved in training.

In addition, the training companies are relieved of administrative work (from the point of recruitment right up to the end of the apprenticeship).

- **VIAMIA: Professional assessment and advice for people over 40**<sup>54</sup>: In order to respond to the rapid changes in the world of work, it is important to actively shape one's own career. For this reason, the Federal Council and the social partners encourage employees aged 40+ to regularly assess their position. Against this background, the State Secretariat for Education, Research and Innovation (SERI) subsidizes the development and implementation of the free "viamia" service on behalf of the Federal Council.<sup>55</sup>

Users of "viamia" will first be asked to complete an "employability check". This test assesses employability. The test results serve as a basis for the position assessment in which the personal and professional situation is analysed and any need for action is determined. With the help of a career advisor, the person seeking advice will then develop and plan specific measures for maintaining or improving his/her employability.

54 <https://www.viamia.ch/de>

55 <https://www.sbf.admin.ch/sbfi/de/home/bildung/berufsbildungssteuerung-und--politik/projekte-und-initiativen/foerderung-der-inlaendischen-arbeitskraefte/kostenlose-standortbestimmung.html>

- **Netzwerk Kleinsterberufe (Network of Small-Scale Professions)**<sup>56</sup>: The Network of Small-Scale Professions was launched as a project after the 2014 SwissSkills special exhibition of small professions and was heavily supported from the offset by the Swiss Federal Institute for Vocational Training (SFIVT) and the Swiss Trade Association (STA).

In addition, a parliamentary group for the support of small-scale professions represents the concerns of the Network of Small-Scale Professions in the Swiss parliament and in the commissions.

The goals of the Network of Small-Scale Professions include the development of a viable and sustainable network, the development and implementation of educational offers and the improvement of framework conditions for small-scale professions.

56 <https://kleinstberufe.ch/>

### 4.3. CONCLUSION AND RECOMMENDATIONS

The focus on best practices is different in the partner regions. Since the dual education systems in Slovenia and France are in development, the given practice examples refer more to the implementation and promotion of dual training. In France, the emphasis is also more on cooperation and axes of intervention. In Austria, Bavaria and Switzerland, there are well-established strategies of promotion of dual education and training as well as examples of successful initiatives and programmes within and beyond classical apprenticeship.

The described situation and examples of each partner region show the importance of cooperation and exchange between political and economic actors as well as municipalities, educational institutes, training companies, in-company trainers, (potential) trainees and parents. Contacts and discourses on political level should be used primarily for the implementation of innovation in education as well as the steady improvement and permeability in the education system as well as on vertical and horizontal levels.

The following list sums up the **recommendations** on the basis of the best practice research in the Alpine Space. They mirror the results of the SME needs analysis and evaluation of current dual education formats described in the SME needs analysis report (Chapter 3).

- ▶ Advance the value and visibility of dual education paths as well as professional fields
- ▶ Encourage students to test their skills out as well as to learn more about different professions, materials and tools
- ▶ Enhance exchange, coordination and networking between political and economic stakeholders, SMEs, educational institutes, in-company trainers, teachers, trainees, students and parents
- ▶ Conjunction of higher education (e.g. high school diploma, university) and practical training in SMEs
- ▶ Advance special support services and educational opportunities for trainees with disadvantages
- ▶ Promote the women's quota in training companies

- ▶ Enhance possibilities for adults and people with higher education certificates to follow a dual education and training programme
- ▶ Strengthen the support of training companies and in-company trainers concerning issues such as information, consultation, resources or advanced training

The complete “Best-Practice Collection Report” can be found on the Du-ALPlus homepage: <https://www.alpine-space.eu/projects/dualplus/pdfs/results/dt231-best-practice-collection-report.pdf>. The examples (Chapter 4.2.) are also presented in the national languages within the Annex (Chapter 8.1.).

The comprehensive results served as the basis for developing the dual training formats in six project regions which are outlined in Chapter 5..

## 5. INNOVATIVE DUAL TRAINING ACTIVITIES WITHIN DUALPLUS

In addition to sound and empirical research activities, the project team developed innovative training formats as well as a proposal for an innovative tutors' training programme within the DuALPlus project.

The six reports on innovative dual training formats (chapter 5.1.) as well as the proposal for an innovative tutor's training programme (chapter 5.2.) are available in both English and the national language of the partners involved on the **project homepage**: <https://www.alpine-space.eu/projects/dualplus/en/project-results/innovation-and-quality>.

The reports are also presented in the Annex of this handbook (chapter 8.2.).

### 5.1. DUAL TRAINING FORMATS

Six partners developed regional training formats based on previous research, either by improving existing trainings or by developing new ones.

The trainings are directed at SMEs, trainers or youngsters. They will help these target groups to develop the skills they need to cope with continuous social, technological and organizational changes in the workplace. The trainings will also help the SMEs to reach out to new target groups such as girls, people with higher education, NEETS or refugees. Therefore, they can be defined as best practice examples that provide inspiration for future innovations in dual education and training in the Alpine Space.

Due to the COVID-19 pandemic, single trainings have been only partly implemented and evaluated so far. New information that is available only after the release of this handbook will be provided on the **project homepage** as well as on the **online platform** [www.dualeducationfinder.eu](http://www.dualeducationfinder.eu).

In the following, we will introduce the six training formats developed in Vorarlberg (AT) by Regional Development Vorarlberg eGen, in Lower





Austria (AT) by New Design University, in Bavaria (D) by the Chamber of Trade and Crafts for Munich and Upper Bavaria, in Trento (IT) by the Autonomous Province of Trento, in Bolzano (IT) by IvH-Education and Service co-operation and in Auvergne-Rhône-Alpes (FR) by the Auvergne-Rhône-Alpes Regional Chamber of Crafts. The reports are provided in the partners' language in the Annex.

### 5.1.1. LEARNING FOR LIFE – HOLISTIC TRAINING CONCEPT FOR APPRENTICES (VORARLBERG/AT)

#### SUMMARY



FIGURE 5: The “Learning for Life” training concept strengthens the personality of apprentices and identifies possible educational pathways.

© Training compass of the Montafon region, telesis Entwicklungs- und Management GmbH

Under the motto “Learning for Life” in the Montafon (Vorarlberg, Austria), a holistic and innovative training concept for apprentices is being developed in the course of the DuALPlus project and integrated in the form of a pilot project in spring 2021 into the existing programme as a third pillar. In addition to training in the company and in the vocational school, a regional co-operation project of SMEs will primarily strengthen the expertise, social competences and self-competences of young people. In addition to increasing the attractiveness of dual education, the focus is on the personality formation of the participants. With the aim of lifelong learning and on the basis of the Austrian education system, trainees in general as well as each individual can be shown educational and career paths.

DuALPlus is an international project that deals with the development of dual training in the Alpine region. In this context, dual training basically means training as a combination of learning in the company and school education and training. In the development of innovative forms of education, the focus is on the form of apprenticeship: the apprenticeship as a starting point for further lifelong dual learning.

#### Vorarlberg as a partner region in the European DuALPlus project

In Vorarlberg, about one in two young people opt for a qualified apprenticeship. This great popularity is due to the wide range of training courses on offer. The dual training offers young people future prospects and makes a decisive contribution to securing the business location and thus to the high quality of life in Vorarlberg.

In Vorarlberg, the Montafon Valley is one of the regional partners in the international DuALPlus education project. The aims of the project are to

- ▶ increase the attractiveness of dual training, especially for small- and medium-sized enterprises in the regions;
- ▶ introduce innovative forms of education in addition to existing training;
- ▶ and to communicate and improve the permeability of the education system as a basis for further learning.

The DuALPlus project works in an interdisciplinary way with many different partners who are directly or indirectly related to dual training. For these co-operations, the international network of the project is inten-



© WIGE Montafon

sively used to be able to use and implement the latest information and the most innovative development platforms for education and training at a regional level as well.

### BACKGROUND

Professionals are the backbone of our small- and medium-sized enterprises, or SMEs for short. The shortage of skilled workers is seen as one of the biggest challenges facing the Austrian economy. Three-quarters of companies are already struggling to meet their needs for qualified staff.

Apprenticeships are therefore very important and demand from SMEs is very high and leads to tensions between industry and trade due to low birth rates.

Large companies are trying to attract their needs for young talent through apprentice castings, taster days and their training workshops. Small companies have a much harder time, as the trainer has to take over the training of the apprentice in specialist and social competence in addition to the business activity.

### Direct benefits of innovative education and training systems for SMEs

In this context, innovative forms of education and training are developed which, in addition to direct training in the company itself and attending vocational school, can also be implemented as a third pillar in the sense of innovative holistic training. This is done not only in large companies, as has usually been the case up to now, but also in small companies, especially in regional co-operations.

This increases the attractiveness for dual training also in small- and medium-sized enterprises and the trainees are supported directly and on possible further individual training and further education steps on their way to their final apprenticeship examination.

### GOALS

Within the framework of DuALPlus, five selected modules of the new forms of education and training have been developed as a pilot project in Montafon and offered to the companies or their apprentices for participation.

### Motto: “Learning for Life”

The innovative training and further education programme focuses on the further development of the participants’ expertise, social competence and self-competence as a third pillar, in addition to working in the company and attending vocational school.

The main aim is for young people to be given state-of-the-art tools to successfully meet their current and future challenges. “Learning for Life” is the motto for every participant.

### DESCRIPTION OF THE PROGRAMME

#### Requirements

In order to best meet the respective needs of the participants, the modules are generally carried out in small groups of mostly six people in systematically based day seminars.

Six apprentices and three students from the Montafon Polytechnic School are taking part in the pilot project in Montafon. The pilot project is part of the DuALPlus project and therefore free of charge for the apprentices of the participating companies.

For the selection of participants, the companies were informed in writing about the offer. Of the participating apprentices, four are male and two are female. There are three apprentices in the first year, two in the second year and one in the third year.

#### Content and structure

The five modules of the pilot project in Montafon build on each other systematically and are part of a larger 18-day training series (see overview), which is carried out in the period of three to four years during the apprenticeship of young people as a third pillar alongside work and vocational school.

No.	Contents	Cat. Competence	No. Pers.	No. Days
1	Time and goal management	Self-competence	6	1,00
2	Learning to learn	Self-competence	6	1,00
3	Communication	Self-competence	6	1,00
4	Holistic thinking and acting	Self-competence	6	1,00
5	Mental training	Self-competence	6	1,00
6	Fundamentals of mathematics	Subject Competence	6	1,00
7	Applied mathematics I	Subject Competence	6	1,00
8	Applied mathematics II	Subject Competence	6	1,00
9	Business arithmetic I	Functional competence	6	1,00
10	Business calculus II	Functional competence	6	1,00
11	Business management game	Technical, social, personal competences	9-12	2,00
12	Applied project management	Social competence	10-20	4,00
13	Job rotation	Social competence	10-50	2,00
<b>Total days in the apprenticeship period</b>				<b>18,00</b>

FIGURE 6: Education and training system (3rd pillar) of the WIGE Montafon

© WIGE Montafon

The entire programme is based on a system-cybernetic approach and has been certified and awarded several times in scientific-strategic as well as practical-operational terms. In addition to the training series, the overall programme includes other elements such as project organisation; target group-oriented information, for example, through parents’ evenings; public relations or holistic projects such as nature experience days.

The five modules were selected for the pilot project because the first three seminars lay the basis for self-competence, the mathematics seminar is considered to be the biggest problem subject of students and provides expertise as the basis for the STEM strategy in Montafon and because the economic planning game presents economic knowledge in a communicative form to strengthen social competence.

The figure shows the point of personality-oriented education and training from the entire programme as a third pillar. The five modules developed and offered in the pilot project form the compact start in spring 2021 as part of the DuALPlus project.

**Module 1 Time and goal management: “Now we’re off!”**

The participants recognise that the management of time and goals is one of the most important success factors for effective and efficient action—both professionally and privately. Your own responsibility, general principles, defined tasks and applicable tools are the first module’s responsibilities.

**Module 2 Learning: “Learning to learn properly”**

This module shows what learning really is and how it works according to the latest findings from education and brain research. Modern and innovative ways of individual learning are presented in order to learn faster, more thoroughly and, above all, more sustainably.

**Module 3 Solving problems: “Through holistic thinking and acting”**

A first overview of the building blocks of systems and possible correlations as factors of action are presented. Recognising complexity is the basis for taking situations and challenges holistically in order to act purposefully and successfully.

**Module 4 Mathematics: “Basic mathematics for apprentices”**

Mathematics is the subject that causes problems for many students in our education system. It is essential for the successful application of defined STEM strategies in the respective regions. Mathematics is presented in this module from a systemic perspective. The module provides an overview of the field of mathematics so that the participants can correctly classify, evaluate and possibly expand their current state of knowledge.

**Module 5 Two-day interactive economic planning game: “Learning by doing”**

Planning games are models with which complex relationships can be represented in a simple form. With this didactic, action-oriented method, which simulates processes and conflicting goals, the participants gain sustainable experiences in a short time (learning by doing).

In a simulated market environment, “economy in three companies over several financial years” is played interactively. According to the motto of the Indian folk wisdom, “Tell me—and I will forget it. Show it to me—and I’ll remember. Let me do it—and I’ll keep it!”

**IMPLEMENTATION**

The actors involved in the development and implementation are defined as follows:

**Actors**

Actors of the pilot project are:

- ▶ 6 apprentices of member companies of the Montafon Economic Community
- ▶ 3-6 students of the Montafon Polytechnic School (participation in the economic planning game)
- ▶ The core team of DuALPlus Montafon:
  - ▶ Elke Martin (Youth Coordinator Stand Montafon)
  - ▶ Christian Zver (Managing Director WIGE Montafon)
  - ▶ Martin Plöger (Director Polytechnic School Montafon)
- ▶ The speaker pilot projects:
  - ▶ Markus Gamon (Regio-V; telesis Entwicklungs- und Management GmbH)

The five seminar blocks will be led by Markus Gamon as speaker in the Montafon. Markus Gamon has been awarded the Austrian State Prize for Consulting and the Constantinus Award for his work on innovations in dual education and training systems.

**Conditions**

The pilot project was advertised in the companies of the Montafon Economic Community. The six apprentices participating in the pilot project will be exempted for a period of six working days.

3-6 students from the Montafon Polytechnic School will be added to the game.

**Introductory process**

The five modules are planned to be implemented in the period from May to June 2021 (depending on the current situation and possibilities during COVID-19). The seminar days take place in three units of two days each.

## EVALUATION

### COVID-19 pandemic

Due to the COVID-19 pandemic, the implementation of the pilot model had to be postponed. The evaluation is therefore not yet available.

### Evaluation process

Evaluation means a systematic examination and evaluation of an object on the basis of empirical, i.e. experience-based information, with the intention of ensuring and developing its quality and usefulness. The “subject” of evaluation in this case is the implementation of the pilot project at its current stage of development. In principle, the evaluation takes place in a systematic form, which can be divided into four consecutive phases.

#### Phase 1: Getting started

Good preparation creates a solid basis. The aim is to find a suitable starting point, to clarify framework conditions and objectives and to make fundamental decisions on which the concrete planning and implementation of the evaluation is based.

The beginning is crucial: how something starts and who is involved in it influences the outcome of a process to a high degree. It is therefore important to ‘pick up’ those affected and those involved. Even if preparations have already been made, for example by the school management or the quality team, or some choices are specified: in any case, it is advisable to start an evaluation together, for example with a meeting or a kick-off workshop in which all interested parties and participants participate.

#### Phase 2: Planning and implementation

As soon as it is clear which questions are to be answered with the evaluation and who has to be taken into account, methodological planning will be carried out. The best method is a smaller group, for example an evaluation team, which is entrusted with the planning and implementation. The evaluation team now selects appropriate investigation methods and puts together appropriate survey tools.

The planning of the individual survey and evaluation steps is part of the overall planning of the evaluation project. It has proved its worth to pay

attention to good information during the surveys themselves: this creates motivation and transparency and contributes to the quality of data. In the interests of efficiency, a systematic accompanying documentation has to be created: it saves laborious and time-consuming rework.

#### Phase 3: Evaluation and presentation of results

At the beginning of the data analysis, it makes sense to get an overview and to critically question the data base once again (“source critique”, data check). The raw data is then evaluated and processed in a form that enables further work. This is, for example, the statistical analysis of survey data or a first systematic summary of qualitative findings. The results are easily comprehensible, clearly arranged and tailored to the addressee. The next step is to validate, interpret and evaluate the analysis results—preferably with a larger circle of stakeholders in a validation workshop / evaluation conference. While the (communicative) validation and interpretation still revolve around the data (Are they plausible? What do they tell us?), the assessment and conclusion is concerned with taking a position:

- ▶ Where do we stand?
- ▶ How satisfied are we?
- ▶ Where is the need for action?

A final written presentation of the results is the basis for the development of schools and teaching and serves to ensure results, traceability and dissemination, thus making evaluation results available to others. A sleek and clearly written presentation gives an overview of the occasion and the goal, methodological procedure, results and conclusions. It is based on an accompanying documentation of all steps.

#### Phase 4: Start implementation

Finally, phase 4 is about making the evaluation results usable. With it, the evaluation fits into the quality cycle. Successful evaluations lead to conclusions and further steps in school and teaching development. This requires additional information activities in order to initiate an (intensive) engagement with the evaluation results among stakeholders.

Once objectives and measures have been agreed, it is important to make a commitment through a work programme jointly drawn up and adopted

by the teachers: the implementation of the measures is addressed, with clear mandates and, in particular, those responsible.

## RESULTS

The evaluation is to be carried out in four phases according to the defined procedure. This approach was defined primarily for the possible implementation of the overall project. The pilot project will be evaluated because it will be the basis for a possible introduction of the planned 3rd pillar in the 2021/22 school year. The exact course of the evaluation of the pilot project will be agreed in detail during the implementation.

The results of the evaluation process are described in the following seven points (in excerpts):

- ▶ *Motivation to participate*  
What motivates companies and young people to participate?  
To what extent are young people motivated?  
What measures could increase motivation?
- ▶ *Expectations for the pilot model*  
What are the expectations for the pilot project of the participating companies?  
What are the expectations of the participants themselves?
- ▶ *Aims before the start of the pilot model*  
What objectives were defined before the start of the pilot project?  
How are the defined objectives formulated?
- ▶ *Satisfaction with the pilot model*  
What is the satisfaction with the pilot model in a target-actual comparison?
- ▶ *Achieved goals*  
Have the objectives been achieved sufficiently?
- ▶ *Future prospects of the participants*  
What are the possibilities for participants to complete the pilot model?
- ▶ *Final examination*  
The results of the final evaluation of the pilot project are useful and necessary for the introduction of the third pillar as a whole training initiative.

## OUTLOOK

The findings are implemented and developed further in a continuous improvement process.

The aim is to implement a cooperative development and education concept for training companies as a third pillar alongside workplace learning and attending vocational schools in autumn 2021, based on the experience of the pilot project in the Montafon.

The financing of the third pillar as a holistic innovative education and training project is based on private financing by the SMEs themselves and a public share in the form of subsidies from the State of Vorarlberg, Chambers of Economics and Labour and municipal grants. A financing model has been developed and is available as a basis for possible implementation.

The institutionalisation of this third pillar will make dual training opportunities in the Montafon more attractive and demonstrate the need for further lifelong learning to young people.

The participants of the holistic development and education concept are shown, above all, that they are each responsible for their further professional and private development. The education system is open to individual development steps of each individual.

## 5.1.2. SKILLED TRAINING FOR UNIVERSITY STUDENTS (LOWER AUSTRIA/AT)

### SUMMARY

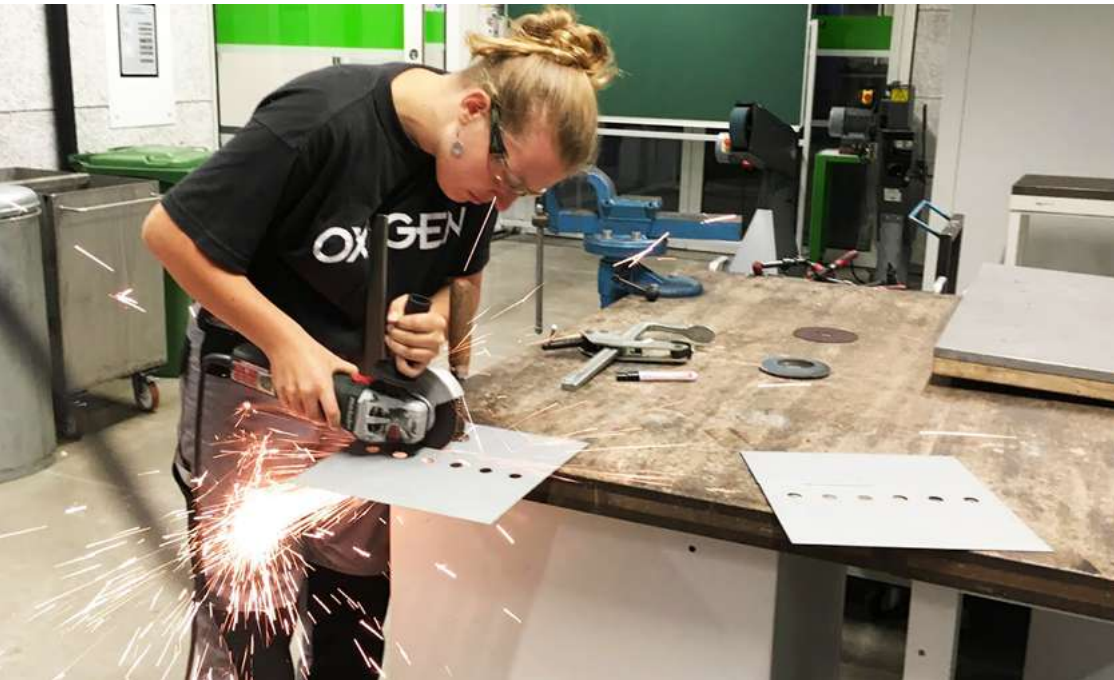
Linking design and crafts, the “Manual & Material Culture” bachelor’s programme at New Design University (NDU) in St. Pölten aims to prepare students for self-employment in design or crafts or leading positions in medium-sized companies or design offices. Two additional practical courses are offered as part of the course of study (metal and wood), which, however, cannot replace sound teaching for persons without corresponding practical training. The “Skilled Training for University Students” course, developed in collaboration with co-operation partners, is designed as a consecutive model to enable students to complete a skilled worker qualification which was not possible within the framework of the previous metal course of the bachelor’s programme.

The pilot model was developed in the second half of 2019 and implemented within the framework of fourteen theory and 18 practice units between March and August 2020.

The free course was initially supposed to end between 29 June and 3 July 2020 with the final apprenticeship examination of the participants. Due to the COVID-19 pandemic, the NDU’s teaching activities were shifted to distance or hybrid learning in 2020. Due to the pandemic, the final apprenticeship examination had to be postponed three times and is expected to take place in July 2021.

The pilot model was evaluated by means of two questionnaires and a final focus group discussion. The results of the evaluation (see chapter 6) particularly showed the relevance of the positioning of the skilled worker training in the bachelor’s programme as well as a theoretical and practical deepening in the form of a mandatory company internship and optional intensive training in preparation for the final apprenticeship examination.

The skilled training shall be revised in accordance with the learnings (see chapter 7) and implemented as soon as possible. Furthermore, a corresponding skilled training is planned for the wood sector.





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The combination of university studies and apprenticeship certification contributes to the quality and attractiveness of dual education as well as to New Design University and the “Manual & Material Culture” bachelor’s programme.

### BACKGROUND

Austria is made up of nine regions, which have a certain level of autonomy. In terms of the vocational education system, the federal government is primarily responsible.

The success of the dual system is the result of a process involving many institutions and bodies at different levels. At the federal level, there are the Ministry for Digital and Economic Affairs (BMDW) as well as the Ministry for Education, Science and Research (BMBWF). The latter defines the curriculum and partially finances the vocational schools. Each region has an apprenticeship office, placed at the Regional Economic Chamber (WKO), but subordinate to the Federal Ministry of Economy (BMDW).

Regional governments provide the financial resources for building and maintaining the vocational schools; for purchasing equipment, machinery and teaching materials and (together with the federal government) co-fund the salaries of teachers and trainers. The participation of companies and workers in the dual system is provided through several bodies.

At the local level, enterprises hire apprentices. The on-the-job training is provided by authorised trainers or instructors. Vocational schools offer general and theoretical training as well as some practical training.

Before they can hire trainees, the enterprises have to show they meet the legal requirements in terms of suitable machinery and equipment as well as of the skills of the trainers or instructors providing the on-the-job training. The trainer can be the entrepreneur him- or herself or another employee appointed by him or her. Trainers are required to have professional expertise in the trade, or in a similar one, and to have passed the initial training instructor examination.



Enterprises can choose to train apprentices within the framework of training alliances with other companies as well. Since 2009, it is possible to carry out the apprenticeship through a supra-company training model (ÜBA) if a student is not able to find a placement in a company.

Beyond the on-the-job training, the trainees have to attend a vocational school for one day or a day-and-a-half per week, i.e. for 20% of the time. The organisation of the learning at the vocational school can also be blocked, e.g. continuously for eight weeks per year. Curricula of vocational schools contain mainly basic knowledge and skills related to the chosen occupation. Though the curricula are defined at the federal level, the schools are allowed to have a certain degree of autonomy.

The apprenticeship period ends with a leaving (practical as well as theoretical) examination, which verifies that the trainee has properly acquired the required skills.

The Austrian dual education system is primarily oriented towards young people. So far, most existing educational and training offers beside traditional dual education and training have been addressed to people with pertinent professional practice or unemployed people with at most second-level education. There are hardly any offers for adults with a higher educational background to learn a trade as part of second-chance education. Among other things, this gap should be closed by the developed training format.

## GOALS

The “Manual & Material Culture” bachelor’s programme at New Design University (NDU) in St. Pölten is aimed both at persons with an apprenticeship certificate as well as those with a high school diploma. The programme links product design with craft, conveys tools for professional design work to apprenticeship graduates and conveys well-founded wood and metal working competencies to graduates as well as leavers of high school or university within additional courses. Among other things, students should be prepared for self-employment in design or craft or leading positions in medium-sized companies or design offices.

However, the additional courses within the bachelor’s programme cannot replace a sound apprenticeship for persons without appropriate practical training. The skilled training for university students, which is introduced in the following sections, is designed as a consecutive model to enable students to obtain a certificate as skilled workers that is not possible within the framework of the additional metal course.

The training format that has been developed aims at a simultaneous conclusion of the bachelor’s degree and the metalworking apprenticeship.

This should enable students to independently produce their own projects after completion and to be able to contribute their professional skills more fruitfully to their professional activities through the additional skilled worker training.

Furthermore, the format strengthens the quality and attractiveness of dual education to the public by combining university studies and apprenticeship.

## DESCRIPTION OF THE PROGRAMME

The “Skilled Training for University Students” training format was developed in collaboration with a “community of practice” working group consisting of co-operation partners at New Design University in the second half of 2019 and implemented in collaboration with the “community of practice” member Pascal Ernst, who also supervised the metal course of the “Manual & Material Culture” bachelor’s programme between March 2020 and January 2021 as a pilot model for students as well as alumni of the bachelor’s programme. The evaluation was conducted during as well as after the testing phase.

## Requirements

The pilot model was free of charge and addressed to students as well as graduates of the “Manual & Material Culture” bachelor’s programme and thus, according to the requirements for the degree programme, to persons with a high school exam and/or an apprenticeship qualification.

### Content and structure

The aim of the skilled training for university students is to teach students professional and social skills as well as self-learning skills.

The specialist competences are based on the Metal Technology Training Regulations<sup>57</sup> and include (condensed) content on integrated energy production, glass and glass components, metal technology project practice, the basics of steel construction/metal construction (including strength theory), materials technology (including material testing), building physics and fire protection, locks and lock types, railings, grids and grates as well as facades, glass structures and roofs.

Social skills are to be improved by different social forms of working groups. Within the scope of the skilled workers training, students should work in small groups as well as individually.

The documentation of and reflection on individual training contents and work processes within the framework of an individual, freely configurable portfolio is intended to support students in strengthening their self-learning skills.

The skilled training ends with an apprenticeship certificate in Metal Engineering / Steel Construction Engineering.

In the development process for the future training format within the “Manual & Material Culture” bachelor’s programme, a total time frame of 256 hours (80 hours of theory, 176 hours of practice units) during the diploma thesis semesters (5/6) was proposed.

SEMINAR CONTENT	HOURS / MODULES
Theory	80 hours
Practice	176 hours
<b>Total</b>	<b>256 hours</b>

The training format was tested in a pilot model between March and August 2020 in condensed form (see chapter 5) and then evaluated. The following sections focus on the implementation and evaluation of the pilot model.

### IMPLEMENTATION

#### Actors

The pilot model was developed in the second half of 2019 and implemented in the summer term of 2020. In both the development and implementation process, first, the NDU main team of the DuALPlus project consisting of Stefan Moritsch and Julia Pintsuk-Christof was involved; second, the community of practice, which was integrated into the current project processes in general and consisted of six master crafts(wo)men and/or designers in metal work, smithery, orthopaedic shoemaking, ceramics and jewellery art. Among them, the metal worker Pascal Ernst should be mentioned in particular. He already supervises the metal course of the “Manual & Material Culture” bachelor’s programme and thus took charge of the pilot model.

Ten students respectively alumni of the “Manual & Material Culture” bachelor’s programme also participated in the pilot model as actors. There were four women and six men, seven from Austria and three from Germany, between the ages of 23 and 38. Seven people had completed high school with a diploma, two had a craft master certification and a high school diploma, and one person had an apprenticeship certification and a high school diploma. Six of the ten participants already had completed one or more vocational trainings as part of an apprenticeship, college and/or higher vocational school (high school diploma) in the fields of construction technology, interior design and furniture construction, agriculture, mechatronics, product design, carpentry and/or technical drawing.

57 148. Order of the Federal Minister for Economics, Family and Youth about the vocational training in the profession of metal technology (Metalltechnik-Ausbildungsordnung), <https://www.ris.bka.gv.at/>.

### Conditions

Prior to the actual implementation of the pilot model, a clarification of formal conditions was required. This included the reconciling of content issues with the rectorate and the management board of the New Design University, organisational and legal issues as well as financial, human and spatial resources.

The pilot model was designed for a minimum of two and a maximum of ten participants. The theory units were held on the premises of New Design University, and the practice units workshops were held on the premises of WIFI Lower Austria, which are located in the same building. WIFI is an education and training institution, which, like New Design University, belongs to the Lower Austrian Chamber of Commerce.

### Implementation process

For the pilot model, fourteen theory and 18 practice units of five to eight hours were planned between March and June 2020. The free course was intended to end between 29 June and 3 July 2020 with the final apprenticeship examination of the participants.

Participation in the pilot model was free of charge, and the ten participants were recruited by the head of the academic section.

Due to the COVID-19 pandemic, the NDU's teaching activities were shifted to distance or hybrid learning in 2020. This situation also required greater flexibility and commitment from the leader and participants of the pilot model. For example, the theoretical content had to be learned largely in self-study. Nevertheless, the timetable of the theoretical and practical units was largely adhered to, with the latter taking place over the summer of 2020 and being completed at the beginning of August.

Due to the pandemic, however, the final apprenticeship examination had to be postponed three times and is expected to take place in July 2021.

### EVALUATION

#### Evaluation process

The evaluation of the "Skilled Training for University Students" pilot model was conducted between February and August 2020.

After a kick-off meeting with the head of the academic section, the trainer and students, respectively alumni, a questionnaire was sent out to all participants before the start of the course, primarily to determine their motivation for participating and their expectations for the course.

A second questionnaire was sent out to the individual participants towards the end of the pilot model, at the beginning of July 2020, in order to assess their satisfaction with the course.

Following the completion of the pilot model at the beginning of August 2020, experiences, perspectives and recommendations were discussed with the participants and the trainer within a focus group.

The key results will be outlined below.

### RESULTS

#### Motivation to participate

Six of the ten participants had already received one or more vocational trainings in technical, manual fields or in the field of design.

The decision to participate in the "Skilled Training for University Students" pilot model in addition to or after the "Manual & Material Culture" bachelor's programme was primarily based on the desire to expand or deepen existing competencies.

„Da ich den Metallkurs vier Semester absolviert habe und ein Lehrabschluss in Metall meine Kenntnisse stärkt.“

[“Because I participated in the metal course for four semesters, and an apprenticeship certificate in metal strengthens my competencies.”]

The strong link between theory and practice also promises better opportunities on the labour market.

„[...] Da ich eine spätere Selbstständigkeit im Möbel & Prototypenbau

anstrebe, wird dies durch die Facharbeiterausbildung deutlich gefördert. Nur wenn man das Handwerk versteht, kann passend geplant werden.“

[“[...] Because I am aiming to work self-employed in furniture & prototype construction, this is clearly promoted by the skilled training. You have to understand the craft in order to plan appropriately.”]

A ranking of different potential motives showed the following priorities:

- ▶ Expansion of craft skills
- ▶ Diversity of professional opportunities
- ▶ Establishment of own company with practical craftsmanship (execution of both design and production)
- ▶ Professional activity in the craft trade
- ▶ Special professional interest
- ▶ Completion of the final apprenticeship examination
- ▶ Admission to craft master classes/craft master examination
- ▶ Establishment of own company with a theoretical reference to craftsmanship (competence in craftsmanship but limited to design work)

### Expectations of the pilot model

The participants primarily expected to receive extensive skilled training in metal work (“So viel lernen wie möglich”; “Learning as much as possible”), to gain practical experience, to be promoted with regard to their self-realisation, to be prepared for future self-employment as well as to be able to successfully complete the course with the final apprenticeship examination.

With regard to professional skills, the participants primarily expected to learn specific techniques (e.g. welding, turning and milling). They also expected social competencies to be strengthened by an extensive balance of individual and group work, self-learning competencies to be enhanced by developing work pieces and space to be given for experimentation and reflection.

Retrospectively, most of the participants's expectations were met. Thus, the majority described the acquired professional skills as essential and practice oriented. Some of the participants would have liked to have a lit-

tle more in-depth knowledge in order to feel better prepared for the final apprenticeship examination.

The promotion of social competence was perceived as successful due to the positive working climate, the open exchange and discussion opportunities as well as the balance between individual and group work.

The expectations regarding the promotion of self-learning competence were also fulfilled largely due to the possibility to develop in practice and to elaborate theoretical contents independently.

From the point of view of the trainer, several participants had difficulties in independently learning theoretical contents, which is why he provided further theoretical material for the final apprenticeship examination.

### Goals before the start of the pilot model

The majority of participants stated on the first questionnaire that they were looking for an entry position or pursuing specific professional plans such as working self-employed on the planning and implementation of projects or working in an “innovative and creative” craft company and/or design office after completion of the pilot model. After successful completion of their apprenticeship, three people planned to complete the craft master in metalworking, a further university programme or further craft training. One person was already self-employed and would like to use the additional skills acquired within the framework of his or her company.

### Satisfaction with the pilot model

The second questionnaire and the focus group discussion focused primarily on the experiences and perspectives of the participants after completing the theoretical and practical units of the pilot model.

The course met retrospectively with overwhelming satisfaction, although constructive criticism was voiced, which should be taken into account when revising the skilled training.

What the participants found particularly positive was the open atmosphere in the course, the work in the workshop, the opportunity to con-

tribute to the design, the strong practical relevance and the opportunity for joint discussion.

Potential for improvement, however, was mentioned above all with regard to the temporal resources for theory and practice.

„Es ist ein enges Zeitkorsett mit sehr vielen praktischen und theoretischen Inhalten zu bewältigen. Die Vorzüge der gebotenen Vielfalt überwiegen dennoch.“

[“It is a tight time corset with many practical and theoretical contents to cope with. The advantages of the variety offered still predominate.”]

Especially for the participating students, it was a challenge to complete the course and work on their diploma thesis at the same time. There were also limited time and space resources due to the Covid-19 situation.

Furthermore, the participants would have liked a stronger theoretical input in the form of textbooks, forms or guides during the course. The lack of a structure in the curriculum was also mentioned by individual persons.

### Achieved goals

Despite the restrictions due to the COVID-19 pandemic, the pilot model largely contributed to achieving the defined goals. Thus, all participants described their previous competences as generally improved by the scope of “process-processing techniques offered in connection with industry-related professional competence”. The expansion of professional knowledge in general and skills in crafts in particular as well as the stronger connection of theory and practice compared to the “Manual & Material Culture” bachelor’s programme also led to greater self-confidence with regard to the implementation of their own projects. However, several participants doubted whether the competences learned in the pilot model were sufficient for a positive final apprenticeship examination. „Erweiterung der Kompetenzen findet klar statt. Allerdings steht zur Frage ob so ein Lehrabschluss bestanden werden kann.“

[“There is a clear extension of competences, but the question is whether such a final apprenticeship examination can be passed.”]

There were even greater doubts about completing a craft master course, for which significantly more practice units are required.

„Der Facharbeiterkurs ist ein guter Einstieg, aber mir persönlich fehlt einfach die Praxis um mir den Meisterkurs zu zutrauen.“

[“The skilled training is a good start, but I personally lack the experience to feel confident about doing the craft master course.”]

More practice would also be needed for a job in the craft trades, so the pilot model focused more on the teaching of basic knowledge. However, the participants dared to build on the acquired knowledge and also used it in companies with more theoretical craftsmanship (emphasis on design work). This also increased the variety of career opportunities and job market opportunities.

### Future prospects of the participants

The majority of participants would like to use the acquired skills in previous and future jobs and deepen them with more practical experience. Several of them want to go directly into the profession and sooner or later set up their own company. Three participants would like to attend other trainings.

### Final apprenticeship examination

After several postponements due to the COVID-19 pandemic, the final apprenticeship examination is expected to take place in July 2020.

### LESSONS LEARNED

From the evaluation of the “Skilled Training for University Students” pilot model, the following learnings can be derived, which are taken into account in the course revision:

- ▶ **Skilled training between fourth and fifth semester:** The participating students found it challenging to complete the skilled training at the same time as their diploma theses in the sixth semester. As a result, we recommend moving the 80 hours of theory units and 176 hours of practice units to the summer break between the fourth and fifth semester (e.g. theory on Friday evenings, four hours each; practice all day on Saturdays, eight hours each).

- ▶ **Mandatory company internship between second and fourth semester:** The participants were able to fundamentally expand their competences within the framework of the pilot model but expressed doubts about sufficient preparation for the final apprenticeship examination and practical work in the craft trade. In order to provide future students with extensive practical competence, we recommend a mandatory internship of approx. 160 hours in a metalworking company between the second and fourth semester, but at the latest before the final apprenticeship examination.

The internship company should be chosen by the students themselves. This enterprise does not have to have a vocational training examination but must be relevant with regard to the metalworking field and be open throughout the full period of the internship. Students must document their work in weekly internship reports.

- ▶ **Optional intensive training:** In order to prepare the students specifically for the final apprenticeship examination, we recommend an optional intensive training of 40 hours after completion of the theory and practice units. Trainers and students can decide together whether there is a need for it.

SEMINAR CONTENT	HOURS / MODULES
Theory	80 hours
Practice	176 hours
Intensive training	40 hours
Internship	160 hours
<b>Total</b>	<b>456 hours</b>

The evaluation of the skilled training has shown that such a model can contribute fundamentally to the promotion of dual training at the tertiary level as well as to the connection of design and craftsmanship. This course should be revised according to the learnings and implemented as soon as possible. Furthermore, a corresponding skilled training is planned for the wood sector.

### 5.1.3. PARTIAL CRAFTS QUALIFICATION IN THE CONSTRUCTION SECTOR WITH EXTERNAL EXAMINATION (BAVARIA/D)

#### SUMMARY

##### Introduction

The present report summarises the activities carried out by the Chamber of Skilled Crafts of Munich and Upper Bavaria within the DuALPlus project in order to innovate and complement the already well-established dual education offers within Bavaria.

The intention behind the innovative dual education programme described in the following is to make dual education accessible not just for secondary school leavers, but also for adults and socially deprived individuals such as refugees, school dropouts, etc. On the other hand, the more flexible approach to dual education as it is proposed within this concept is an answer to the urgent need of the construction industry for skilled workers.

In the following, we will introduce the background and the objectives of the innovative dual education concept, describe the curriculum and structure as well as our attempt to run a pilot course and the lessons learned out of the process.

##### Acronym

Teilqualifizierung im Baugewerbe (Partial qualification in the building industry)

#### BACKGROUND

##### Situation in the construction sector

The crafts sector, and in particular the building industry, is facing a serious lack of skilled workforce that cannot be fully covered by the number of regular apprentices in dual education.

Consequently, construction businesses are currently falling back on unskilled workers, many of whom are migrants, school dropouts or other low-skilled workers who are changing careers to the construction industry.



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However, this is not an ideal solution for the construction industry which would in fact require more professionally qualified workers than unskilled ones.

### Need for new dual education models

In the light of those developments, the Chamber of Skilled Crafts of Munich and Upper Bavaria and the Bavarian Construction Guilds (Landesverband Bayerischer Bauinnungen) jointly developed a model concept of partial qualifications for the building industry in preparation for the external examination. In contrast to the traditional full-time dual vocational education and training for crafts professions in the building sector, this new format will give access to dual vocational training for target groups which do not have the possibility to do a traditional full-time apprenticeship after secondary school but are changing careers to the building industry at a later time in their life.

Moreover, this new format facilitates the job market integration of the target groups described above, who are playing an increasingly important role on the job market as NEETs and other low-skilled workers, e.g. school dropouts or migrants.

The new dual training programme gives them the opportunity to build on their prior work experience yet benefit from the high quality of the German dual vocational education and training.

By applying for an external examination (Externenprüfung) by the Chamber of Skilled Crafts after having completed the qualification modules at level 3 (TQ3) and at level 5 (TQ5), they even get the opportunity to acquire fully recognised vocational qualification titles in the building industry.

### GOALS

#### Aims of the new training format

The aims of the partial qualification format can be summarised as follows:

- ▶ Integration of new target groups on the job market, such as low-skilled individuals (migrants, NEETs, school dropouts and other often marginalised individuals), into dual education

- ▶ Making dual education accessible not only right after secondary school, but even at a later stage of life
- ▶ Making dual education compatible with family life and job by part-time dual education modules
- ▶ Offering a second chance to obtain a fully recognised crafts qualification in the dual education system to school dropouts, migrants or other marginalised individuals who did not have the chance to take part in or succeed in the regular school system
- ▶ Supporting the construction industry by training their unskilled workers to skilled professionals according to the German high-quality standards in dual education

### **Innovative elements of the new training format**

The partial qualification for the building industry is a completely new, modularised qualification concept. It consists of five modules building on each other and representing different partial qualification levels.

Module 1 is the lowest and module 5 is the highest qualification level. This highly modular approach makes it possible for NEETs and other low-skilled workers to benefit from the dual vocational training system by accessing and leaving it at different vocational training levels according to their prior work experience.

At the end of each partial qualification level, a skills assessment takes place. If it is successful, the trainee acquires a certificate that can be credited nationwide.

If Modules 1-3 have been completed successfully, the trainee has the opportunity to participate in an external examination (Externenprüfung) at the Chamber and acquire the official qualification of a “construction worker” (Baufachwerker).

Successfully completing the external examination after TQ5 leads to the qualification title “skilled construction worker” (Maurergeselle).

The concept does not compete with the regular dual education set in place for professions in the construction industry. It complements it per-

fectly, as it is tailored to the needs of a specific new target group, which could not be reached by the usual organisation of apprenticeships.

### **DESCRIPTION OF THE NEWLY DEVELOPED PROGRAMME**

#### **Curriculum**

The complete partial qualification concept for the building industry consists of five qualification modules with a total duration of 12 months.

*Module 1:* General basic education in the construction trade

*Module 2:* Specialised training in one of the three fields: building construction, underground construction, interior construction

*Module 3:* More specialised training in one of the three fields

*Module 4:* More specialised training in one of the three fields

*Module 5:* More specialised training in one of the three fields

In the framework of the DuALPlus project, the training contents have been elaborated in greater detail and cover the following six areas of learning:

*Learning field 1:* Preparation of the construction site

*Learning field 2:* Accessing and exploring the construction object

*Learning field 3:* Brick laying of single walls

*Learning field 4:* Making of reinforced concrete elements

*Learning field 5:* Making of a wood construction structure

*Learning field 6:* Coating and cladding of a building structure

Those training contents are accompanied by German language training, social studies and technical calculation.

Given the particularities of the target group (NEETs, migrants), socio-pedagogical support is foreseen to accompany the pilot training.

#### **Target groups of the education programme**

The target group is low-skilled adults who are 25 years old and older. This includes adults:

- ▶ Without any vocational qualification
- ▶ With a formal vocational qualification but no employment
- ▶ Who are unemployed or threatened by unemployment
- ▶ Who acquired competences by their prior work experiences but do not hold any qualification certificate



- ▶ Who have career gaps with several periods of unemployment
- ▶ Who have dropped out of vocational education and training
- ▶ Who have dropped out of university/ higher education studies
- ▶ Who are job returnees (after longer periods of leave)
- ▶ Who have migrated to Germany and have an opportunity to stay
- ▶ Who hold foreign qualification certificates and degrees which are not recognised in Germany

### Requirements on the participants

The prior education of the trainee is not relevant. However, practical work experience in a related trade/ job is an asset.

In order to qualify for the external examination by the Chamber of Skilled Crafts and acquire the official qualification title, approx. 4.5 years of trade-related work experience is required according to the German VET Act (Berufsbildungsgesetz).

### Training fees

The training fees until level 3 amount to €8,352.00. The fees for further modules until level 4 amount to € 7,497.60.

However, since the training programme has been certified by the German employment agency according to the AZAV standard, the participants can apply for funding through the employment agency for up to 100% of the training costs.

## IMPLEMENTATION

### Resources and actors involved

For the realisation of the partial qualification course, the following resources/ partners are needed:

- ▶ The vocational training centre in Traunstein of the Chamber of Skilled Crafts for Munich and Upper Bavaria (Bildungszentrum Traunstein)
- ▶ Vocational trainers (external experts) for training the participants off-the-job
- ▶ Socio-pedagogical staff

- ▶ Support by the Employment Agency Traunstein in promoting the pilot training to the target groups and giving them the financial aid they might require to be able to attend the training

### Description of the testing phase

Our testing phase was supposed to start in spring 2020 with the promotion of the partial qualification concept to the target groups. Those were mainly migrants and NEETs who are currently unemployed, respectively working for construction companies as unskilled workers.

The Chamber of Skilled Crafts for Munich and Upper Bavaria decided that the first implementation of the newly developed dual education concept should take place in the catchment area of the Traunstein training centre (Bildungszentrum Traunstein).

In order to plan, organise and promote the first implementation of the new dual education format, the Chamber also involved the local employment agency since it has direct access to the target groups envisaged for this training format, i.e. low-skilled individuals, unemployed migrants and school dropouts and the like. To receive support in the promotion and financing of the training measure, the training course had to be certified according to the AZAV standards of the German employment agency. So, in early 2020, the Chamber of Skilled Crafts for Munich and Upper Bavaria worked on the AZAV certification process with a successful result.

Both the regional employment agency as well as the Traunstein training centre then started promoting the partial qualification in the construction sector within their networks. The Traunstein training centre informed all regional stakeholders of the construction industry such as the construction guild and the district craftsmen association in order to inform as many construction businesses about this qualification opportunity for their low-skilled workers. A press release in the local newspaper about the start of the pilot training, which was published in August 2020, was supposed to inform an even larger audience.

The employment agency reached out to the unemployed low-skilled individuals registered within the region of Traunstein, informing them about the excellent opportunity to enhance their professional prospects and careers.

Although both entities started already in spring/ summer with the promotion, the response rate was considerably low. By October only two participants had registered for the training, so the Traunstein training centre decided to postpone the start of the measure to November 2020. In the beginning of November, we had four registered participants and would have started the training course anyway. However, in early November, the Bavarian government announced a new lockdown due to increasing COVID-19 infections in the city and district of Traunstein and the entire region of Upper Bavaria.

Given the persistent lockdown in Bavaria since November, with only very short-term relaxation periods, it was impossible for us to start with the training measure until April 2021. Carrying out the training measure online was not an option since the target group lacked the IT skills, technical devices and infrastructure for being able to participate in online training. Moreover, a large part of the training consists of practical training that needs to be carried out in the workshops of the Traunstein training centre.

We were hoping that the lockdown would end by the middle of May or the beginning of June but carrying out the training during the spring and summer months, which is the peak season of the construction business, is not a reasonable option, as companies do not have the time to train the trainees properly as foreseen by the dual education programme.

Therefore, our intention is to give the implementation of our training course another try in October 2021. Unfortunately, this means that we will not be able to report about the implementation and the evaluation within the project period.

## EVALUATION

Since we were unable to run our pilot implementation as planned, we could not carry out an evaluation at all.

Originally, we planned to carry out a 360-degree feedback. The feedback was intended to be evaluated after the training by feedback forms handed out to:

- ▶ The trainees
- ▶ The trainers
- ▶ The consultants at the employment agency
- ▶ The instructors in the training companies

Aspects and criteria of evaluation would have been:

- ▶ The process of promoting the training to the target groups
- ▶ The appropriateness of the off-the-job training content, didactics, methods and tools
- ▶ The appropriateness of the duration and time frame of the training module
- ▶ The quality of the practical training in the training company
- ▶ The co-operation and communication process between all stakeholders involved
- ▶ The socio-pedagogic challenges met during the pilot training
- ▶ The process of assessing the competences acquired by the trainees after training
- ▶ The financial requirements related to the realisation of the training module

## LESSONS LEARNED

Although we could not run a full implementation of the dual education measure, there are some lessons we could learn in the course of the organisation and realisation of the dual education programme. Our promotion activities proved not to be as effective as we had planned since they resulted in only four registered participants for the dual training, which is a rather low number given the fact that there is quite a significant number of low-skilled individuals and unemployed refugees or migrants in the catchment area of the employment agency of Traunstein.

Our promotion strategy included involving the construction guild since construction businesses often complain about the fact that they have to employ low-skilled workers as they cannot find qualified construction workers on the job market. Therefore, we were highly confident that the

construction businesses would send us their unskilled workers for training as soon as they learned about the attractive opportunity.

However, it seems that there is a certain contradiction between what the construction businesses usually claim and complain about and what they actually want to have. On the one hand, they call for more qualified workers and staff while, on the other hand, they also benefit from the low-skilled workers, as they represent cheap labour since they do not need to be paid according to the collective labour agreements of the industry. It seems that construction businesses are reluctant to send their low-skilled workers into training because as soon as the low-skilled workers improved their qualification level and achieved a recognised vocational training, the construction businesses would have to pay higher wages according to the collective labour agreement of the construction industry.

Also, there were some difficulties in co-operating with the employment agency. It seems that not all consultants were fully informed about the dual education opportunity and therefore did not promote it sufficiently to their clients. We also learned about interested individuals who applied for the dual education programme at the employment agency but were rejected, as the selection criteria for entering the training were not fully clear to the consultants.

On the basis of those lessons learned, the Chamber of Skilled Crafts for Munich and Upper Bavaria will adjust the promotion strategy for the next dual training, which is foreseen for October 2021, by:

- Involving the guild in the district, but giving it more information about the advantages and benefits for its businesses if they send their low-skilled workers to training
- Better briefing of the consultants of the employment agency about the intention of the dual education measures and the selection criteria for participants
- Stronger involvement of local media and newspapers in order to promote the dual education measure directly to interested individuals

#### 5.1.4. **LEARNING ATELIER: DESIGN THINKING WORKSHOPS OF LEARNING PRACTICES AND PROCESSES IN DUAL TRAINING (TRENTO/IT)**

##### **SUMMARY**

###### **Introduction**

The programme, named “Learning Atelier”, sees the participation of representatives of SMEs as well as educational institutions and an expert facilitator that guides a heterogeneous group of actors to identify issues/challenges useful for their professional development, to describe and share their strategies and competences and finally to integrate those strategies in order to produce a list of best practices to be suggested in the future. Furthermore, the programme considers the aspect of soft skills and ideally retraces the four main phases of educational activity: readiness to learn, learning design, motivation to learn and learning assessment.

###### **Acknowledgements**

The Learning Atelier was organised by the Vocational Education, Higher Education and IT Support Division and the Education Service (Office for the Evaluation of School Policies) of the Department of Instruction and Culture (PAT). We would also like to thank the Didactic Pedagogical Office and the RSPP DIC group (head of the prevention and protection service) for their support in ensuring strict adherence to anti-COVID safety measures.

The initiative was divulged with the precious support of local associations of category and educational institutions.

Special thanks is due to Prof. Maurizio Gentile, Associate Professor of Didactics and Special Pedagogy at the LUMSA University of Rome, for the effective and engaging facilitation of the programme.

Finally, a sincere thanks to Dr. Rita Festi and Dr. Annalisa Scarlino of the Central Training School (CTS) who participated in the initiative in the role of observers. During the months of May and June 2020, several remote meetings were held between CTS and PAT in view of the realisation of the Learning Atelier, an initiative that CTS deems of its own interest in relation to its mission of promoting the quality and innovation of training systems.



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## BACKGROUND

### Dual education in the Trentino region

At the regulatory and implementation level, dual apprenticeship was regulated by national decrees and provincial resolutions between 2015 and 2016 [1-6]. PAT defined the apprenticeship model for the attainment of a qualification or diploma that is in addition to, and not in place of, full-time VET pathways. The model was implemented for the first time in the 2016/2017 school year through the “Garanzia Giovani” programme.

The new apprenticeship scheme is aimed primarily at young people between the ages of 15 and 25 and provides three/four years to obtain a qualification/diploma.

In addition to the social partners, employers’ associations and educational and training institutions, one of the most important players in the process of implementing the dual system is the PAT Department of Education and Culture, which defines the organisation, the specialisations, the guidelines and the resources involved in the apprenticeship system.

Over the years, PAT has promoted, both at the provincial level and at the national and international level, various accompanying actions to promote dual apprenticeship:

- ▶ From 2014 to 2017, it participated in the role of leader in the SWORD “School and Work-Related Dual Learning” project, co-financed by the ERASMUS+ program, whose objective was to facilitate the transition from professional training to the world of work through a comparative analysis of dual training of the various European partners, the launch of pilot projects and the definition of guidelines to support dual learning paths. The outputs produced by the SWORD project have formed an important methodological basis for the launch of the dual system in Trentino;
- ▶ Since 2017, as a member of Action Group 3 of EUSALP, European Union Strategy for the Alpine Macro-Region, it has been promoting the Dual Training Forums;
- ▶ Since 2018, it has participated as a member of the European Alliance for Apprenticeships (EAFA), a multi-stakeholder platform that aims to

strengthen the quality, offer and image of apprenticeships in Europe and promote the mobility of apprentices and youth employment;

- ▶ In 2018, it signed an agreement with ANPAL (National Agency for Active Employment Policies) for the promotion, development and consolidation of the dual system;
- ▶ Also in 2018, PAT issued a call for projects related to the development of dual apprenticeship pathways, in which 10 educational/training institutions participated with 8 projects funded;
- ▶ In 2019, it organised seminars and roundtables aimed at institutional actors and different stakeholders to present the implementation of and initial experiences with dual apprenticeship in Trentino, as well as to reflect on possible developments and new scenarios;
- ▶ In 2020, it signed an agreement with the Chamber of Commerce, Industry, Crafts and Agriculture of Trento (CCIAA), with the aim of developing, consolidating and strengthening the dual apprenticeship projects through the launch of calls for proposals for the design and implementation of dual apprenticeship programs co-designed between educational/training institutions and local enterprises.

The Learning Atelier initiative aims at consolidating and enhancing the dual system in Trentino and is placed in the context described above, in continuity with the policies implemented by PAT to promote dual apprenticeship.

### **The need for participatory planning initiatives**

The interviews with company tutors, carried out in 2019 as part of the Du-ALPlus project [1], highlighted three main aspects:

- ▶ The need, especially for SMEs, to avoid traditional training situations for the training of company tutors (i.e. long hours in the classroom, passive listening situations, excessively theoretical content, etc.);
- ▶ The need for greater interaction between the main stakeholders involved in the dual system, primarily the in-company and the school tutors;
- ▶ The need to better understand the learning process of students in a dual situation: how to prepare, manage and evaluate apprentices in order to contribute to their growth, not only professionally, but with a specific focus on the so-called soft skills or non-cognitive skills.

The above findings emphasise the importance of offering short training paths, which may allow a process of sharing between the various figures involved in the dual system (in-company and school tutors); a process capable of conducting in-depth analysis, especially on aspects related to the management of the learning process during the dual experience in the company.

When planning these paths, it is critical to adopt participatory approaches and working methods alternating transmissivity, group work, restitution, reworking and final synthesis.

The strategies and methodologies used need to be adapted to the profiles of the participants to allow their activation through the sharing and enhancement of their knowledge and experiences. The participants' direct involvement would help, it is believed, to consolidate the "new ideas" and "new knowledge" built together by the group that could then appropriate them more profoundly and consciously.

Since the Trentino region's dual system is not fully established and consolidated, and for the reasons just described, there is a need and room for the development of new programmes offering innovative and unconventional training methods capable of encouraging the sharing of ideas and experiences.

The present report illustrates the Learning Atelier initiative as a first step toward satisfying the above-mentioned needs.

## **GOALS**

### **Learning Atelier objectives**

The Learning Atelier, with design thinking workshops, aims at three main objectives:

1. To allow two or more professional communities to share their professional knowledge, thus "crossing the boundaries" of their field, and to create new experiences and practices;
2. To provide company tutors with a better understanding of the learning processes of apprentices in a dual situation;
3. To promote a more active role of the companies.

### THE ACTIVE ROLE OF IN-COMPANY TUTORS

In the Trentino region, dual education programmes are mostly under the control of educational and training institutions. This means that school-teachers often do the matching between the candidate apprentices and the companies. This might result in some disadvantages:

1. School tutors can hold implicit biases against individual students that might affect the matching. In fact, many students often behave differently at school than they would at work;
2. Students and/or companies might experience this mediated decision passively, and this could affect their motivation during the training period;
3. The school tutor often drafts the individual training plan and, again, the company could accept it passively without questioning its potential to be effective.

The Learning Atelier aims at taking the first step towards a more active role of the company tutor. This is pursued by creating the conditions so that the two parties (business world and school world) can initiate shared and participatory planning paths.

The Learning Atelier concept focuses on making the involvement of company tutors active and mandatory in order to ensure the co-planning and the co-realisation of dual paths. Under this aspect, the Atelier proposal differs from already existing formats in the Trentino region which mostly propose more traditional information-learning experiences.

### DESCRIPTION OF THE PROGRAMME

#### Introduction to the Atelier methodology

The method proposed for the realisation of the training path is the result of the combination of two reflective approaches: 1) the analysis of learning situations, and 2) the development of prototypes of activities and practices based on this analysis.

The first approach has as its main tool the so-called “Learning Atelier”, developed in the context of learning psychology [2]. The purpose of the atelier is to ensure that multiple representatives of different professional communities (in our case, companies and vocational training centers),

through specific inputs given by the trainer, can share their professional knowledge, literally “crossing the boundaries” of their own areas and skills, to create new ones.

The second approach is Design Thinking (DT), a set of specific practices (i.e. questioning, mapping, visualisation, etc.) to support the design of activities and services, in this case, in the context of learning in work situations.

The integration of the two approaches means that design practices can be located and connected to the activities already carried out by the participants.

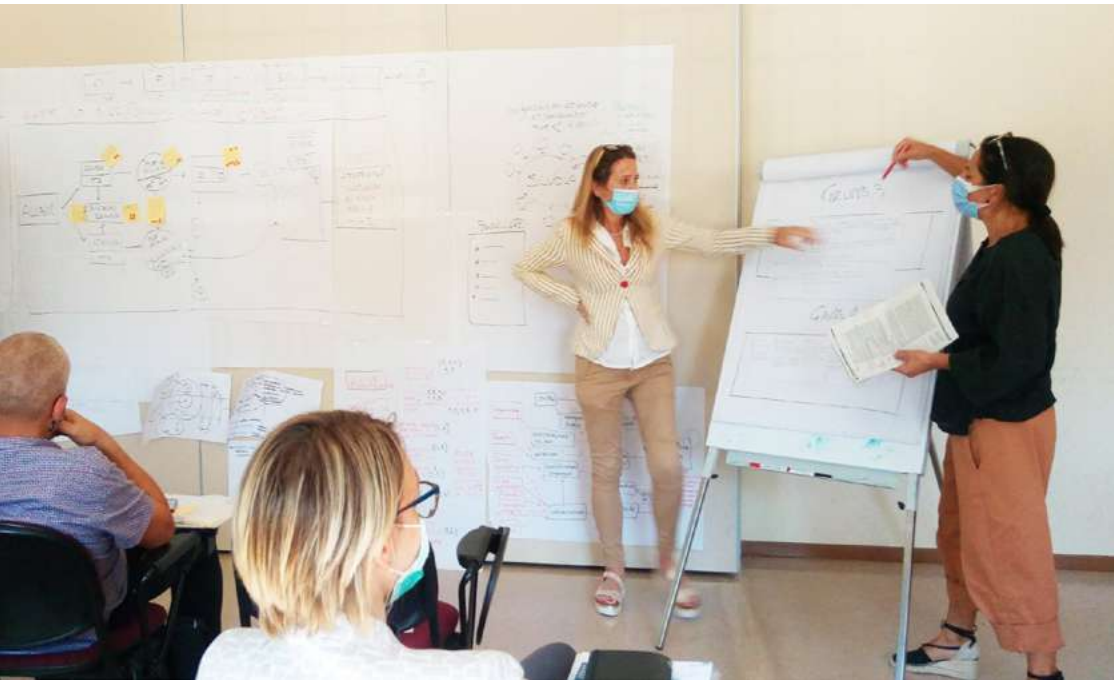
The Learning Atelier programme started with a training proposal called “Learning Atelier” (in the original English version, it is “Change Laboratory”). In the Atelier, the work is done in small groups with heterogeneous composition. One or more facilitators manage the process.

In general, the sequence of activities includes:

- ▶ An introductory part in which a problem or an issue to be addressed is identified;
- ▶ An active part in which all participants give their point of view in addressing the problem, with the support of the facilitator, presenting their experiences and practices already in place;
- ▶ The third part of reflection in which the practices learned and “transferable” by the participants in their work experience is defined;

In all these stages, the Design Thinking approach is used as a tool to support the design of new learning practices. It is in the final phase that the “crossing of boundaries” occurs because a practice previously developed in a specific context is rethought, reoriented and generalised during the Atelier in one or more different contexts.

The result of the laboratory is then the production of one or more “service prototypes”, intended as devices designed to guide and manage the learning of the apprentice in the dual workplace.



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### DESIGN THINKING APPROACH

Design Thinking is a methodology for the optimisation of decision-making processes inherent to the solution of a problem. In the public administration sector, as well as in profit and non-profit activities, DT is aimed at developing new services and products.

The basic principle is to make participants' thoughts visible through techniques of non-linguistic representation of information and knowledge developed by the participants.

There are multiple versions of DT. In general, the method is to proceed by layers of representation (one for each work session), and the participants are involved through specific deliveries (i.e. individual, group, classroom) to be carried out within defined times.

In summary, the facilitator helps the group to represent the problem, make decisions, identify the critical moments of a flow of actions, define the end user, the short-term result and the long-term goal.

In the context of the Atelier, the following methodology has been proposed:

- a. Define the problem and choose the end user;
- b. Sketch the solution;
- c. Decide and make the solution feasible;
- d. Design a prototype;
- e. Verify the solution with the end user.

### TARGET GROUPS

The main targets of the Learning Atelier are company tutors. As underlined above, to stimulate and foster the exchange of ideas, knowledge and best practices between the two main communities (companies and educational institutions), the presence of school tutors, although in a smaller percentage, is essential. Furthermore, other stakeholders (e.g. policymakers, managers of representative subjects and associations, representatives of organisations dealing with dual education at different levels) can participate in the Atelier: their presence would diversify the community and ensure even more interesting exchanges.

## REQUIREMENTS

The Learning Atelier envisages the participation of in-company and school tutors with experience in managing dual training apprenticeships. Of course, tutors, who are new to this task, are encouraged to join the Atelier since they can make connections and get valuable tips. The Learning Atelier is conducted by one or two expert facilitators and involves the presence of around 30 people, since the physical presence of the participants is crucial to boost meaningful interactions and ensure effective teamworking, it is important to provide a location with three or four rooms for plenary and group sessions. If possible, it would be ideal to hold the event at a company site and offer a lunch break between working sessions, thus allowing participants to network and interact more informally.

The costs of the Atelier (facilitator, location, materials, food) can be covered by the participants or more likely—as in our case—by dedicated funds aimed at fostering dual education.

## STRUCTURE OF THE PROGRAMME

The training path is structured as follows:

1. Dissemination of information material addressed to participants, with particular reference to the following topics: learning models, motivational models and cases of evaluation relevant to training processes in the dual environment;
2. Moment of exchange with all the people involved to break the ice, assess the impact of the provided material and to get to know the participants;
3. Series of Atelier workshops based on DT approach. Each Design Thinking Workshop (DT-W) is aimed at investigating a particular aspect of a learning process: preparing the students, defining and designing, implementing and evaluating the process of learning.

The organisation of a single DT-W is common to all the workshops and unfolds in three main phases:

- ▶ In the initial part (first 30 minutes), the facilitator first defines a problem or issue to be addressed with brief and concise theoretical references (e.g. preparing one student for learning can be transformed into a real case set in the company or in the school);

- ▶ Subsequently (in the next two and a half hours), the facilitator accompanies the participants in describing practices they are currently using to, for example, prepare students for learning. Schemes and representations are realised through the support of DT procedures which serve to define such practices (the Atelier approach entails a fixed representation scheme that considers: the object of the practice, the subjects that apply it, the tools they use, the rules that follow, the division of labour and tasks, and the point of view of the professional community of reference);
- ▶ Finally, in the last hour, the facilitator develops, together with the participants, one sequence of possible practices (e.g. “10 ways to prepare the student for learning in the company”) to be applied to address the problem, concluding the collective design process started with the participants.

The outcome of each atelier is a list of practices and strategies to better understand and address that problem; they can serve both business tutors and school tutors for their own professional development and, afterwards, the atelier will no longer be just school or just “corporate” but will be an integration between these.

The set of practices and strategies developed during the series of workshop meetings is the result of the training course: one or more “prototypes of service”, which is a toolkit of good intervention practices and methodologies for orientation and management of the apprentice's learning during the dual experience in the company.

A certificate of participation is issued after the completion of the training which is recognised as valid for the mandatory upskilling of in-service teachers employed in the educational and training institutions of the Trentino region.

The next chapter describes how the Learning Atelier was organised in Trento within the DuALPlus project.



## IMPLEMENTATION

### Organisational resources

The Learning Atelier training path was supported by the funding of the DuALPlus project and was organised by three DuALPlus/PAT staff members of DIC (Education Service and Vocational Education, Higher Education and IT Support Division), with the support of four staff members of the Didactic Pedagogical Office of the same Division. The location for the training path, made available by the Department, consisted of three rooms: one large plenary room and two smaller rooms for group work. During the training, the organisational staff provided constant support and all the material provided by the facilitator was uploaded on a Google Drive folder, which was then shared with all the participants.

### ACTORS

The laboratory involved the presence of 26 actors: 16 “target” participants, four PAT officials from the didactic pedagogical office, two observers from the Central Training School, three DuALPlus-PAT staff members and one expert facilitator: Dr. Maurizio Gentile, Associate Professor of Didactics e Special Pedagogy at LUMSA University of Rome, was engaged to conduct the laboratory which focused on learning processes.

The distribution of the 16 participants was as follows:

- ▶ Company tutors (CTs): 4
- ▶ School tutors (STs): 7
- ▶ School representative for dual apprenticeship: 1
- ▶ Representatives of Trentino Federation of Cooperation: 2
- ▶ Representatives of National Confederation of Direct Farmers (Col-diretti): 2

The active participants (16 “target” participants plus 2 PAT officials) were divided into three groups. The groups were formed by the organisers in such a way to guarantee heterogeneity within a single group and the presence of at least one company tutor.

## PROGRAMME SCHEDULE

The Learning Atelier was held in Trento at the DIC on September 2020: 1st Tuesday (online), 3rd Thursday, 4th Friday and 5th Saturday (in-presence DT-Ws). It lasted 14 hours and was organised according to the schedule described in the next subsections.

### Dissemination of preparatory material

On the 26th of August 2020, information material was sent to the participants with particular reference to learning models, motivational models and cases of evaluation relevant to training processes in the dual environment. The artefacts delivered to the participants consisted of: (a) three mini-video presentations; (a) one document describing the Learning Atelier training path and the proposed schedule; (b) three video presentations; (c) three PowerPoint presentations with suggested readings ([3,4,5,6]); (d) worksheets; (e) glossary related to presentation concepts; and the (f) Atelier mission statement.

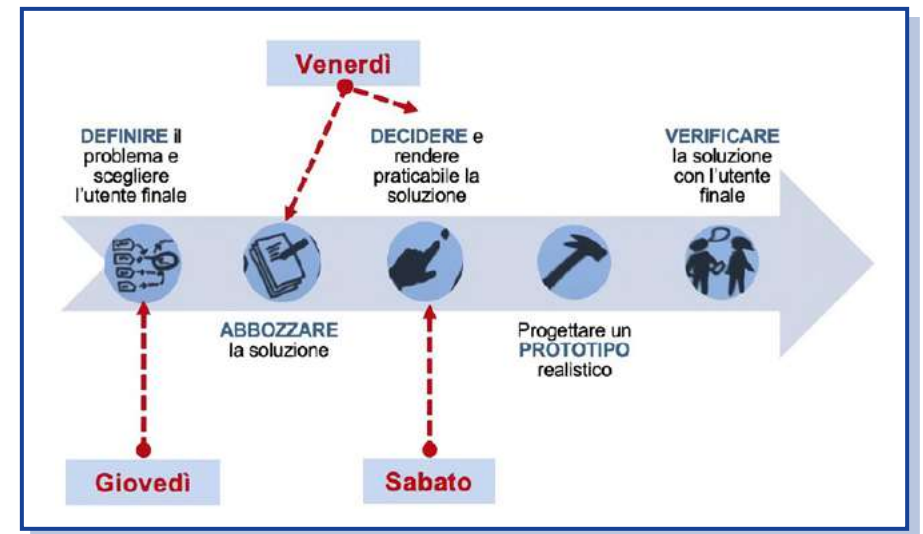


FIGURE 7: DT methodology adopted in the Learning Atelier

### Ice-breaking webinar online

On the 1st of Sept 2020, a 2-hour online webinar involved 12 target participants and the organisational staff in boosting the mutual knowledge within the group and in discussing and evaluating the impact of the given information material. The online format was chosen to avoid in-presence meetings as much as possible because of the pandemic.

In the context of the Atelier, the methodology described above has been proposed with three DT-Ws (red points in Fig. 2).

### First DT-W: preparing the students

On the 3rd of Sept 2020, the first 4-hour Atelier workshop took place. It focused on preparing the students for the process of learning. Initial inputs from the facilitator: focus the attention of students, stimulate motivation before learning, call up previous knowledge, cultivate commitment and perseverance, and learn in a work organisation.

### Second DT-W: defining and designing a learning process

On the 4th of Sept 2020, the second 4-hour Atelier workshop took place. It focused on the topic of defining and designing a process of learning. Initial inputs from the facilitator: schedule activities to do with the apprentice, simulate possible scenarios to anticipate problems/errors, consider the characteristics and needs of the apprentice, define goals to achieve and share them, and integrate the needs of production with the individual process of learning. Fig. 3 shows the layer of representation produced by the group in the second DT session.

### Third DT-W: implementing and evaluating a learning process

On the 5th of Sept 2020, the last 4-hour Atelier workshop took place. It focused on the topic of implementing and evaluating the process of learning. Initial inputs from the facilitator: stimulate motivation for learning, monitor the application of the process learning (feedback), develop tools for formative assessment, use the results of the evaluation to improve learning, and recognise and validate acquired skills to support horizontal and vertical permeability in the Trentino system and beyond.

### OUTCOMES

The three workshops' primary outcome was defining a strategy for co-designing the learning process in the dual system. This strategy includes four aspects:

1. The **end user**: the learner;
2. Three **critical moments**:
  - a. Direct involvement of STs in the company and profile of the dual apprenticeship candidate;
  - b. Definition of extended agreements on the territory (networks) and company profiles (What is the ideal learning environment for that learner in that sector?);
  - c. Management and sharing of the cognitive, motivational and evaluative aspects of the training plan ("YES learning", "NO training"), and tailoring a pathway to measure;
4. A **concrete result**: need for school-company to co-design the dual education system 2020-21;
5. A **general goal**: attractiveness of dual education ("In the company, I learn well, I learn a lot").

### Critical moment (a):

#### Direct involvement of STs and candidate student profile

The main criticality that emerged was the school's view towards the dual system and the need to identify the students based on at least two profiles, defined (provisionally) according to the following categories:

- A. "Fragile and/or at risk of training failure";
- B. "Aware and ready to enter the world of work".

At present, it seems that dual education is perceived by schools as a measure to combat early school leaving by addressing mainly students with profile A: therefore, a "remedial" use of this educational path, rather than a training opportunity to improve their learning. On the contrary, the view to aim for is a dual system as a learning opportunity for both "fragile" and "aware" students. With this in mind, the GPI working group has proposed the following solutions:

1. The STs **increase the selection of "aware" students**, suitable and ready to enter the world of work;

2. **Design and implement moments of interaction** between learning paths in the company/ school, for example, the CT goes to school, the ST goes to the company;
3. **Reshape the student profile** during the course to take into account the developments of the experience. For example, one of the desirable (but not necessarily verifiable) scenarios is the transition from a “fragile profile” to a “conscious profile” as a result of the interaction with the working environment. Profiling, in both the initial and intermediate phase, should suggest if the chosen company is the ideal learning environment for that specific student and if the latter is obtaining the expected cognitive and motivational gains from experience;
4. Define the individual learning plan as a result of a **shared work between the company and the school**;
5. The final evaluation of the path is also the outcome of the sharing between companies and schools using **self-assessment and simulated interview tools in the presence of companies**.

#### Critical moment (b):

##### Definitions of company profiles and extended agreements on the territory (networks)

The second criticality regarded the ideal environment for a given student and sector. In particular, two critical issues were discussed by the group:

- A. How can schools establish stable relationships with the production system (distinguishing between maintenance and manufacturing companies) so as to form networks of schools-companies dedicated to the dual ([7])?
- B. How can companies attract and maintain new human resources and transfer youngsters' skills to new employment options?

The GP2 working group, dedicated to this second point, put forward the following solutions:

1. **Establish a dual network** made up of school representatives, company trainers, representatives of the Chamber of Commerce and trade associations contact persons. The main activities of such network could be: (a) the setting up of a stable work schedule to ensure the alignment between schools and companies over time; and (b) developing a plan

of proposals to inform and raise awareness on dual learning opportunities in the community;

2. **Profile the company** according to three categories:
  - a. “Micro companies” with high learning opportunities;
  - b. “Small companies” with good employment opportunities;
  - c. “Medium-sized companies” with excellent employment opportunities.
4. **Train company representatives** with the goal of obtaining a sort of “Training Structure” certification.

#### Critical moment (c):

##### Management and sharing of the training plan

The third criticality concerned whether the dual system should be considered as a form of job training or, more strictly, as a learning process. In particular, two critical issues were discussed by the group:

- A. How can the company support the student's motivation?
- B. How to give direction and evaluate the learning process in the dual path?

The solution proposed by the GP3 working group suggests that **school and company tutors should share the training plan and the operational procedures for managing the dual path**. This solution consists of:

1. For the student's profile (fragile, aware, etc.), define:
  - a. Learning mode;
  - b. Methods of reinforcement and self-evaluation;
  - c. Time in the company for re-elaboration;
  - d. On the basis of the criticalities observed, redefine learning modes.
5. Support the company:
  - a. In defining times and spaces to dedicate to the learning path of the student;
  - b. In the step-by-step evaluation of the path shared between CTs and STs.

Also, for this third critical moment, the general management strategy of the dual path entails an increase in the interaction between the school and the company. This interaction takes place when CTs and STs support the student's motivation through reinforcement and evaluation.

## EVALUATION

As illustrated in the previous section, the Learning Atelier actively involved around two service officials and 16 people between school and company tutors and other representatives.

At the end of the programme, the project staff sent an online survey to the participants to collect insights about their training experience. The survey consisted of 5 items on:

- a. Logistics;
- b. Instructional materials;
- c. Reactions and satisfaction regarding the coherence and clarity of the proposed contents, the guidance of the facilitator, the methodology used (design thinking), and the transferability of the proposed solutions;
- d. Future training needs
- e. Open question for remarks and comments.

There were 14 respondents in total and the feedback received was positive: 64.3% of the respondents were highly satisfied with items a) and b). On item c), an average of 75% declared that they were highly satisfied, apart from the perceived transferability of results, which was judged slightly positively (50% of highly satisfied respondents).

Considering the future training needs expressed in the survey, three main categories have been highlighted: a) design of learning processes; b) exploring students' needs for learning readiness; and c) learning evaluation (see Fig. 4).

The comments revealed a need for promoting such training opportunities and a greater exchange with companies that have an interest in dual apprenticeships. On the one hand, a school tutor said: *"Planning and sharing the dual training path with company tutors stimulates me a lot. So far, we have tried to share as much as possible but the basic language was the scholastic one."* On the other hand, a company tutor stated: *"We need greater involvement of the company tutor in training and the exchange with peer tutors";* and again: *"We see no obstacles in terms of organisational aspects, but only commitment and dedication on the company tutor side in transmitting passion for work to the student"*.

Therefore, it seems crucial to develop a common and shared language as a base for an effective participatory planning process. Company tutors are willing to play an active role in the dual system!

Finally, while discussions among the working groups and the facilitator were extensive and deep, more time was needed for the conclusions phase.

## LESSONS LEARNED

### Tips for the future

Of the five phases envisaged by the DT workshops, in the 12 hours available, the first three were carried out: defining, sketching, deciding. The Atelier development would imply a work of continuity aimed at the prototyping and verification of the solution, respectively, phase four and five of the DT.

Below are some indications for the future:

1. It is suggested to conclude the work cycle of the DT with the prototyping and field verification phase of the general strategy of co-management and design of the dual education path. This first activity involves bringing back the group that participated in the September 2020 three-day workshop to the classroom.
2. As a consequence of the first point, it is suggested to define an adequate number of hours to deepen the learner's co-design and management's operational details along the four key moments of dual training: preparing, directing, motivating and evaluating learning. It is necessary to reinforce the group with a more consolidated language and knowledge base (see the video presentations dedicated to the themes of learning, motivation, evaluation and related glossaries).
3. Given the training activity's success and the feedback received, it is suggested to organise DT activities to be offered to STs and CTs engaged in the training and learning-to-work paths, within an annual/biennial schedule. This measure can be adopted to raise awareness and change the view towards dual education (from a remedial form of intervention to a real learning opportunity);
4. As an antecedent to or consequence of point 3, it is suggested to define a more intensive awareness-raising campaign aimed at schools, companies and job consultants to promote more excellent "attractive-

ness of the dual system". The message of the campaign could be: "In the company, I learn well, I learn a lot";

5. The number of company tutor participants was adequate; however, school tutors and other figures were prevalent in numbers. It would be recommended to intensify the promotion of the Learning Atelier training path within the companies, taking into account some of the solutions that came about during this experience (e.g. recognising company tutors training).

### Family strategies for managing learning processes in the dual context

Another lesson learned is the generative power that the Atelier can have on learning practices for students in work environments. As already stated, the main processes in the Atelier were:

- ▶ Introducing and preparing the student/apprentice for the learning experience in the company;
- ▶ Planning the learning activities in the company;
- ▶ Managing motivation for learning in the company;
- ▶ Evaluating learning in the company.

Each of these processes can be addressed, considering the point of view of the organisation that hosts the apprentice in the learning phase, and therefore considering the company tutor as the prevalent one, through the use of strategies and relative activities/techniques, which can be applied at strategic moments of the learning experience.

The strategies, being generative for the identification or reshaping of the activities to be proposed to the learner, can be framed within the concept of a "family" of strategies, in which:

- ▶ Each strategy can be linked to another through the activities/techniques proposed;
- ▶ All the strategies can generate other strategies through the combination or integration of pre-existing ones;
- ▶ There is a "leading thread" or elements characterising the strategies and activities present within.

Based on the Learning Atelier outcomes for DuALPlus, it was possible to identify a first family of strategies, considering the four strategic processes previously indicated.

In the following table, it is possible to synthesise the two strategies proposed for each of these processes.

PROCESSES FOR MANAGING THE LEARNER	FAMILY OF STRATEGIES
Introduce and prepare the learner for the on-farm learning experience	"Give the apprentice citizenship". "Give the apprentice a group".
Plan in-company learning activities	"Let us build learning goals together".
Manage motivation for learning in the company.	"Models are important". "Let us enrich the work".
Evaluate learning in the company.	"Feedback that makes you think". "I evaluate you so you can grow. Formative assessment".

### 5.1.5. FIT FOR THE FUTURE: IMPROVING DUAL TRAINING (BOLZANO/IT)

#### SUMMARY

The focus of the DuALPlus project is to promote and further improve dual training in the Alpine regions.

First, the project will improve guidance on the right career choice for young people and increase public recognition of dual education as a valuable learning path.

Second, it will promote innovation and quality in dual education.

As a third focus, the results of the project will improve the framework conditions for innovation by raising the horizontal and vertical permeability of the dual education system.

A survey was designed on the topic of “career guidance and recognition”. One result of the surveys of young people and trainers at the beginning of the project was that prestige and social recognition for the dual training program are quite low. In addition, young people have increasingly high expectations on their future employers and companies are looking for fitter apprentices. These problems can be counteracted by improving dual training. The project aims to develop a multilingual handbook on innovative methods in dual training and is divided into five intermediate steps. The first step is the establishment of a “community of practice” learning group, followed by qualitative and quantitative surveys on the needs of SMEs to optimise dual training.

Further, suggestions for the training of company tutors will be collected and possibly a training programme for trainers in cooperation with SMEs will be introduced.

The final stage is the development of a field report on the training of company trainers.



All the knowledge accumulated in the different stages is used in the development of the multilingual manual.

An important goal of this project is the development and improvement of training programmes. Here, the project partners are asked to improve their own training programmes for trainers and/or introduce new ones. This is done in cooperation with SMEs and trainers.

lvh-Education and Service cooperation has developed the concept “Fit for the Future” on this topic, a workshop together with trainers and apprentices.

The focus is on getting to know each other and clarifying open organisational questions.

Together, trainers and trainees look at what is necessary to positively influence the training path, to master challenges and to take advantage of opportunities. In addition, all participants experience a sense of cohesion and mutual trust. The participants also learn about the use and importance of mental training and coaching.

### INITIAL SITUATION

Companies are increasingly looking for fit apprentices, and apprentices are looking for recognised companies in which they can get to know and love their future profession.

But it is not always self-evident that these needs are also satisfied on both sides.

lvh.apa as a trade association for crafts and service providers represents the interests of this industry and strengthens them. As an interest group, lvh, together with its members, fights at all levels for acceptable framework conditions for the economy. Another important task of lvh is to inform, advise and support its members on an ongoing basis.

lvh repeatedly receives feedback from its members that the training of apprentices does not run smoothly and has therefore set itself the goal of offering support to both the entrepreneur and the apprentice. Since no programme in this direction is offered in South Tyrol, lvh has developed the concept “Zukunftsfit” together with two experienced trainers, where they support apprentices, entrepreneurs, and trainers on the common path.

The freelance outdoor and mental trainer Valentin Piffraeder has been working with lvh for many years, primarily preparing apprentices for the world championships of the trades. His ability to weld young people into a team, to inspire them and motivate them to train together for a goal have helped the South Tyrolean young craftsmen to achieve many top performances and awards.

The trainer for conflict management and systemic organisational development Vera Nicolussi-Leck accompanies and supports people and organisations competently and effectively in conflict resolution and the development of future strategies.

Unfortunately, the programme could not be implemented within the project timeframe, but it is planned to launch the “Zukunftsfit” workshops in the fall of 2021.

Contents are getting to know leadership and learning techniques, strategies for solving conflicts and mutual resources. These skills, coupled with reflection on one’s own actions, contribute to strengthening social skills and support personal development. Through increased performance, communication and team skills, as well as appreciative mutual interaction, the culture of the entire company changes in the long term.

Dissatisfaction, conflicts and apprenticeship terminations automatically decrease. In turn, the motivation, quality and willingness to perform of trainers and apprentices improve. The apprentices’ loyalty to the company also increases.

At the same time, the attractiveness of the dual education system for crafts and trades in the Alpine region is strengthened and the networking of business, education and science can be experienced and felt.

## GOALS

The participants

- ▶ Recognise that learning is a form of interaction in which everyone acquires new knowledge and skills through shared and mutual exchange
- ▶ Understand that everyone is equally involved in the learning process and thus share responsibility for it
- ▶ Get to know and apply schemes, models and techniques from leadership science and learning research
- ▶ Develop personally and strengthen their social and problem-solving skills
- ▶ Learn that new knowledge comes from teaching
- ▶ Understand business interrelationships and contribute their strengths to the team
- ▶ Learn to accept and give feedback and are active and curious
- ▶ Can move on any parquet and become a public face for the company
- ▶ Permanently change the culture of the entire company
- ▶ Bring a positive spirit to the company
- ▶ Are characterised by an appreciative and apprentice-friendly corporate culture
- ▶ Build a nourishing network
- ▶ Have a clear picture on the topic of onboarding and training plan

## DESCRIPTION OF THE PROGRAMME

### Building Blocks Fit for Future

The contents of the individual modules are described in detail below.

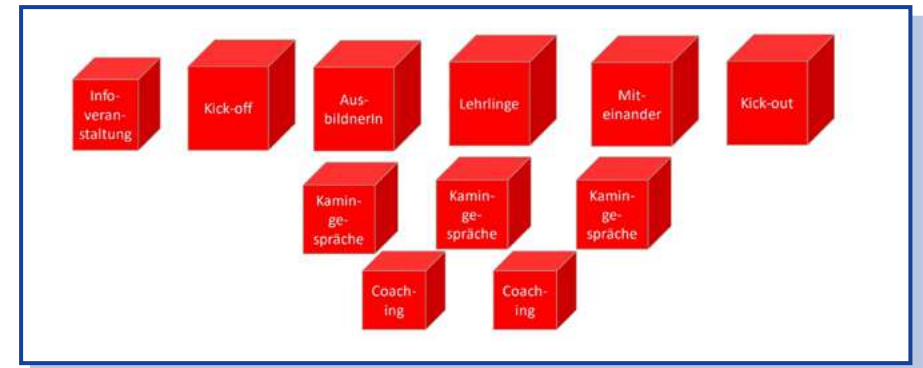


FIGURE 8: “Infoveranstaltung” – information event; “AusbildnerIn” – teachers/trainers; “Lehrlinge” – apprentices; “Miteinander” – with each other; “Kamingesprache” – fireside chat

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### Information Events Fit for the Future

The information events will take place in the districts of Silandro, Bolzano, Bressanone and Brunico. Here the project will be presented for the first time. All interested parties will have the opportunity to ask questions, make suggestions and, of course, register immediately for the additional qualification “Zukunftsfit”.

The moderation of these 30 minutes gives a first insight into the working methods of the trainers and the effect of the additional qualification.

*Duration:* 4 x 30 min.

### Kick-Off Future Fit

The Kick-Off is the kick-off event for the additional qualification “Zukunftsfit” for teachers, trainers and apprentices.

On this day, the focus is on getting to know each other and clarifying organisational questions that are still open.



Together, apprentices, trainers and apprentices look at what is necessary to have a positive influence on the training path, to master challenges and to take advantage of opportunities. In addition, all participants experience the first contents of “Zukunftsfit”.

*Duration:* 1 day

### Teachers and trainers among themselves

A clearly structured training programme creates a framework, provides security and orientation and thus makes it possible to take responsibility for a common, profitable learning path.

What does “leading with a sense of purpose and a view of the big picture” mean? How do I recognise and use resources and strengths? Where are my own resources and strengths?

How do I deal with feedback or mistakes? How do I support my apprentice professionally and socially? How do we manage to work together in an appreciative manner?

We answer these and similar questions together in the modules.

#### *Participants:*

- ▶ Have a clear idea about the onboarding phase and the training plan
- ▶ Can create the framework for a suitable learning environment in the company
- ▶ Reflect on their attitude as a leader
- ▶ Recognise their own personality structure
- ▶ Use their role in relation to the organisation and its environments in a situationally aware manner
- ▶ Get to know and apply schemes, models and techniques from leadership science and learning research
- ▶ Know their own resources, strengths and weaknesses
- ▶ Know their self-image and the image of others
- ▶ Train their communication skills
- ▶ Experience themselves as self-effective
- ▶ Learn through teaching

- ▶ Know how to get an impression of the apprentices' skills and competencies
- ▶ Can give and receive feedback
- ▶ Identify learning gaps and catch them
- ▶ Address critical issues constructively
- ▶ Recognise conflicts in time and have the competence to solve them
- ▶ Know how to support their apprentices on their learning journey
- ▶ Use techniques for deceleration
- ▶ Learn ways to change behaviour
- ▶ Know the dynamics and the prerequisites for team performance
- ▶ Recognise the value of team development
- ▶ Can design an appreciative exit

*Duration:* 2 x 2 days

### Apprentices among themselves

These two modules create a learning environment for young people that enables them to develop. They get to know their skills and talents better and know how they can best use them on their training path and in the company.

#### *Participants:*

- ▶ Reflect on their attitude as apprentices and towards the company
- ▶ Recognise their own personality structure
- ▶ Know what shapes their behaviour
- ▶ Use their role in relation to the organisation and its environments in a situationally aware manner
- ▶ Know their own resources, strengths and weaknesses
- ▶ Know their self-image and the image of others
- ▶ Train their communication skills
- ▶ Experience themselves as self-effective
- ▶ Learn through teaching
- ▶ Know the dynamics of teams
- ▶ Get to know and apply schemes, models and techniques from learning research
- ▶ Know how to get an impression of their own skills and competencies
- ▶ Can give and receive feedback

- ▶ Recognise learning gaps and address them actively and independently
- ▶ Address critical issues constructively
- ▶ Know how to get support on their learning journey
- ▶ Use techniques for deceleration
- ▶ Learn ways to change behaviour
- ▶ Recognise the value and importance of time management

*Duration:* 2 x 2 days

### **With each other**

Together, the contents learned are now deepened, applied, reflected upon and checked for their transfer effectiveness into everyday life.

#### *Participants:*

- ▶ Recognise and reflect together on their values, attitudes and beliefs
- ▶ Experience their own team building process coupled with theoretical background knowledge and reflection
- ▶ Clarify their role and role expectations
- ▶ Discover their responsibility for the success of the learning process and the company
- ▶ Train their communication skills
- ▶ Practice the constructive and solution-oriented handling of conflicts
- ▶ Recognise the value of trust and joy in everyday activities
- ▶ Plan the transfer together

*Duration:* 2 days

### **Fireside chat**

The two-day modules are rounded off by fireside chats on current and future topics (such as innovation, digitalisation, and sensible occupational safety). A cosy get-together with exchange, networking and making new plans bring the evenings to a close.

*Duration:* two-hour evening event including dinner

### **Mental training and coaching**

Supportively, all participants take advantage of individual mental training or coaching between modules.

This takes place both in an individual setting and in a team setting (trainer-apprentice).

Questions such as, “How do I affect others, what are my blind spots and unconscious patterns, what expectations are placed on me as a teacher, trainer or apprentice, how do I shape my work, etc.” are reflected upon in personal coaching or mental training and thus enable more conscious action. At the same time, techniques for better handling stress and demanding situations are practiced.

*Duration:* Total of 16 hours per participant can be planned individually

### **Kick-out**

A successful project needs a successful conclusion.

Together, we draw final transfer loops:

- ▶ We exchange first experiences
- ▶ Collect successes and hurdles,
- ▶ Consider suitable transfer actions
- ▶ Give an outlook
- ▶ Plan more meetings at the regulars' table, and
- ▶ Let the time together come to an end with a joint dinner

*Duration:* 1 day

### **METHODS**

The methods used are appropriate to the respective problem/situation and thus all the tools listed are to be seen as possible means of application, i.e. flexible in their situational application.

A theoretical background is provided by the model of strategic, generic problem solving (Watzlawick, Bateson, etc.), which states that only through joint clarification of the current situation can feasible solutions

be developed and implemented that are supported by all participants. Further methods come from communication science, systemic consulting and theory of the enneagram.

Borrowing from positive leadership theory, we assume that everyone has a valuable wealth of basic knowledge, and with this methodology we can ensure maximum customisation of workshop experiences, which, together with concrete experimental results, leads to maximum learning (with head, heart and hand).

The additional teaching method used is the so-called “action learning”.

In contrast to a typical trainer approach, where the participants sit opposite the trainer who describes the golden rules of a particular topic, the participants experience new experiences in concrete action. The experiences and the sense of achievement are then reflected on together with the trainer and checked for their transfer effectiveness. In this way, they are sustainably transferred into everyday work. The format is interactive and highly participative.

Creative techniques, outdoor methods and techniques from mental training expand the design of the individual modules.

Finally, by creating ad hoc implementation plans, the conditions are created under which the participants can systematically and proactively transfer the contents of the individual modules into their everyday work.

## IMPLEMENTATION

The implementation of the “Fit for the Future” package was originally planned for April 2020. Due to the COVID-19 pandemic in spring 2020, the implementation was postponed to September 2020. Due to the new lockdown caused by COVID-19 in winter 2020, this date became impossible again and the implementation for 2020 was cancelled. We are going to try to organise it in September 2021, even though the date is no longer within the project timeframe. Instead, the focus of the task will be on the “digital apprenticeship folder”.

## EVALUATION

The programme could not be implemented due to the current COVID-19 pandemic. “Zukunftsfrit” was advertised two times (spring and fall 2020) but had to be cancelled each time because physical meetings were not possible.

However, for the chosen workshop type for the project “Zukunftsfrit”, a physical presence is indispensable for various reasons.

Online workshops complicate and minimise interaction with each other. The inability of apprentices and their supervisors to exchange information is a particular hurdle for the modules “Trainers”, “Apprentice”, “Together” and “Kick-out”.

In addition, the informal exchange among the participants, which normally takes place in the times between the individual modules, is missing. Thus, the breaks are held at home and not on site, and hardly allow for casual conversations in between.

The same results are also not achieved with fireside chats online, since in an online event the talks have to be led by one person and thus no natural exchange can take place among the participants.

Mental coaching and training cannot be done online because the coaches cannot see the facial expressions and gestures of the participants in relation to certain questions and thus cannot interpret and coach them.

In addition, a poor Internet connection or lack of technical equipment, such as no camera, can frustrate participants and be disruptive to the entire group. This negatively influences the desired results.

All the above reasons would worsen the course and results of the “Zukunftsfrit” project. Due to this, an attempt will be made to postpone the implementation of “Zukunftsfrit” to September 2021. Unfortunately, this schedule is no longer within the project phase.

## 5.1.6. THE TITLE SMALL BUSINESS ENTREPRENEUR (AUVERGNE-RHÔNE-ALPES/FR)

### SUMMARY

#### Introduction

Recognition of the regional level as a relevant step in the implementation of vocational training policies has become evident. The regions' expertise in this area has been steadily strengthened over the years. The ongoing debates within our own network as part of the General Public Policy Review (GPP) still bear witness to this, if needed. Training is now a regional matter.

The establishment of a University of Trades and Crafts (URMA) in the Rhône-Alpes is part of this logic. The 11 CMAs in Rhône-Alpes have been working for several years to ensure the legibility and coherence of their actions carried out in the various territories of the region.

Various initiatives that are designed to help facilitate the establishment and development of a URMA bear witness to this culture of work in a regional network that structures the provision of services of the Rhône-Alpes CMAs in the areas of orientation, training and employment:

- ▶ With regard to apprenticeship training centers, the CMAs and the Rhône-Alpes ICCs have initiated a formal coordination of the 10 CFAs managed by the consular network in the Rhône-Alpes region. The creation since 2009 of this network aims to raise the bar for the definition of a common policy on the development of learning in connection with the regional training development plan (PRDF). It aims to better coordinate the network's training offer for learning. It should also allow for more coherence and sharing between the initiatives taken by each of the network's institutions.
- ▶ Decision support centers (CAD) have been operating since 1992 on the basis of a common set of specifications for the reception of and orientation information for young people and adults interested in the craft sector.
- ▶ Employer Craft Spaces (EAEs), initiated in 1999, use shared tools to support artisanal enterprises in the fields of employment and human resource management.



- ▶ A training scheme for the common facility, redefined in 2008, aims to enable project owners to benefit from training modules complementary to the preparatory stage during the installation and recommendations in terms of training and follow-up. The aim is to better assess the strengths and weaknesses of the projects and to promote their sustainability.

### What's at stake

Building on these achievements, the CMA Auvergne Rhone Alpes aims, with the creation of a university of trades and crafts, to tackle more specific issues:

- ▶ Respond to the problems of installation, business development and people qualification.
- ▶ Expand inflows into the sector, in particular, to promote the creation and recovery of quality companies in the medium term.
- ▶ Organise and dedicate the academic recognition of the managerial training of craftsmen whose profession as a businessman is now fully recognised as requiring a set of functions that are not traditionally attributed to the craftsman.
- ▶ Promote the CMA's continuing education offer in a coherent and legible way.

### BACKGROUND

The apprenticeship contract aims to obtain a state diploma (CAP, BAC, BTS, Bachelor's, Master's, etc.) or a professional title registered in the National Directory of Professional Certifications (RNCP), including diplomas from National Education and professional titles under the Ministry of Labour.

The duration varies depending on the training chosen:

- ▶ In principle, two years for the learning period; this duration may, in some cases disadvantageously, be less (6 months) or longer (3 years), or even 4 years for disabled workers.
- ▶ The duration of the training is at least 400 hours under the apprenticeship contract.

The apprentice is paid according to their age; in addition, their remuneration increases each new year of performance of their contract. The minimum wage received by the apprentice corresponds to a percentage of the Smic or the MSC (conventional minimum wage of the employed) for those 21 years and over.

Apprenticeship Training Centres (CFAs) provide general, technological and practical training. In close contact with the professional world, they are the privileged place of a pedagogy specific to the learning of each trade.

Based on the transfer of skills by learning masters, learning is a concrete way of acquiring both theoretical knowledge and skills to master a trade, understand the company, acquire the necessary know-how and thus promote integration into the company.

As of 31 December 2018, the apprenticeship training centers are located throughout France, with 448,100 apprentices, including 49,700 apprentices in Auvergne-Rhône-Alpes; an increase of 4.2% over 2017. The number of apprentices in secondary education is on the rise (up 1.8%) for the second year in a row. Growth in higher education learning remains at a high level (up 8.1% from 9.1% in 2017).

16.0% of apprenticeships come from a third-grader, with young people at this level focusing mainly on a general or technological second (63.7%).

The organisation of apprenticeships in France has undergone a major evolution with the reform linked to the "Freedom to Choose One's Professional Future" law of September 2018 with the transition from a regulated system to a market logic.

Funding is now provided according to costs to contracts defined by the professional branches under the control of France's competences.

Eleven skills operators have been set up in 2019. Managed by the professional branches, these organisations are responsible for ensuring:

- ▶ Funding for apprenticeship and professionalisation contracts based on the levels of care defined by the branches;

- ▶ Technical support to the branches: definition of the cost to the contract, observatory of skills and qualifications, certification engineering, etc.

Regions that previously had a major expertise in the financing and regulation of apprenticeship training openings now see their intervention limited to two missions:

- ▶ Funding investments in CFAs
- ▶ Correcting territorial inequalities

For Chambers of Trades and Crafts, the missions are now:

1. To support companies that wish to do so, especially in the preparation of the apprenticeship contract, prior to its filing with the skills operators;
2. To mediate and prevent potential conflicts between employers and apprentices;
3. To participate in the training of learning masters;
4. To participate in the regional public service of guidance;
5. To participate in the regional governance of learning.

## GOAL

### Respond to diverse audiences and needs

- ▶ Open up learning to young dropouts at the university who want to re-orient their personal and professional project by offering them access to a dual professional qualification on a technical and managerial level.
- ▶ Offer job seekers or adults retraining in management as part of the support of a project to create or take over a business.

### Consolidate the training of craft assets, craftsmen and apprentice spouses by promoting the development of a logic of course

- ▶ Develop partnerships with consular network CFAs to offer managerial skills to young people who are preparing for or already hold a Level IV diploma.
- ▶ Promote the development of a logic of course among the assets of the sector, in particular, by organising the development offer in a modular and capitalisable way.
- ▶ Promote industry certifications (CTM, BTM, BM3, ADEA) in line with this course logic.

- ▶ Develop open and remote FOAD training, especially for installation project owners.

### Coordinate and energise partnerships with higher education

- ▶ Harmonise and develop partnerships with higher education by valuing existing initiatives and organising the implementation of the convention signed by the Permanent Assembly of Chambers of Trades and Crafts with the National Conservatory of Arts and Crafts.
- ▶ Establish a regional steering committee involving representatives of academic institutions developing relations with the CMA Auvergne Rhône-Alpes, with the aim of capitalising on good practices, promoting the devices and changing educational systems.

### Organize and promote the training offer of CmAs in the region

- ▶ Give consistency and legibility to the training offer of the Chambers of Trades and Crafts of the Region within the framework of a logic of regional mapping.
- ▶ Produce a regional catalogue of the actions proposed by the CMAs in the context of continuing education.
- ▶ Organise communication on URMA and actions related to its deployment, in accordance with the national charter.

The TEPE is a Level III (BAC 2) CNAM (National Conservatory of Trades and Crafts) title, which can be completed in one year.

It is a training that relies on the realisation of a professional project in the small business craft sector to apply good practices in business, financial and organisational management.

The goal of the training is to acquire cross-cutting knowledge and skills to carry out a project of:

- ▶ Business development,
- ▶ Start-up,
- ▶ Business takeover.

This project can be carried out in any trade sector: building, food, beauty, automobile, sales, etc.

## DESCRIPTION OF THE PROGRAMME

The entire training course for the professional title is based on four common issues. Each will be addressed through one or more modules:

- ▶ What for? to help make sense of the action.
- ▶ What do I do? to set priorities for action.
- ▶ How do I do that? to facilitate the realisation of the action.
- ▶ Who do you have to do it with? to know how to share the action.

The majority of our modules are dedicated to promoting and facilitating ACTION: how to do it? This pedagogical orientation is also found at the level of the teaching approach of each of the modules so that they:

- ▶ Are pragmatic in providing concrete answers at the same time as they “open up” minds to new perspectives that will remain to be explored at a later date;
- ▶ Are not “repulsive”;
- ▶ Enable enterprising people to discover simple benchmarks in relation to the subject, which are reliable and essential (such as: 3 or 4 things to think about and do and 3 or 4 things to avoid);
- ▶ Give an enterprising, effective “competence” and not just “knowledge”;
- ▶ Take into account the sometimes heterogeneous levels of enterprising people;
- ▶ Encourage the entrepreneur’s involvement in their project.

## Requirements

The Small Business Entrepreneur designation is part of an action training scheme lasting up to one year.

During this period, the entrepreneur will be immersed in their professional situation and will simultaneously attend the title training course, lasting 308 hours.

The professional title training has two distinct and complementary facets:

- ▶ A section to address process management, referred to as “good practices to undertake”, reserved for the acquisition and implementation of structuring methodologies allowing the entrepreneur to manage their ACTION and the COMPETENCES necessary to carry out this action (203 h); and

- ▶ A section to address disciplinary benchmarks, referred to as “the right questions to undertake”, offering the entrepreneur the opportunity to build a personalised modular course (105 hours).

## Content and structure

The trainee follows the following educational path, depending on the option chosen:

- ▶ AGIR: Training in operational management of creative, business development or recovery projects (161 hours);
- ▶ Module 11: “How do I manage my project?” (21 hours);
- ▶ Module 9: “How do I assess the skills needed for my project?” (21 hours);
- ▶ The right questions to start: five 9 p.m. modules (105 hours).
- ▶ That is 44 days of training over a period to be agreed (up to 1 year).

## 1 - “Good Practices to Start”

These trainings guide the trainees into the project and help them organise their journey. Based on AGIR (161h), a simple and operational method of project management and skills, they come according to three profiles: creator, activity developer, taker. They are organised into two chapters:

**AGIR Project:** A toolbox to structure and mark the route through stage points (see Annex). AGIR Project is punctuated by 5 thematic sequences that constitute as many milestones in the realisation of the project. Each of these sequences alternates collective or individual face-to-face sessions (3 days in total) and periods of personal work supervised by practical application.

**AGIR Skills:** A simple method of assessing the skills of a workstation applied to and by the interns allowing them to build their skills improvement plan. AGIR Skills is punctuated by different sequences that gradually help trainees to reflect on the skills needed for the project.

The materials dedicated to AGIR are provided on a single tool, made available to the trainee (Excel document). Training is facilitated by the possible use of @ppui®, a dedicated IT platform. They thus allow each participant to make concrete progress on their project on the basis of the work instructions specified during the face-to-face pedagogical sessions.

UAEN90	Management de projet/ project Management	<b>AGIR Createur:</b> Comment construire et mener mon projet de création d'entreprise ? <b>AGIR Createur:</b> How to build and carry out my business creation project
UAEN91	Management de projet/ project Management	<b>AGIR Développeur d'activité :</b> Comment construire et mener mon projet de développeur d'activité ? <b>Business Developer:</b> How to build and run my business developer project
UAEN92	Management de projet/ project Management	<b>AGIR Repreneur:</b> comment construire et mener mon projet de repreneur d'entreprise ? <b>AGIR Buyer:</b> how to build and carry out my business buyer project?

### AGIR Activity Developer (UAEN91)

#### Objectives

In direct relation to the business development project, this module allows the use of the AGIR project management method and tools to promote:

- Identifying the project's perimeter
- Identifying the way forward
- Identifying the project's professional and controlled conduct

#### Content

1. Know the project's stakes for the company and position it in the overall strategy.
2. Formalise the idea in project:
  - Set goals and deliverables,
  - Describe the constraints,
  - Identify the criteria for success.
3. Define the project organisation:
  - Identify the different players involved and specify their roles, rights and duties,
  - Build the project team.
4. Build project communication:
  - Report on the progress of the project at different levels of decision-making,
  - Evaluate the project's strengths and develop membership in-house.

5. Master the project's conduct (quality - cost - time):
  - Master the actions to be carried out,
  - Build and manage the project budget,
  - Build the planning and manage the progress of the project.
6. Take stock in terms of achievements, perspectives and skills.

### AGIR Taker (UAEN92)

#### Objectives

In direct relation to the takeover project, this module allows the use of the AGIR project management method and tools to promote:

- Identifying the project's perimeter
- Identifying the way forward
- Identifying the project's professional and controlled conduct

#### Content

1. Check the self-project suitability.
2. Make an in-depth diagnosis of the company:
  - - Check the feasibility of the takeover project,
  - - Build the recovery strategy.
3. Identify the skills to carry out the project.
4. Build the legal, financial and tax package:
  - Study possible scenarios
  - Make the project credible to its interlocutors.
5. Finalise the recovery plan:
  - - Professional background,
  - - Make a diagnosis of the company,
  - - Develop a short- and medium-term strategic approach,
  - - Structure the business approach,
  - - Obtain funding,
  - - Master the actions to be carried out.
6. Integrate the company and manage change:
  - - Be accepted as a future leader,
  - - Take over the company successfully,
  - - Build development paths.
7. Take stock in terms of achievements, perspectives and skills
  - CNE



## The Steps of the AGIR Module

This training is provided as the project progresses. It is divided into four work sequences.

### *Sequence 1: Formalisation of the project (4 days)*

- ▶ Formulate the expected and content of the project,
- ▶ Define the context of the company,
- ▶ Formulate the context of the project,
- ▶ Identify the project's stakeholders,
- ▶ Define the skills required for the project,
- ▶ Make a roadmap for the next sequence.

### *Sequence 2: Project management (6 days)*

- ▶ Set achievable goals,

*Identify the main tasks to be carried out,*

- ▶ Assess the necessary means,
- ▶ Set measurement indicators,
- ▶ Plan for achievements,
- ▶ Develop the skills improvement plan,
- ▶ Make a roadmap for the next sequence.

### *Sequence 3: Project follow-up (9 days)*

- ▶ Follow the implementation of the forecast action plan through dashboards,
- ▶ Make necessary adjustments,
- ▶ Achieve an intermediate situation of CAP progression,
- ▶ Make a roadmap for the next sequence.

### *Sequence 4: Project evaluation (4 days)*

- ▶ Assess the results of the project: level reached, success factors, main difficulties;
- ▶ Define new strategic, technical, organisational or commercial axes induced by the results achieved and the new objectives set;
- ▶ Take stock of what they have learned in terms of skills;
- ▶ For AGIR Creator and Takeover: synthesize the project on the basis of business or takeover plans.

## 2 - "The Right Questions to Start"

These modules, each lasting 21 hours, provide answers to key questions related to project implementation. They were designed to provide, in a minimum of time, pragmatic, useful and directly transferable answers to the project.

These modules are available in-person. In the event of implementation **for a territory and for a given group**, we can determine the proposed modules in advance (see "Predation on the choice of modules" paragraph).

Each 21-hour module consists of three distinct and complementary phases over approximately three weeks:

Phase 1 to gain knowledge (J1),

Phase 2 to transform knowledge into skills (J2),

Phase 3 to enrich the group's experience, to enrich itself with the expression of the group and the speaker (J3).

### **D1: Knowledge acquisition phase**

#### *Objectives:*

To provide essential theoretical elements and content in relation to the question asked.

Prepare the application work to be done for Phase 3.

*Content:* See content of the modules below and/or the module's detailed repository at C

*How it works:* Varies depending on the format chosen:

If a format in the present: training seminar,

If hybrid format: cut the "course" into four 2-hour sequences (1:30 - 15 minutes of sequence-induced application exercises).

*Lead actor:* Varies according to the chosen format:

If the actor is in-person form: the intervener,

If hybrid format: the learner in conjunction with a tutor via the Plei@d platform on which the sequences will be deposited.

*Duration:* 1 day, or the equivalent of 7 hours

**D2: Acquisition transfer phase**

*The objective* is to implement the elements acquired in the acquisition phase (in J1) in relation to the project carried out (creation / business development / takeover).

*Content:* Varies depending on the nature of the subject that the learner has decided to develop in this transfer work.

*Lead actor:* The learner.

*Duration:* Estimated and valued at 7 hours of personal work

**D3: Restitution evaluation phase**

*Goals:*

Assess the transfer work carried out by each learner,  
Allow each participant to learn from the transfer processing carried out between each other

*Content:*

Presentation by each of their work to the group,  
Further training/deepening,  
Synthesis of the modules from the three phases, which will lead to the production of the “key factors of success” induced by the question and the list of “things to avoid”,  
Handing over to the intern:

- A summary of the essential elements to remember on the “issue”,
- A summary but essential bibliography allowing them to delve into the subject on their own.

*Lead actors:* The speaker and a group of learners

*Duration:* 7-hour in-person day

**APPLICATION****Actors**

A partnership has been established between CMRA AUVERGNE RHONE ALPES and CNAM.

The course will take place within EFMA cfa gere by the CMRA AUVERGNE Rhnone Alps.

**Conditions**

Recruitment of young people with a Level IV professional certification in connection with a trade.

These young people must also be part of the logic of implementing a project of creation, takeover or development of a company.

**Implementation process**

The implementation of the title will take place according to a logogram of the training system, completed and dedicated to this site, specifying the distribution of responsibility.

In particular: Promotional campaigns will be developed and confirmed in consultation between the signatories of the convention.

CNAM - CNE and CMAR ARA are committed to affixing the logos of the signatory partners to all documents and publications inherent in the training action. This relates to advertising made in advance of recruitment, information of trainees, any press releases or press articles relating to the action concerned, or any communication medium (poster, leaflet, etc.) concerning the operation.

In the face of current regulations, the courses implemented must comply with the rules for approving teachers and tutors. These are defined by CNAM-CNE and based on the various activities, skills and training benchmarks related to the preparation of the Small Business Entrepreneur Title. The repositories are provided by CNAM-CNE.

Training planning and reading in place of evaluation procedures are developed in consultation in accordance with regulations, particularly in the context of learning.

As part of the guardianship of the pedagogical guardianship exercised by CNAM-CNE, the director of EFMA is appointed as the educational supervisor.

The educational supervisor is in charge of the pedagogical coordination of the preparation of the TEPE. In this context, he or she is the guarantor of the application of the rules and the preparation of the title.

To do this, he or she works closely with the professor responsible for the national title, or by delegation, the national pedagogical officer of CNAM-CNE who is responsible to the necessary validations.

The selection of candidates is made by CMAR ARA via EFMA

An execution report will be drawn up by ARA CRMA via EFMA within two months of the end of the training.

## EVALUATION

### Evaluation process

#### *Module evaluation*

The evaluation of each module will be carried out by the speaker during the restitution evaluation phase (J3) based on a presentation, before the group, of the work carried out.

An assessment will be given for each module by the speaker at three levels: INSUFFICIENT - PASSABLE - SATISFACTORY.

#### *Conferment of the professional title*

The professor responsible for the professional title will consider the candidate "ADMIS" or "NO ADMIS" in view of all the evaluations obtained:

On the AGIR methodological report:  
THE INSUFFICIENT level is an elimination rating.

At the presentation of the AGIR methodological report before the oral panel:  
THE INSUFFICIENT level is an elimination rating.

On the disciplinary cues part (the modules):  
To assess this part, the evaluation carried out in each of the 7 modules by the learner should not include more than one INSUFFICIENT level assessment.

It will be agreed that the INSUFFICIENT level corresponds to a score of less than 8/20; PASSABLE level at a score between 8/20 and 12/20; SATISFYING level at a score above 12/20.

Diligent participants who do not meet these obligations will receive a certificate of internship.

For the record: the speakers are approved to teach the modules according to the procedure in force at Cnam (GAGE).

## Results

### *Participants*

Participant profile: 9 apprentices (no continuing education) aged 19 to 24: 5 women and 4 men.

### *Learner-led projects:*

- ▶ 4 business takeover projects: 2 in the butcher-processor sector, 1 in the bakery sector, 1 in the hairdressing sector.
- ▶ 1 business creation project in the hairdressing sector.
- ▶ 4 business development projects: 2 in the hairdressing sector,
- ▶ 1 in the aesthetics sector, 1 in the automotive sector.

*Expectations of the pilot model* (Expectations of CNAM with regard to the project expert and trainers)

- ▶ Respect the organisation and objectives of the repositories.
- ▶ Adapt content to the audience.
- ▶ Develop skills more than knowledge. The project is the priority of the training, and the stakeholders give theoretical benchmarks and

methods of conducting the project. The project expert aims to support learners in the appropriation of the method in relation to their project.

#### *Goals before the start of the pilot model* (CNAM's goal for learners)

An entrepreneur working in four main areas of activity, each of these areas must master key activities:

- ▶ Building the decision:
  - Ensure legal, technological and competitive monitoring.
  - Define, implement and control the creative project's strategy in relation to its production, services and environment.
  - Build the contractual and legal structure adapted to the project, the activity and its sustainability.
  - Identify, analyse and address malfunctions related to the project strategy.
- ▶ Driving the project:
  - Design operational implementation based on the strategy and objectives set upstream.
  - Stop technical, economic and budgetary choices.
  - Implement, stimulate, coordinate and control
  - Ensure its development and sustain it.
- ▶ Managing resources and controlling activity:
  - Define the strategic communication of the project and ensure its presentation to partners and funders.
  - Manage human resources.
  - Control and manage financial flows.
  - Lead the team around the project.
  - Be a force of proposal to position a new project in line with the overall strategy of the company.
- ▶ Animating networks of internal and external partners:
  - Comply with and enforce existing regulations.
  - Build and maintain networks relevant to the project and its sustainability.

Facilitate the commercial development of the project.  
Monitor the quality of suppliers, subcontractors and experts.

#### *Satisfaction with the pilot model* (Satisfaction of the project expert in relation to the training)

By offering entrepreneurs a path that allows them to combine both knowledge and effective implementation and work on their project and on themselves represents the added value of this training.

The immediate application of the modules through the exercises allows everyone to ask the essential questions to lead their project.

The journey generates the learning, communication, awareness, questioning, action and introspection necessary for an entrepreneurial project.

A small heterogeneous group but with the same objective, the conduct of a project, creates a closeness conducive to exchanges and the entrepreneurial spirit.

#### *Goals achieved*

To have allowed project owners, in the context of the development, creation or takeover of a company, to lead their project and to be able to perform a structuring function in the company (manager or manager),  
To have transmitted methods of project management and management of the necessary resources to the day-to-day life of the entrepreneur,  
To have shared the essential knowledge that the concrete realisation of the project requires.

#### *Participants' future prospects*

Two participants have a project to take back funds from an artisanal trade, one of which with a business development.

Three participants plan to start their own business in the medium term. Two of them are continuing their studies with a master's degree.

One participant has created and is developing the commercial function within the family business.

One participant abandoned her development project and left the professional field in which she worked.

One participant does not plan to take part.

#### *Final learning exam*

Of the 9 participants, 8 completed all the modules and obtained the title.

1 learner dropped out of training

Notes: 7 of the 8 participants received a satisfactory final evaluation. 1 participant validated the TEPE with the passable mention.

#### **LESSONS LEARNED**

The AGIR methodological tool provides structure. It allows each candidate to move forward step by step and to raise the right questions related to the project. The use of the tool has helped to highlight one of its weaknesses: it is more suited to the business development project.

The entrepreneurs are mostly young people with professional degrees. This young audience may encounter difficulties in conceptualising the project and lack the maturity and the overall vision that entrepreneurs must have.

The trainer's experience and knowledge of the various industries underpins their credibility. They are essential to the training.

The project expert must therefore be curious and keep up to date. Exchanges with learners, sponsors and the various facilitators of the training enrich this field. Animation is a fair notion of balance: the speaker must be constant in his neutrality, his flexibility, his availability and at the same time infuse a dynamic to stay the course. He or she must remain neutral and fair (time given to everyone).

A new session began in September 2020, with a limited number of participants.

Due to the pandemic, training resources had to be adapted by developing tools for distance learning.

Despite the educational resources available to apprentices, the approach limits the dynamics of exchanges essential to the project pedagogy advocated by the TEPE.

## 5.2. **FACING THE CHALLENGES OF DUAL EDUCATION IN 2020 - TRAINING CONCEPT FOR IN-COMPANY TUTORS IN DUAL EDUCATION**

### 5.2.1. **SUMMARY**

#### **BACKGROUND**

The importance of dual education for a smooth transition from education to work and the economic relevance of skilled crafts and trade professions are widely recognised at the political level. Yet, SMEs find it more and more difficult to find suitable apprentices. Today, an increasing number of apprentices are part of marginalised groups such as dropouts, refugees and young people with learning disabilities.

The purpose of this train-the-tutor programme is to offer in-company tutors the opportunity to acquire the necessary knowledge, skills and competences to successfully address, motivate and accompany apprentices from highly diversified backgrounds in the course of their apprenticeships. Marginalised young people are thus given the chance to successfully finish their apprenticeships and training companies gain the possibility to benefit from the qualified apprentices they trained.

The programme was developed in the framework of the DuALPlus project; a project funded by the EU Alpine Space Programme, in which SMEs; educational institutions; business support organisations such as handcraft clusters and chambers; universities and design institutes and regional public authorities from six Alpine regions joined their forces to improve the quality of dual education in the Alpine Space.

Thus, the train-the-tutor programme has a transnational Alpine perspective, i.e. it addresses problems in dual education that are common to all project partner regions (Bavaria, Rhone-Alpes, Salzburg, South Tyrol, Trentino, Vorarlberg and Slovenia).

By the discussions at the various project partner meetings in the course of the DuALPlus project, the project partners were able to identify the challenges that are common to and need to be faced by all project partners/ partner regions alike. Those are:

- ▶ Attracting young people to do an apprenticeship (since the number of apprentices has been continuously decreasing in all regions)
- ▶ Integrating new/special target groups (such as migrants, dropouts, early school-leavers, NEETs, etc.), who require special support in order to succeed.

Those challenges need to be especially faced by the in-company tutors who, on the one hand, need to act as ambassadors for apprenticeship, promoting it in order to attract new apprentices for the organisations they work in. On the other hand, in-company tutors need to learn how to deal successfully with and give appropriate support to special target groups with their special needs. Accordingly, the purpose of the innovative train-the-tutor concept is to propose qualification modules for in-company tutors, which promote their skills to deal with those new challenges on the current job market.

It can be considered a guideline for further vocational training providers for setting-up a new qualification measure/further vocational training offer for in-company tutors in their regions.

## STRUCTURE

The structure and the contents of the tutors' training programme are inspired by and build upon the modules proposed by the German initiative "Stark für Ausbildung – Strong for apprenticeship", whose modules partially address the topics in focus of the DuALPlus partnership. However, some contents were modified, and additional modules and contents were amended in a way to suit the needs/ framework conditions in the Alpine regions.

The whole training concept consists of 6 main modules. These modules do not represent a full curriculum, but rather a training concept giving suggestions to training providers as to how to set up a new training offer for in-company tutors. This offer includes recommendations with regard

to training objectives, training format (online, offline, blended learning), duration of the single units and full modules, as well as the didactic approach and methods.

The six modules are not interrelated and thus can be completed individually, as needed. They cover the following subjects:

- ▶ *Module 1:* How to approach apprentices successfully?  
The intention is to enable in-company tutors to approach young people in an appropriate way, with the appropriate language, in order to make them choose an apprenticeship in their company. It also trains in-company tutors to promote their trade/profession to young people and to avoid prejudices and misunderstandings when conducting job interviews.
- ▶ *Module 2:* How to integrate migrants by apprenticeships?  
The scope of this module is to make in-company tutors aware of the special experiences and backgrounds of migrants and the particular living conditions they have to face now in the new country. The module is intended to train intercultural awareness and understanding, overcoming language barriers, fostering language learning (particularly technical language) at the workplace, avoiding misunderstandings and resolving conflicts arising out of them.
- ▶ *Module 3:* How to deal with school dropouts as apprentices?  
In this module, the in-company tutors are intended to learn what differentiates school dropouts from other apprentices and why they can be beneficial for companies and particularly successful in their apprenticeship. They learn how to approach them didactically and methodologically, how to best motivate them and how to communicate with them clearly and successfully. In particular, in-company tutors have to be careful not to give school dropouts the feeling of having failed and that dual education is the second-best option. Quite the contrary, pursuing a career through dual education is an excellent alternative to an academic track with an almost as broad variety of career opportunities.

- ▶ *Module 4:* How to support the learning process by a holistic approach to apprenticeship?  
This module is intended to make in-company tutors familiar with pedagogic theory and how young people learn, particularly in the context of an apprenticeship. Moreover, in-company tutors will learn how to support the individual learning processes of young children and young adults, particularly fostering those with learning disabilities or learning problems, but also how to assess learning progress and give constructive and motivating feedback and prepare apprentices for the final examination.
- ▶ *Module 5:* Fostering digital competences for in-company tutors  
The scope of this module is to foster the digital skills of the in-company tutors so that they can make use of those for improving the training of the apprentices at the workplace and beyond. As the current COVID-19 crisis has shown, the ability to use the internet and other digital media in order to facilitate distance learning activities is becoming a crucial and distinctive competence for trainers and tutors.
- ▶ *Module 6:* Assessment of learning processes during the apprenticeship  
The intention of this module is to provide in-company tutors with basic pedagogic skills so they can set appropriate learning objectives for the practical training and monitor and assess the progress made by the apprentices.

## 5.2.2. **MODULE 1: APPROACHING APPRENTICES SUCCESSFULLY**

### **GENERAL PURPOSE OF THE MODULE**

This module aims to train tutors in business on recruitment methods and the reception, integration and training of young people. Indeed, surveys have shown that some companies do not seem sufficiently equipped to handle recruitment issues (reproduction of stereotypes, discrimination, etc.). On the other hand, contracts are being terminated during training due to communication problems between in-company tutors and apprentices.

This module will allow tutors to improve their communication with young people and to further develop their recruitment practices.

### **LEARNING OBJECTIVES**

After having participated in this module, the in-company tutors will be able to...

- ▶ Improve the way they communicate with young people
- ▶ Change their practices in changing recruitment
- ▶ Get access to young people
- ▶ Take a positive stance and talk convincingly to young people
- ▶ Manage generational differences
- ▶ Recruit with more objectivity and openness to different profiles of candidates.



MAIN LEARNING UNITS MODULE 1	LEARNING UNIT	LEARNING OUTCOMES	LEARNING CONTENT	SUGGESTED DIDACTIC APPROACH/MEDIA	LEARNING HOURS
	Background of young people and their attitudes towards work and crafts	<p><b>After having completed this learning unit, the learner:</b></p> <ul style="list-style-type: none"> <li>Understands values of young people/ levers</li> <li>Understands how young people build their orientation project and project themselves in the world of work</li> <li>Understands how to adapt their management to the next generation</li> </ul>	<p><b>Subjects of this learning unit are:</b></p> <ul style="list-style-type: none"> <li>How do young people today project themselves in their orientation and in the world of work?</li> <li>What are the values and expectations of young people in terms of guidance?</li> <li>How do young people view trades? (Self-) assessments and how to deal with false judgements</li> <li>Values and expectations of young people</li> </ul>	<ul style="list-style-type: none"> <li>Videos, studies/ field studies</li> <li>Presentation (e.g. video, so small group of 4-6)</li> </ul>	1.5 h
Involving apprentices in real work and business processes	<p><b>After having completed this learning unit, the learner:</b></p> <ul style="list-style-type: none"> <li>Is able to speak positively of and convincingly promote their job and company</li> <li>Knows how to speak in a respectful and responsible way to reach young people</li> <li>Understands their role in recruiting and the potential influence unfounded stereotypes</li> <li>Is able to recruit objectively</li> </ul>	<p><b>Subjects of this learning unit are:</b></p> <ul style="list-style-type: none"> <li>Help tutors to open up their frame of reference and give up certitudes</li> <li>Learn to speak positively and convincingly promote their own profession and company</li> <li>Know how to talk responsibly and respectfully to young people</li> <li>Become aware of what the management of young people involves, including which attitudes to build, focus on technology and innovation as well as the values of the company to promote a future-oriented strategy</li> <li>Understand the levers of the different generations (Y, Z digital natives) using an analysis grid and know how to create the right structure and set the right limits</li> </ul>	<ul style="list-style-type: none"> <li>Workshop between tutors</li> <li>Practical case on recruitment (e.g. in the skin of a visually impaired person with a mask, in the skin of a dyslexic person with a text whose words are cut differently, etc.)</li> <li>Case studies on recruitment <ul style="list-style-type: none"> <li>Recruit objectively and avoid bias</li> <li>Provide tutors with a different view on recruitment with new solutions and focus more on the skills and capabilities of candidates</li> </ul> </li> </ul>	1.5 h	

### 5.2.3. **MODULE 2: HOW TO INTEGRATE MIGRANTS BY APPRENTICESHIPS**

#### **GENERAL PURPOSE OF THE MODULE**

The lack of specialists is increasing. Due to its deep-rooted traditions in craft and trade sectors as well as its aging population, there is a lack of skilled workers and apprentices especially in the Alpine Space. This situation is going to escalate. Migration, immigration and cultural diversity could be benefits for our society as well as our economy if we are able to develop a welcoming and respectful culture, to transfer knowledge and awareness and to realise good practices in the field of education, training and qualification.

The aim of this module is to raise the in-company tutors' awareness of the particular experiences and backgrounds of migrants as well as the living conditions they are confronted with. The goals are to train intercultural awareness and understanding, to bridge language barriers, to enhance the learning of (foreign) languages at the workplace as well as to avoid misunderstandings and resolve resulting conflicts.

We define 'migrants' as people born in foreign countries as well as people whose both parents were born abroad (second generation migrants).

#### **LEARNING OBJECTIVES**

After having participated in this module, the in-company tutors will be able to...

- ▶ Characterise their own nation and other nations as well as the cultural features and differences, use this variety to strengthen the apprentices' learning success, recognise potential misunderstandings which could result from differences, and be able to use communication techniques and resolution strategies to steer cultural misunderstandings in a positive direction.
- ▶ Recognise different aspects of a welcoming culture, integration as well as their meaning for the recruitment of apprentices with and without migration background, know the essential aspects of a welcoming portfolio and are able to develop such a portfolio for the own

company, know practices and actions for a positive welcoming culture in companies which enhance the onboarding as well as integration of apprentices.

- ▶ Recognise language barriers and try to show potential solutions, know regional offers and programmes as well as relevant contact persons, as well as support and encourage the apprentices to take language courses or training for linguistic competences.
- ▶ Use a dictionary/handbook as a tool to explain technical terms and prevent misunderstandings.
- ▶ Recognise, enhance and use the potentials and strengths of apprentices.
- ▶ Use ways and practices to influence group dynamic processes positively.
- ▶ Use methods and practices to recognise conflicts early on and resolve those that occur during the apprentice training.
- ▶ Deal with discriminatory attitudes towards their companies as well as apprentices and act in an exemplary manner.

MAIN LEARNING UNITS MODULE 2	LEARNING UNIT	LEARNING OUTCOMES	LEARNING CONTENT	SUGGESTED DIDACTIC APPROACH/MEDIA	LEARNING HOURS	OFFLINE / ONLINE
	Training of intercultural awareness and understanding	<p><b>After having completed this learning unit, the learner:</b></p> <ul style="list-style-type: none"> <li>• Knows the characteristics of their own as well as other nations as well as their cultural features and differences</li> <li>• Uses this variety to strengthen the apprentices' learning success</li> <li>• Knows and recognises potential misunderstandings which could result from differences</li> <li>• Knows communication techniques and resolution strategies to steer cultural misunderstandings in a positive direction</li> <li>• Knows regional support services as well as how to get support if needed</li> </ul>	<p><b>Subjects of this learning unit are</b></p> <ul style="list-style-type: none"> <li>• Presentation of characteristics of different nations and their cultures</li> <li>• Features compared to their own culture, in accordance with the demands of the tutor's country, e.g. migrants from former Yugoslavia or from Turkey.</li> </ul>	<ul style="list-style-type: none"> <li>• Presentation of cultures by a cultural representative (guest lecture)</li> <li>• Support by movies from the countries of origin</li> <li>• Discussing characteristics and differences of cultures in the course of workshops and team work</li> <li>• Definition of and co-operation with contact partners</li> </ul>	4 hours	Day 1 - Module offline
	Development of welcoming culture and welcoming portfolio	<p><b>After having completed this learning unit, the learner:</b></p> <ul style="list-style-type: none"> <li>• Knows different aspects of welcoming culture, integration as well as their meaning for the recruitment of apprentices with and without migration background</li> <li>• Knows the essential aspects of a welcoming portfolio and is able to develop such a portfolio for their own company</li> <li>• Knows practices and actions for a positive welcoming culture in companies, which enhance the onboarding and integration of apprentices</li> </ul>	<p><b>Subjects of this learning unit are</b></p> <ul style="list-style-type: none"> <li>• Recognition and mapping out essential aspects of a positive welcoming culture in the training company</li> </ul>	On the basis of good practices, the in-company tutors develop ideas for the welcoming portfolio of their training company (main contents: presentation of company, contact persons for schools, parents, rules, respect)	4 hours	Day 1 - Module 2 offline
	Recognition and overcoming of language barriers	<p><b>After having completed this learning unit, the learner</b></p> <ul style="list-style-type: none"> <li>• Recognises language barriers and tries to show potential solutions</li> <li>• Knows regional offers and programmes as well as the relevant contact persons</li> <li>• Supports and encourages the apprentices to take language courses or training for linguistic competences</li> </ul>	<p><b>Subjects of this learning unit are</b></p> <ul style="list-style-type: none"> <li>• Regional offers and contact persons of organisations with a focus on language support</li> </ul>	Presentation of regional and current services, language courses as well as trainings for linguistic competences for apprentices in the course of a workshop conducted by a professional expert	2 hours	Day 2 - Module 1 offline or online
Encouragement and support with the learning languages						

MAIN LEARNING UNITS MODULE 2	LEARNING UNIT	LEARNING OUTCOMES	LEARNING CONTENT	SUGGESTED DIDACTIC APPROACH/MEDIA	LEARNING HOURS	OFFLINE / ONLINE
	Encouragement of the learning of technical language at the workplace	<p><b>After having completed this learning unit, the learner</b></p> <ul style="list-style-type: none"> <li>Uses a dictionary/handbook as a tool to explain technical terms and prevent misunderstandings</li> </ul>	<p><b>Subjects of this learning unit are</b></p> <ul style="list-style-type: none"> <li>Simple methods and practices to simplify the technical language for apprentices</li> </ul>	Development of a dictionary/handbook matched with their own company, professional sector, professional field as well as the framework of the training plan in the course of a workshop. It could contain essential terms and rules in e.g. German and Turkish. The dictionaries/ handbooks will be translated	<p><b>6 hours</b></p> <p>It could be helpful to use an existing model of a tool/handbook, in which the participants could fill in their own notes during the workshops</p>	<p><b>Day 2 - Module 2</b></p> <p>offline, online or as homework</p>
	Recognition and use of the potentials and strengths of apprentices	<p><b>After having completed this learning unit, the learner</b></p> <ul style="list-style-type: none"> <li>Recognises, enhances and uses the potentials and strengths of apprentices</li> </ul>	<p><b>Subjects of this learning unit are</b></p> <ul style="list-style-type: none"> <li>Development of a SWOT analysis (matrix)</li> </ul>	Development of ideas; workshop	<p><b>2 hours</b></p>	<p><b>Day 3 - Module 1</b></p> <p>offline</p>
	Strengthening of the solidarity and community feeling of apprentices	<p><b>After having completed this learning unit, the learner</b></p> <ul style="list-style-type: none"> <li>Knows ways and practices to influence group dynamic processes positively</li> </ul>	<p><b>Subjects of this learning unit are</b></p> <ul style="list-style-type: none"> <li>Recognition and carving out of typical everyday situations</li> <li>Training in methods to counter problems, e.g. common activities like an excursion or a barbecue party</li> </ul>	Group work and simulation, respectively role plays. For instance, a new apprentice with migrant background starts to work in a company with three local apprentices	<p><b>2 hours</b></p>	<p><b>Day 3 - Module 2</b></p> <p>offline</p>
	Early recognition of conflicts and resolution of resulting conflicts	<p><b>After having completed this learning unit, the learner</b></p> <ul style="list-style-type: none"> <li>Knows methods and practices to recognise conflicts early on and resolve those that occur during the apprentice training</li> </ul>	<p><b>Subjects of this learning unit are</b></p> <ul style="list-style-type: none"> <li>Recognition of social competences and use of methods as tools of personal skills</li> </ul>	Lecture and development, respectively common definition of examples supplemented by presentation of situations in videos/short movies	<p><b>2 hours</b></p>	<p><b>Day 3 - Module 3</b></p> <p>offline</p>

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MAIN LEARNING UNITS MODULE 2	LEARNING UNIT	LEARNING OUTCOMES	LEARNING CONTENT	SUGGESTED DIDACTIC APPROACH/MEDIA	LEARNING HOURS	OFFLINE / ONLINE
	Dealing with discrimination in day-to-day work	<p><b>After having completed this learning unit, the learner</b></p> <ul style="list-style-type: none"> <li>· Know how to deal with discriminatory attitudes towards their companies as well as apprentices and act in an exemplary manner</li> </ul>	<p><b>Subjects of this learning unit are</b></p> <ul style="list-style-type: none"> <li>· Recognition and carving out of typical everyday situations</li> </ul>	<p>In the course of role plays, participants re-enact situations and look for good solutions</p> <p>For instance, real incident of an electric company in Vorarlberg/AT which trains eleven apprentices with migration background. Trainers as well as apprentices repeatedly have to face verbal abuses in daily life, such as <i>“Aren't you able to recruit local people anymore to do this work?”</i></p>	2 hours	Day 3 - Module 4 offline

## 5.2.4. MODULE 3: HOW TO DEAL WITH DROPOUTS

### GENERAL PURPOSE OF THE MODULE

There are various reasons why young people quit their secondary school, university studies or already started dual education and training. Terminations can lead to frustrations as well as despondency and lack of motivation, which can result in serious consequences from long-term unemployment to mental illnesses and a complete withdrawal from “normal” life. According to EU statistics, the amount of premature school and education dropouts (of people aged 18-24) was 10.6% in 2018. Teenagers from socially weak or underprivileged families are often particularly affected. The transition to (another) dual education can be a promising option for them. However, potential career and education tracks as well as future prospects should be communicated in a clear, transparent and realistic manner, and specific support should also be offered to those young people.

The goal of the module is to train in-company-trainers methodically as well as didactically in dealing with trainees who start a dual education as lateral entrants. The module is intended to build awareness and understanding that this type of trainee differs from others in terms of their diverse starting points and knowledge/experience levels at the beginning of their dual education and training. Potential new trainees hope that the transition to the new educational track will be more successful than their previous secondary school, university studies or former training programme. Trainers should convey the impression that the trainees have not failed but encourage them and clearly emphasise the variety of career options of dual education and training as well as that this educational track is a great alternative to an academic career. They should motivate the trainees, especially during the difficult starting phase of their education and training, as well as value and make effective use of the trainees’ individual potential and previous knowledge.

### LEARNING OBJECTIVES

After having participated in this module, the in-company tutors will be able to...

1. Deal with lateral entrants in the context of job interviews. They are trained in methods and practices to gain a realistic assessment of the reason for the candidates’ termination/transition.
2. Point out career as well as continuing education opportunities of dual education and training in general as well as within their companies.
3. Question strengths, potentials as well as weaknesses of trainees. They offer taster weeks/ months to potential trainees to give them a sense of security and allay fears.
4. Understand various aspects and reasons which motivate young people to quit their education pathways.
5. Understand this particular starting situation through interactions with the trainees and learn to support them as mentors and advisors.
6. To view the individual potential and knowledge of the trainee as a chance.
7. Use existing potentials of trainees and adapt the learning and working tasks with regard to the trainees’ level of competence.
8. Link and square them with the framework curricula as well as to adapt focus areas, if necessary.
9. Deal with older target groups and their higher educational background. Moreover, they know possible reasons for transitions of education pathways.
10. Use existing competencies and specialist knowledge of the older trainees and build on that. They also recognise the potential and opportunity for their companies (e.g. maturity of the trainees, motivation to work, networks, independence, and project experience) and use the manifold additional offers to make the education and training more attractive.
11. Apply preventive strategies to involve the trainees in their company (employee, training group). To begin with, they take the opportunity to talk to their staff members about the particular situation.
12. Strengthen the sense of community in the training group. Methods of coaching are especially used at the beginning of the training.
13. Stay in contact with parents and vocational schools (triangle) and sustain communication and exchange with other in-company tutors.

MAIN LEARNING UNITS MODULE 3	LEARNING UNIT	LEARNING OUTCOMES	LEARNING CONTENT	SUGGESTED DIDACTIC APPROACH/MEDIA	TRAINING HOURS	OFFLINE / ONLINE
	Job interviews with lateral entrants	<p><b>After having completed this learning unit, the learner:</b></p> <ul style="list-style-type: none"> <li>• Is trained in dealing with lateral entrants at job interviews</li> <li>• Is familiar with methods and practices in dealing with candidates to gain a realistic assessment of the reason for the candidates' termination/transition</li> <li>• Can point out career as well as continuing education opportunities of dual education and training in general as well as within their companies</li> <li>• Questions strengths, potentials as well as weaknesses</li> <li>• Offers taster weeks/month to potential trainees to give a sense of security and allay fears</li> </ul>	<p><b>Subjects of this learning unit are</b></p> <ul style="list-style-type: none"> <li>• Early recognition of strengths, potentials and motivation as well as previous problems difficulties.</li> <li>• Pointing out dual education and training pathways</li> <li>• Using taster weeks/ month as tools</li> </ul>	<ul style="list-style-type: none"> <li>• Team work: e.g. questionnaire for job interviews or development of a career portfolio for their own company</li> <li>• Simulation, respectively role plays of job interviews</li> </ul>	4 hours	Day 1 Module offline
	Raise awareness and understanding	<p><b>After having completed this learning unit, the learner:</b></p> <ul style="list-style-type: none"> <li>• Is familiar with the various aspects and reasons which motivate young people to quit their education pathways</li> <li>• Develops a sense and understanding for this particular starting situation through interactions with the trainees</li> <li>• Supports the trainees as mentors and advisors</li> </ul>	<p><b>Subjects of this learning unit are</b></p> <ul style="list-style-type: none"> <li>• Becoming familiar with motivations (e.g. school fatigue, excessive demand, misconceptions)</li> <li>• Prevention of problems and difficult situations in the company</li> <li>• Development of methods for integration</li> </ul>	<ul style="list-style-type: none"> <li>• Keynote speech: presentation of the current situation and the various motivations</li> <li>• Presentation and discussion of diverse examples/ own situations</li> </ul>	4 hours	Day 1 - Module 2 offline
	Purposeful deployment of strengths and knowledge	<p><b>After having completed this learning unit, the learner:</b></p> <ul style="list-style-type: none"> <li>• Sees the individual potential and knowledge of the trainee as an opportunity</li> <li>• Uses existing potentials and adapts the learning and working tasks with regard to the trainee's level of competence</li> <li>• Knows methods and practices to link and square the trainees' competencies with the framework curricula as well as to adapt its focus areas, if necessary</li> </ul>	<p><b>Subjects of this learning unit are</b></p> <ul style="list-style-type: none"> <li>• Recognition and identification of existing potentials as well as their purposeful deployment</li> <li>• Revision, adaption of framework curricula</li> <li>• Recognition of boredom, underload as well as overload</li> </ul>	<ul style="list-style-type: none"> <li>• Presentation of methods and practices</li> <li>• Presentation of best-practice examples</li> </ul>	2 hours	Day 2 - Module 3 offline and on-line

MAIN LEARNING UNITS MODULE 3	LEARNING UNIT	LEARNING OUTCOMES	LEARNING CONTENT	SUGGESTED DIDACTIC APPROACH/MEDIA	TRAINING HOURS	OFFLINE / ONLINE
	Lateral entrants as efficient target group	<p><b>After having completed this learning unit, the learner:</b></p> <ul style="list-style-type: none"> <li>• Is familiar with older target groups and their higher educational background</li> <li>• Knows possible reasons for transitions of education pathways</li> <li>• Uses existing competencies and specialist knowledge of the older trainees and builds on that</li> <li>• Recognises the potential and opportunity for their companies (e.g. maturity of the trainees, motivation to work, networks, independence, and project experience)</li> <li>• Knows and uses the manifold additional offers to make the education and training more attractive</li> </ul>	<p><b>Subjects of this learning unit are</b></p> <ul style="list-style-type: none"> <li>• Getting to know possible motivations for especially early terminations (e.g. high demands, misconceptions, lack of practical relevance, financial issues)</li> <li>• Becoming familiar with additional as well as training offers (e.g. Xchange, professional experiences abroad, job rotation)</li> <li>• Getting to know methods and practices to integrate offers and make the education attractive</li> </ul>	<ul style="list-style-type: none"> <li>• Presentation of real career pathways (e.g. interviews/ movies in which trainees tell about their motives and their shift from university studies to dual education and training; as well as tell about their positive and rather negative experiences</li> <li>• Demonstration of the opportunities for a company</li> </ul>	2 hours	Day 2 - Module 4 offline and on-line
Prevention of problems, conflicts and difficulties	<p><b>After having completed this learning unit, the learner:</b></p> <ul style="list-style-type: none"> <li>• Is familiar with preventive strategies to involve the trainees in their company (employee, training group)</li> <li>• Takes the opportunity to talk to their staff members about the particular situation</li> <li>• Knows methods to strengthen the sense of community in the training group</li> <li>• Is familiar with methods of coaching and uses them especially at the beginning of the training</li> <li>• Is familiar with ways to stay in communication with parents and vocational schools (triangle)</li> <li>• Is familiar with ways to sustain contact and exchange with other in-company tutors</li> </ul>	<p><b>Subjects of this learning unit are</b></p> <ul style="list-style-type: none"> <li>• Identification of usual everyday activities/situations of conflict</li> <li>• Becoming familiar with methods to positively use the diversity of the trainees' group</li> <li>• Application of coaching methods as well as serious networking</li> <li>• Good networking and exchanging</li> </ul>	<ul style="list-style-type: none"> <li>• Simulation/role play, e.g. new trainee explains something to colleagues</li> <li>• Presentation of good methods and offers</li> </ul>	4 hours	Day 2 - Module 5 offline	



### 5.2.5. **MODULE 4: SUPPORT LEARNING BY A HOLISTIC ORGANISATION OF THE APPRENTICESHIP**

#### **GENERAL PURPOSE OF THE MODULE**

The intention of this module is to provide the in-company tutors with the necessary knowledge, skills and competences which enable them to support their apprentices in their learning processes, so they can use their skills to their full potential.

Trainees vary in their learning abilities and levels of previous knowledge. Also, their knowledge, skills and competences evolve as the training progresses. Accordingly, in-company tutors have to adjust their didactic approach and methods to every individual apprentice, but also along their learning processes, and they need to find the right balance between clear instructions, assuming the role of a “learning companion” or an intensified learning support for apprentices with special needs or learning disabilities.

#### **LEARNING OBJECTIVES**

After having participated in this module, the in-company tutors will be able to...

1. Organise the learning process of their apprentices so that they have the chance to learn by making their own experiences and mistakes.
2. Assume the role of a “learning companion” who is able to give clear instructions as well as give support or guidance, as requested by the individual trainees.
3. Create the organisational framework conditions needed for successful learning.
4. Support self-responsibility, independence and self-organised learning of apprentices.
5. Select appropriate learning and work tasks according to the competence level of the apprentices.
6. Monitor and keep track of the learning progress of the apprentices.
7. Give appropriate, constructive and motivating feedback.
8. Prepare all apprentices for successful final exams, according to their individual needs.

MAIN LEARNING UNITS MODULE 4	LEARNING UNIT	LEARNING OUTCOMES	LEARNING CONTENT	SUGGESTED DIDACTIC APPROACH/MEDIA	LEARNING HOURS
	Accompanying learning processes	<p><b>After having completed this learning unit, the learner:</b></p> <ul style="list-style-type: none"> <li>• Knows how to identify learning needs of the trainee by (self) assessment and defining learning objectives</li> <li>• Is able to develop learning paths i.e. real and complex tasks within the work process by which the trainee can acquire the required competences</li> <li>• Knows how to set up a learning agreement upon the defined learning paths with the trainee</li> <li>• Knows how to support the learning paths by preparing the learning environment, supportive material as well as check points</li> <li>• Knows how to monitor the learning process of the trainee</li> </ul>	<p><b>Subjects of this learning unit are:</b></p> <ul style="list-style-type: none"> <li>• Explanation why holistic and complex tasks at the workplace are important to foster the development of vocational competence</li> <li>• Strategies on how to deal with learning barriers and challenging learning situations (particularly in the case of academically weaker students)</li> <li>• Different tools that help accompany the learning process, like apprenticeship boards (Ausbildungstafeln) and roadmaps, documentation of learning outcomes, report booklet</li> <li>• Difference between various leadership approaches (authoritarian, laissez-faire, cooperative)</li> <li>• Importance of a trusting relationship</li> <li>• Fostering motivation</li> <li>• (Self-)assessments and how to deal with false judgements</li> </ul>	<p>Didactic approach: The training can be delivered face-to-face or by blended learning</p> <p>The pedagogic theory on action-based learning, learning barriers, different leadership approaches, relevance of trusting relationships and how to deal with false judgements could be delivered online, e.g. web-based training</p> <p>Face-to-face sessions should be used to give and explain examples for methods and tools such as apprenticeship boards, learning agreements, documentation of learning outcomes, etc.</p> <p>Moreover, group discussions and group work sessions should be used to activate and build upon the previous knowledge of the participants and facilitate an exchange of experience by discussing advantages/disadvantages of certain approaches/techniques of tools to support the learning process</p> <p>Role plays are recommended for practicing different leadership approaches</p>	<p><b>3 hours</b></p> <p>approx. 60 min on the development of vocational competence</p> <p>approx. 70 min on methods, tools and strategies for accompanying learning processes</p> <p>approx. 50 min on framework conditions to facilitate action-oriented practical learning (also of weaker students)</p>

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MAIN LEARNING UNITS MODULE 4	LEARNING UNIT	LEARNING OUTCOMES	LEARNING CONTENT	SUGGESTED DIDACTIC APPROACH/MEDIA	LEARNING HOURS
	<p>Involving apprentices in real work and business processes</p>	<p><b>After having completed this learning unit, the learner:</b></p> <ul style="list-style-type: none"> <li>• Is aware of individual/ cultural diversity of apprentices and the challenges as well as benefits it brings along for the training company</li> <li>• Knows how to set up a diversified learning environment according to the needs of the different apprentices</li> <li>• Is able to apply appropriate criteria for the identification and preparation of work tasks (particularly for academically weaker apprentices)</li> <li>• Is able to systematically involve apprentices in work tasks (step by step at different levels of involvement)</li> <li>• Knows how to define learning objectives</li> <li>• Is able to formulate work tasks which the apprentices complete independently</li> <li>• Knows how to give constructive and motivating feedback</li> <li>• Is able to identify situations in which the apprentices need help and give support</li> <li>• Is able to determine criteria by which learning progress and success can be monitored and enable the apprentices to apply those criteria for self-assessment</li> </ul>	<p><b>Subjects of this learning unit are:</b></p> <ul style="list-style-type: none"> <li>• Reflection on the possible aspects of diversity (e.g. culture, gender, social background, personality, education, age, social behaviour, performance etc.) and how they may affect the learning process</li> <li>• Breaking down complex work processes into tasks with different levels of difficulty that can be executed independently by students</li> <li>• Determination and clear formulation of learning objectives at different levels of difficulty</li> <li>• Distinction between different levels of participation</li> <li>• Supporting measures/accompanying measures supporting the independence and the learning process of the apprentice</li> <li>• Monitoring learning success, particularly of weaker students</li> <li>• Approach to and assessment criteria in the process of external success control</li> <li>• Self-assessment tools and methods for apprentices</li> </ul>	<p>Didactic approach: The training can be delivered face-to-face or by blended learning</p> <p>The pedagogic theory on action-based learning, learning barriers, different leadership approaches, relevance of trusting relationships and how to deal with false judgements could be delivered online, e.g. web-based training</p> <p>Face-to-face sessions should be used to give and explain examples for methods and tools such as apprenticeship boards, learning agreements, documentation of learning outcomes, etc.</p> <p>Moreover, group discussions and group work sessions should be used to activate and build upon the previous knowledge of the participants and facilitate an exchange of experience by discussing advantages/disadvantages of certain approaches/ techniques of tools to support the learning process</p> <p>Role plays are recommended for practicing different leadership approaches</p>	<p><b>3 hours</b> 60 min</p>

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MAIN LEARNING UNITS MODULE 4	LEARNING UNIT	LEARNING OUTCOMES	LEARNING CONTENT	SUGGESTED DIDACTIC APPROACH/MEDIA	LEARNING HOURS
	<p><b>Learning difficulties and constructive feedback</b></p>	<p><b>After having completed this unit, the learner will:</b></p> <ul style="list-style-type: none"> <li>• Know the important determinants of successful learning</li> <li>• Know in which stages of the learning process difficulties can occur</li> <li>• Know about the most common learning disorders and how they can affect the learning process</li> <li>• Is able to identify learning difficulties and give/ provide external support</li> <li>• Know the difference between work assignment and learning assignment</li> <li>• Are able to design learning assignments</li> <li>• Are aware of exam nerves and are able to teach apprentices appropriate stress management/relaxation techniques</li> </ul>	<p><b>Subjects of this learning unit are:</b></p> <ul style="list-style-type: none"> <li>• Pedagogic theory/ scientific background information on learning requirements, learning objectives and learning processes</li> <li>• Pedagogic and psychological basics on learning difficulties and individual learning support</li> <li>• Possibilities of external support</li> <li>• Definition of learning assignments and their relevance for the apprenticeship</li> <li>• Design of learning assignments</li> <li>• Objectives and rules of feedback</li> <li>• Exam nerves and how it affects the performance of apprentices</li> <li>• Learning techniques for exam preparation</li> <li>• Strategies and methods of stress management during exam preparation</li> </ul>	<p>Didactic approach: The training can be delivered face-to-face or by blended learning</p> <p>Particularly the pedagogic theory and psychological theory part could be delivered online, e.g. web-based training</p> <p>Face-to-face sessions should activate and build upon the previous knowledge of the participants and facilitate the exchange of experience by discussing advantages/disadvantages of certain approaches/ techniques for dealing with learning difficulties, exam nerves, feedback, etc.</p> <p>Active involvement of the participants by group work sessions or role plays is recommended for the design of learning assignments or training the communicative skills for constructive feedback</p>	<p><b>3 hours</b></p> <p>60 min for learning difficulties</p> <p>60 min for learning assignment and feedback</p> <p>60 min for exam preparation and stress management</p>

## 5.2.6. **MODULE 5: FOSTERING DIGITAL COMPETENCES FOR TUTORS**

### **GENERAL PURPOSE OF THE MODULE**

The scope of this module is to foster the digital skills of the in-company tutors so that they can make use of those for improving the training of the apprentices at the workplace and beyond. As the current COVID-19 crisis has shown, the ability to use the Internet and other digital media in order to facilitate distance-learning activities is becoming a crucial and distinctive competence for trainers and tutors.

The intention of this module is to provide the in-company tutors with the necessary knowledge, skills and competences which enable them to digitally communicate with and support their apprentices in their learning processes. Digital skills of mentors are different; some have basic digital knowledge, some are advanced and others do not have any digital knowledge at all. The module offers the opportunity to achieve a basic level of digital competence, which is equally relevant to all in-company tutors for accompanying and supporting the learning processes of their apprentices.

The module is designed for direct application in practice and competences trained help tutors to connect with apprentices digitally throughout the learning process. The module equips individuals with the digital skills necessary for everyday life and thus actively fosters their participation in the modern information society.

### **LEARNING OBJECTIVES**

After having participated in this module, the in-company tutors will be able to...

1. Use ICT in education, learning and work.
2. Use the Internet or Internet services safely.
3. Apply information and communication skills for problem solving related to the use of software.
4. Use the Internet/web browsers to gain new information and business insights (connecting with useful modern information technology).
5. Search, collect, store, process, use and transfer data while creating and presenting relevant information.

6. Communicate through various information and communication channels (incl. social media such as Facebook, Instagram, and WhatsApp, etc.).
7. Apply modern software tools and social media to support the learning processes of the students.
8. Improve skills for performing their work tasks related to students/apprentices.
9. Use modern software tools for editing texts, creating spreadsheets and presentations and be able to edit them meaningfully.

MAIN LEARNING UNITS MODULE 5	LEARNING UNIT	LEARNING OUTCOMES	LEARNING CONTENT	SUGGESTED DIDACTIC APPROACH/MEDIA	LEARNING HOURS
	Basic concepts of information technology	<p><b>After having completed this learning unit, the learner :</b></p> <ul style="list-style-type: none"> <li>• Knows basic physical structures of a personal computer</li> <li>• Uses data networks in computing and understands how IT systems emerge in everyday life</li> <li>• Learns about the impact of computers on health and learns how to use the Internet safely (is aware of certain security and legal issues related to computers)</li> </ul>	<p><b>The learning contents/subjects that will be presented/ introduced to the learner:</b></p> <ul style="list-style-type: none"> <li>• Basic physical structure of a personal computer and understanding of basic IT concepts such as memory and data storage, the importance of computer applications to society and usage of data networks in computing</li> <li>• The candidate must understand how IT systems emerge in everyday life and how personal computers can affect health. The candidate should be aware of certain security and legal issues related to computers</li> </ul>	<p><b>In order to finish this learning unit successfully ...</b></p> <p>Lectures should take place in computer classrooms. In addition to the provided computers, the organiser also provides handouts of lectures in paper and digital form.</p>	<p>Hours needed to complete this learning unit:</p> <p><b>1 hour</b></p>
Usage of computer and its files	<p><b>After having completed this learning unit, the learner:</b></p> <ul style="list-style-type: none"> <li>• Knows how to demonstrate knowledge and skills to use the basic functions of a personal computer and operating system</li> <li>• finds himself in a desktop environment on computer</li> <li>• Knows how to organise and handle files and indexes and folders: copy, move and delete them.</li> <li>• Acquires knowledge of using computer icons and handling Windows</li> <li>• Knows how to use search tools, simple editing and print management methods available in the operating system</li> </ul>	<p><b>The learning contents/subjects that will be presented/ introduced to the learner:</b></p> <ul style="list-style-type: none"> <li>• The candidate is required to demonstrate knowledge and ability to use the basic functions of a personal computer and operating system</li> <li>• The candidate must find himself in a desktop environment. He must be able to organise and handle files and indexes and folders: copy, move and delete them</li> <li>• The candidate must demonstrate knowledge to use computer icons and handles windows. Must demonstrate proficiency in the use of search tools, simple editing and print management methods available in the operating system</li> </ul>	<p><b>In order to finish this learning unit successfully ...</b></p> <p>In addition to the provided computers, the organiser also provides handouts of lectures in paper and digital form.</p>	<p>Hours needed to complete this learning unit:</p> <p><b>2.5 hours</b></p>	

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MAIN LEARNING UNITS MODULE 5	LEARNING UNIT	LEARNING OUTCOMES	LEARNING CONTENT	SUGGESTED DIDACTIC APPROACH/MEDIA	LEARNING HOURS
	Word and spreadsheet processing	<p><b>After having completed this learning unit, the learner...</b></p> <ul style="list-style-type: none"> <li>• Knows how to acquire knowledge of using a word processing application</li> <li>• Understands and knows how to use the basic procedures of creating, formatting and finishing a document and prepare it for distribution</li> <li>• Is able to use some of the more advanced features of a text editor, such as creating tables and images in a document</li> <li>• Understands and uses the transfer of objects and the use of mail editing tools</li> <li>• Understands the basic concepts of spreadsheets and is able to demonstrate, on a personal computer, the ability to use a spreadsheet application</li> <li>• Acquires basic knowledge of some functions of the application for working with spreadsheets, such as transferring objects and creating graphs and diagrams</li> </ul>	<p><b>The learning contents/subjects that will be presented/introduced to the learner:</b></p> <p>On a personal computer, the candidate must demonstrate the knowledge of how to use a word processing application. Understand and know how to perform the basic procedures of creating, formatting and completing a document and prepare it for distribution. The candidate must demonstrate proficiency in using some of the more advanced features of a text editor, such as creating tables, incorporating images into a document, transferring objects, and using mail editing tools.</p> <p>The candidate must understand the basic concepts of spreadsheets and demonstrate, on a personal computer, the ability to use a spreadsheet application. Must understand and be able to perform basic setup, formatting, and spreadsheet-related procedures. They must know how to do basic mathematical and logical operations by using basic formulas and functions. The candidate must demonstrate basic knowledge of using certain functions of the application to work with spreadsheets, such as transferring objects and creating graphs and diagrams</p>	<p><b>In order to finish this learning unit successfully ...</b></p> <p>In addition to the provided computers, the organiser also provides handouts of lectures in paper and digital form.</p>	<p>Hours needed to complete this learning unit:</p> <p>3 hours/ word processing</p> <p>3 hours/ spreadsheets</p> <p><b>Together: 6.5 hours</b></p>

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MAIN LEARNING UNITS MODULE 5	LEARNING UNIT	LEARNING OUTCOMES	LEARNING CONTENT	SUGGESTED DIDACTIC APPROACH/MEDIA	LEARNING HOURS
	Data and communications	<p><b>After having completed this learning unit, the learner...</b></p> <ul style="list-style-type: none"> <li>• Masters the basic tasks of searching the network using a network search application and an available network search engine to mark search results and to print network pages and search reports</li> <li>• Knows how to use e-mail programmes when sending and receiving messages, attaching documents or files to a message and knows how to set up folders and indexes for messages using an e-mail programme</li> <li>• Knows how to use modern ICT tools (particularly social media) in order to accompany the learning process of the apprentices</li> <li>• Understands and applies basic concepts of e-learning/blended learning</li> </ul>	<p><b>The learning contents/ subjects that will be presented/ introduced to the learner:</b></p> <p>The candidate performs basic network search tasks using a network search application and an available network search engine to highlight search results and to print network pages and search reports</p> <p>The candidate demonstrates the knowledge of how to use an e-mail programme for sending and receiving messages, attaching documents or files to the message and that they know how to set up and handle messages, folders and indexes using the e-mail programme</p> <p>The candidate will be introduced to basic e-learning and blended learning concepts. They will learn different use cases in which ICT/ social media are used</p> <p>They will work on a case study in which they will have to use different digital media to convey learning contents</p>	<p><b>In order to finish this learning unit successfully ...</b></p> <p>In addition to the provided computers, the organiser also provides handouts of lectures in paper and digital form.</p>	<p>Hours needed to complete this learning unit:</p> <p><b>4 hours</b></p>



### 5.2.7. MODULE 6: ASSESSMENT OF LEARNING PROCESSES

#### GENERAL PURPOSE OF THE MODULE

This module intends to provide in-company tutors with necessary pedagogic skills so they can set appropriate learning objectives for the practical training and monitor and assess the progress made by the apprentices. Many European-level documents (see ETF, 2018; OECD-CERI, 2008) stress the importance and pivotal role of assessment in vocational education and, more specifically, in work-based learning.

Students' assessment in every form is the central principle for the quality assurance of work-based learning. There are different uses of assessment in this field:

- ▶ Assessment can be used to check progress and give feedback to learners, employers and teachers. We can call this a **formative assessment**, which can be very helpful in identifying any problems that need to be corrected before the end of a programme, when it may be too late. This type of assessment may or may not be counted towards final grades or final certificates and vocational qualifications. In this module, formative assessment is considered as the central part of the final assessment;
- ▶ Assessment can be used at the end of a programme to verify if the students/apprentices have reached the expected learning outputs and then are able to demonstrate to the ability to perform the competencies described in the learning plan or curriculum. We can call this type of assessment summative, and it is usually the basis for awarding a vocational qualification.

To ensure a high level of quality in dual education, both types of assessment need to be considered during the in-company learning experience of students. Mostly, they need to be integrated inside the same process in which: a) in-company tutors may track and give value to the learning development of apprentices during daily activities, and b) in-company tutors may participate in a proper way in the final assessment of apprentices and the final grade of qualification due.

Therefore, **formative assessment** will be the focus of the training module for in-company tutors. Apart from the overall quality-based issues, formative assessment is a practice already present in work and organisational activities, even in non-structured forms (for example, the process of 'performance appraisal' to calculate and justify employee bonuses). Feedback is continuously given in organisational life, so formative assessment of learning is closer to work reality than summative assessment, which can be more 'academic' and school-based in its final form.

Formative assessment refers to frequent, interactive assessments of student/apprentice progress and understanding to identify learning needs and adjust work-based teaching appropriately. In-company tutors using formative assessment approaches and techniques are better prepared to meet diverse students' needs through differentiation and adaptation of teaching to raise levels of student achievement and to achieve greater equality of student outcomes. Based on research insights, we know that formative assessment (using different forms of feedback) can be a powerful tool to enhance the motivation, self-image and cognitive abilities of apprentices. The formative assessment and the related work-based learning experiences can be an indirect career guidance device, making apprentices more aware of the match between their actual performance and the chosen career path.

The integration with final summative assessment is not easy, considering the frequently perceived tensions between classroom-based formative assessments and high-visibility summative assessment to hold training institutions accountable for student/apprentice achievement, and a lack of connection between work-based and school and classroom approaches to assessment and evaluation.

Another important point related to formative assessment is the link to the recognition, validation and certification of competencies at the end of the in-company learning process. This topic is also connected with the permeability (vertical and horizontal) of the learning experience when it is over, and when students have to make career choices based on their proven competencies.

This module is organised in four main learning units: 1) a general introduction on assessment in a work-based learning environment; 2) a focus on formative assessment; 3) preparing, planning and implementing formative assessment; 4) tracking the apprentice's development to final grade/qualification, merging formative and summative assessment as learning transfer tool (permeability).

### LEARNING OBJECTIVES

At the end of the module, the in-company tutor will be able to:

- ▶ Master the main features of the assessment process in a work-based scenario from a theoretical and practical point of view.
- ▶ Connect assessment inside the whole learning development of apprentices, considering different forms of assessment (initial, formative, student-generated (self-assessments?), summative and final certification assessment).
- ▶ Design, in partnership with school tutors and students themselves (and with other colleagues at work), formative assessment practices during the learning experiences.
- ▶ Plan, share and implement a formative assessment to track the student/apprentice development in specific time intervals.
- ▶ Use data coming from formative assessment for final integration with summative assessment processes and form (possibly) validation of competencies acquired by students.

In the following section, the recommendations presented in this handbook are condensed.

MAIN LEARNING UNITS MODULE 6	LEARNING UNIT	LEARNING OUTCOMES	LEARNING CONTENT	SUGGESTED DIDACTIC APPROACH/MEDIA	LEARNING HOURS
	Anatomy of student assessment in work-based learning	<p><b>After having completed this learning unit, the learner</b></p> <ul style="list-style-type: none"> <li>• Is able to understand and master the main features of a student assessment in an in-company scenario</li> <li>• Supports the integration of assessment of apprentices in the organisational workflow</li> </ul>	<p><b>The whole process of student's assessment in work-based learning</b></p> <ul style="list-style-type: none"> <li>• Differences and similarities among assessments: initial assessment, formative assessment, student-generated assessment, summative assessment</li> <li>• Learning assessment in an in-company situation: workflow and learning, personnel professional development, appraisal evaluation</li> <li>• Viable integration among these different assessments</li> </ul>	<p>Lectures (in presence and/or online)</p> <p>Case studies on the real application of student assessment in in-company scenarios</p>	2/3 hours
Formative assessment in work-based learning	<ul style="list-style-type: none"> <li>• Is able to understand and master the main features of formative assessment in general</li> <li>• Is able to understand and apply the main typology of formative assessment in work-based learning scenarios (teacher's feedback, student-centred feedback, peer feedback, direct vs indirect feedback)</li> <li>• Is able to understand and apply the main tools for feedback (checklists, rubrics, diaries, simulations)</li> </ul>	<ul style="list-style-type: none"> <li>• Main features of formative assessment in practice</li> <li>• Tools for formative assessment (simulations, authentic tasks, checklists, rubrics, etc.)</li> <li>• Timing in formative assessment</li> <li>• Formative assessment and student's individual characteristics and development</li> </ul>	<p>Lectures (in presence and/or online)</p> <p>Simulations/group exercises</p> <p>Work examples</p>	2/3 hours	

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MAIN LEARNING UNITS MODULE 6	LEARNING UNIT	LEARNING OUTCOMES	LEARNING CONTENT	SUGGESTED DIDACTIC APPROACH/MEDIA	LEARNING HOURS
	<b>Designing and implementing formative assessment that works</b>	<ul style="list-style-type: none"> <li>• Is able to design, based on student's needs and job description, assessment processes focused on feedback</li> <li>• Is able to prepare and implement student assessment tools based on feedback</li> <li>• Is able to set and store data coming from the assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Strategies to design formative assessment (students' needs based assessment, shared design process, evidence-based design)</li> <li>• Strategies to share and communicate formative assessment in an in-company scenario</li> <li>• Strategies to apply formative assessment tools in practice</li> </ul>	Simulations/group exercises Work examples	<b>2/3 hours</b>
<b>Epilogue: tracking student's development, contributing to final grade and learning transfer in different domains</b>	<ul style="list-style-type: none"> <li>• Is able to guide students' learning process through formative assessment</li> <li>• Is able to guide students' learning process using formative assessment as career guidance support, helping students transferring learning in other domains and work experiences; this could be the basis for horizontal and vertical permeability</li> <li>• Is able to connect data from formative assessment into summative scores/grades</li> <li>• Is able to use data from formative assessment to strengthen students' portfolios for competencies recognition and certification</li> </ul>	<ul style="list-style-type: none"> <li>• Features and functioning of tracking students' development devices: e.g. portfolios, students' diaries, tutors' tracking notes</li> <li>• Main devices to integrate initial, formative and summative assessment: from feedback to grading</li> <li>• Tools to guide students in job careers through comprehensive assessment</li> </ul>	Lectures (in presence and/or online) Case studies on the real application of student assessment in in-company scenarios	<b>2/3 hours</b>	

## 6. CONCLUSION AND RECOMMENDATIONS

This handbook aims to outline the key results of one of the main parts of the three-year EU-Interreg project “DuALPlus – Promoting excellence in dual education”. On the one hand, it is intended to show the innovative capacity of dual education in the crafts and trades sector in the Alpine Space, and on the other, offer inspirations for introducing innovation and quality into dual education through identifying key factors and presenting best-practice examples.

In the following sections, we would like to give a summary overview of the basic findings and recommendations addressed to SMEs and professional associations as well as educational institutions.

### 6.1. ENHANCEMENT OF THE IMAGE AND VALUE OF DUAL EDUCATION AND TRAINING

A low public image of dual training in general, and of handicraft in particular, looms over the regions of the Alpine Space. In several countries, an increase in academisation can be observed, indirectly supported by schoolteachers and parents who encourage young people to aim for higher education. Third-level education, respectively university degrees, is considered as a guarantee for a secure and well-paid job as well as manifold career opportunities. Furthermore, there is a low public reputation of certain professions, respectively trade industries.

Representatives of SMEs should **emphasise the value of the training** in their company by improved public as well as media visibility. Thus, the focus could be on **promoting the features of their enterprise** and various benefits of an apprenticeship there (e.g. specialisation in certain skills, networks, sustainability), talking about career success stories of employees (e.g. at schools, job fairs, on the homepage, in social media) and/or providing **open house days** for potential future apprentices at their companies, where they could watch and maybe also try out work processes.

Teachers, respectively lecturers, could also contribute to the visibility of dual education and training by **informing** their pupils or students about **various possibilities for further education** as well as **career opportunities**. Especially young people and their parents are often not aware of the wide range of existing professions as well as the career opportunities they offer. They should encourage their pupils or students to **take a conscious look at their possibilities based on their interests and talents**, maybe supported by career advisors. They could also get better insights into features of various enterprises and the benefits of an apprenticeship there by visiting training and career fairs as well as open house days of companies with their classes.

Beside the recommendations above, potential apprentices and future employees would also benefit from **directly seeing the fruits of training companies**. Thus, representatives of SMEs should give the floor to people trained in their enterprises, let them present their **success stories** and answer questions at events like school visits, job fairs or open house days. Such events also give the company the opportunity to **promote its work and its meaning**, for example, products made to support the elderly in their everyday lives.

**Participation in apprenticeship competitions** is another possibility to enhance the visibility and value of training companies. Maybe enterprises could also **provide some material** for educational institutions to **promote their work and its meaning**.

To contribute to the enhancement of the **quality** of dual education and training, training companies should **improve the co-operation with vocational schools as well as schools in general**. As part of a **joint redefinition of education and training objectives**, the demands of the labour market as well as the companies (e.g. balance between basic and job-related skills) have to be considered to prepare apprentices for their future work.

Moreover, further **specific training and coaching for in-company trainers and teachers** (see chapter 6.2.) could support them in reacting to apprentices with special needs due to, for instance, their age, language and cultural or educational background.

Furthermore, the **improvement of mobility programmes for apprentices** and the development of **mobility programmes for adult trainees as well as skilled workers** can significantly contribute to the enhancement of the quality of dual education and training, as the training companies and employees can benefit from experiences in other enterprises and vice versa.

Not least, educational institutions as well as training companies should also get the **younger trainees' parents** on board and **encourage their involvement** in the dual education and training procedure.

## 6.2. IMPROVEMENT OF THE TRAINING OF IN-COMPANY TRAINERS

The expert interviews we conducted during an earlier project phase showed that today's dual educational systems as well as the needs of vocational schools, apprentices and the labour market highlight certain competences required of in-company trainers including **professional, technical and didactic competences; professional experiences in different fields; social skills** (e.g. tolerance, empathy and conflict resolution) and the motivation to **co-operate and exchange with other trainers**. Our results also showed the need of **continuing education to remain up to date** concerning the professional field, dual training and technical innovations as well as **to react to apprentices with special needs**.

Within the DuALPlus project, we developed a **proposal for a train-the-tutor programme** (see chapter 5) aiming to provide in-company trainers with the relevant knowledge, skills and competences to address, motivate and accompany **apprentices from highly diversified backgrounds** in the course of their apprenticeships. The concept consists of **six modules**, which are not interrelated and, thus, can also be completed individually.

The **first module focuses on approaching potential apprentices** in an appropriate way to win them over for an apprenticeship in their enterprise. Therefore, trainers shall **improve their way of communicating with young people, change their recruiting practices** (e.g. towards more objectivity and openness) as well as **learn how to reach young people, take a positive stance and talk convincingly to young people and handle generational differences**.

Addressing the **special needs of migrants**, the second module aims at **raising the trainers' awareness** of migrants' special experiences and backgrounds as well as their particular living conditions. Besides that, trainers shall learn how they can **bridge language barriers, enhance the learning of (foreign) languages at work** as well as **avoid misunderstandings** and **resolve conflicts**.

In the third module, in-company trainers shall learn how **dropouts** differ from other apprentices and why they can be **beneficial** for companies and **particularly successful** in their apprenticeship. The course focuses on how to **approach** this group **didactically and methodologically**, how to **motivate** them and how to **communicate with them** clearly and successfully without prejudices.

The fourth module focuses on **supporting apprentices' individual learning processes** by a **holistic approach** to apprenticeship by making trainers familiar with pedagogic theory as well as how young people learn, particularly in the context of an apprenticeship. The aim is to **promote** young children and young adults who are **affected by different challenges** such as learning problems or learning disabilities, but also to **assess learning progresses, provide constructive and motivating feedback** as well as **prepare apprentices for their final examinations**.

In the fifth module, trainers shall **improve their digital skills** and learn how to **integrate** them in the **training of apprentices at the workplace and beyond**. Not least, the current COVID-19 pandemic has shown the need for the ability to use the Internet and other digital media.

Addressing **learning processes during the apprenticeship**, the sixth module aims to **provide basic pedagogic skills** so that in-company trainers are able to set **appropriate learning objectives for the practical training** as well as monitor and assess the progress made by apprentices.

### 6.3. LEARNING FROM OTHERS: INNOVATIVE DUAL EDUCATION AND TRAINING

As our research has shown, the focus on best practices is different in the nine partner regions (see chapter 4.2.). While there are several well-established strategies for the promotion of dual education and training as well as examples of successful initiatives and programmes within and beyond the traditional apprenticeship, particularly in Austria, Bavaria and Switzerland, the dual education systems in Slovenia and France are still in development and they are thus focusing more on the implementation and promotion of dual training or co-operation and axes of intervention.

However, the aforementioned situations and examples of each partner region illustrate the necessity of **co-operation and exchange between political and economic actors** as well as **municipalities, educational institutions, training companies, in-company trainers and (potential) trainees and parents**. It is crucial to use contacts and discussions on the political level primarily for the **implementation of innovation in education** as well as the **steady enhancement and permeability** in the education system as well as on vertical and horizontal levels.

The recommendations we have been able to derive from our best practice research mirror the results of the SME needs assessment and evaluation of current dual education formats (see chapter 3).

On the meso and micro level, it is essential to **advance the value and visibility of dual education paths as well as professional fields**. Educational institutions, from at least second level on, should **encourage** pupils or students to **test their skills** as well as to **learn more about different professions, materials and tools**. Political and economic stakeholders, SMEs, educational institutions, in-company trainers, teachers, apprentices as well as pupils/students and parents could highly benefit from an improved **exchange, coordination and networking** between each other. Moreover, a **conjunction of higher education** (e.g. high school diploma, university) and **practical training in SMEs** could **raise the image and value** of dual education and training. This goes hand in hand with the **improvement of opportunities** for adults and people with higher education

certificates to **follow a dual education and training programme**. Furthermore, it is essential to **meet the needs of target groups with special needs** (see chapter 5.2.), for example, advance special support services and educational opportunities for migrants. Not least, training companies and in-company trainers should be supported in related issues such as **information, consultation, resources or advanced training**.

Besides the research on innovative dual education and training activities, six training formats were improved within the DuALPlus project. Addressed to **SMEs, trainers or young people**, they are able to help these target groups to **develop skills to cope with continuous social, technological and organisational changes** in the workplace. Moreover, they can support SMEs to **gain access to new target groups** such as girls, people with higher education, NEETS or refugees. By doing so, they give impetus for future activities in dual education and training in the Alpine Space.

Three of the six innovative training formats developed as part of the project focus on **qualification in the construction sector** and are thus primarily addressed to **apprentices, respectively trainees**.

As part of **“Learning for Life”** in Vorarlberg (Austria), five modules have been developed as a pilot project aiming at the further development of the participants’ **expertise, social competence and self-competence** as a third pillar, in **addition to working in the company and attending vocational school**. Within the modules, **state-of-the-art tools to successfully meet the participants’ current and future challenges** shall be provided, such as “time and goal management”, “mental training”, “fundamentals of mathematics”, “business arithmetic” and “applied job management”.

The **“Skilled Training for University Students”** in Lower Austria (Austria) is designed as a consecutive model to enable students of the “Manual & Material Culture” bachelor programme to **obtain a certificate as skilled workers** that is not possible as part of the additional metal course in the framework of the study programme. The training format aims to strengthen the participants’ **professional skills** (e.g. regarding specific techniques), **social competences** (e.g. by group work) and **self-learning competences** (e.g. by experimentation and reflection). Furthermore, it

shall also **improve the quality and attractiveness of dual education to the public by combining university studies and an apprenticeship**.

**“Partial Crafts Qualification in the Construction Sector with External Examination”** in Bavaria (Germany) intends to make **dual education accessible** not just for **secondary school leavers** but also for **adults and socially deprived individuals** such as refugees or school dropouts. Besides that, the **more flexible approach to dual education** as it is proposed within this concept shall be an answer to the urgent need of the construction industry for skilled workers. The training format consists of five modules including **general basic education in the construction trade and specialised trainings** in one of three fields.

The innovative training formats developed in the Italian regions focus on **workshops for SMEs, trainers and/or apprentices**.

As part of **“Fit for the Future”** in Bolzano (Italy), the participants shall **recognise that learning is a form of interaction** in which everyone acquires new knowledge and skills through shared and mutual exchange. Another aim is their **understanding of everyone’s equal involvement in the learning process** which leads to a **shared responsibility**. Amongst others, the workshop provides **schemes, models and techniques from leadership science and learning research**, intends to **strengthen the participants’ social and problem-solving skills**, their **understanding of business interrelationships** as well as their **communication and feedback culture**.

The **“The Atelier of Learning”** in Trento (Italy) aimed at **bringing together two or more agents from different professional communities** to share their professional knowledge and, “crossing the boundaries” of their field, create new ones. The webinar and three workshops within this training format allowed professional communities to **share their professional knowledge**, provided in-company trainers with a **better understanding of the learning processes of apprentices** in a dual situation and **promoted a more active role of the companies**.

The French training format aims at the **managerial training of craftsmen**. As part of **“The Title Small Business Entrepreneur”** in Auvergne-Rhône-



Alpes (France), the needs of diverse target groups shall be addressed (dropouts, job seekers or adults in retraining), the **training of craft assets, craftsmen, and apprentice spouses** shall be consolidated and **partnerships with higher education** representatives shall be coordinated and energised. Amongst others, the content of the format includes training in **operational management of creative, business development or recovery projects, project management** and **skills assessment**.

So far, only the innovative training formats in Lower Austria, Bavaria, Trento and Auvergne-Rhône-Alpes have been implemented and evaluated due to the COVID-19 pandemic. Although they followed different focuses and approaches, some general findings can nevertheless be derived.

With regard to organisation and planning, **time and content factors have to be well considered**. The “Skilled Training for University Students” shows that there has to be **sufficient time and deepening for all focal points**. Thus, it was challenging for the participants to complete the training at the same time as they were working on their diploma theses, and they did not feel sufficiently prepared for the final apprenticeship examination. In order to provide university students—or other groups with usually less practical experience—with extensive practical competence, we recommend a **mandatory internship**. Moreover, an at least optional **intensive training for the final examination** could be beneficial. During the “Learning Atelier” workshop, it became clear that more time is necessary to **deepen the learner’s co-design and management’s operational details along the four key moments of dual training**: preparing, directing, motivating and evaluating learning.

This also requires a **consolidated language and knowledge base**. Thus, it is essential to **correspond to the particular needs of participants**. For example, younger people may encounter difficulties in conceptualising the project and lack the maturity and overall vision that entrepreneurs must have, as the “The Title Small Business Entrepreneur” format showed. Besides that, trainers of such formats have to be **constant in their neutrality and availability** and, at the same time, **infuse a dynamic to stay in the course**.

Another important finding is the need to **strongly promote** training formats through a **variety of channels** and **involve relevant stakeholders and media** in the process. The “Partial Crafts Qualification in the Construction Sector with External Examination” and “Learning Atelier” training formats were attended by fewer participants than expected. The involvement of stakeholders relevant to potential participants, **like educational institutions, enterprises, guilds, job consultants, employment agencies and local and social media**, could help to **inform target groups and encourage them to participate** in the training. Particularly in the case of trainings for apprentices and employees, respectively low-skilled workers, their companies, respectively guilds, should be **clearly informed about the advantages and benefits** for their businesses if they send them to the training. In the case of trainings for NEETS, consultants of employment agencies or similar institutions have to be **briefed about the intention of the dual education measures and the selection criteria for participants**. Such promotion activities could go hand in hand with a **more intensive awareness-raising campaign aimed at schools, companies and job consultants** to promote a positive image and the high value of dual education and training.

There is a strong innovative capacity of dual education and training in the crafts and trades sector in the Alpine Space. An improvement of the dual education and training systems with regard to the specific needs of potential apprentices, respectively trainees; in-company trainers; SMEs; professional associations in the crafts and trades sector as well as of the current labour market could strongly enhance the value and quality of dual education and training. Therefore, it is crucial to involve stakeholders such as educational institutions, guilds, regional chambers, job consultants, employment agencies and parents.

## 7. REFERENCES

INAPP (2019) Dual systems in the Regions of the Alpine Space. Final report. Trento.

### WEBSITES OF INTRODUCED BEST-PRACTICE EXAMPLES

#### AUSTRIA

##### Successful dual education initiatives for students and apprentices

###### *Vorarlberg*

- ▶ Digitale Lehrlingsmesse Montafon (Vorarlberg): [www.lehremontafon.at](http://www.lehremontafon.at), last access 17.05.2021.
- ▶ AZV Ausbildungszentrum Vorarlberg (Vorarlberg): <http://www.ausbildungszentrum-vorarlberg.at/ausbildungszentrum-vorarlberg/azv-ausbildungszentrum-vorarlberg/>, last access 17.05.2021.
- ▶ Handelsschule + Lehre, Lustenau (Vorarlberg): <https://bhak-lustenau.snv.at/schule/has/>, last access 17.05.2021.
- ▶ Werkraumschule Bregenzer Wald (Vorarlberg): <http://werkraum.at/werkraumschule/>, last access 17.05.2021.
- ▶ Lehre im Walgau (Vorarlberg): <http://www.lehre-im-walgau.at/>, last access 17.05.2021.
- ▶ Extrix – Lehre am Kumma (Vorarlberg): <http://www.extrix.at/>, last access 17.05.2021.
- ▶ GASCHT – Die neue duale Tourismusbildung (Vorarlberg): <https://www.gascht.at>, last access 17.05.2021.
- ▶ Lehrlings-Potenzialprogramm “Kern-Zeit” (Vorarlberg): <https://www.tageins.net/wp-content/uploads/2019/04/Kernzeit-Lehrlinge-Flyer-4.pdf>, last access 17.05.2021.
- ▶ Duales Studienmodell – FH Vorarlberg: <https://www.fhv.at/studium/technik/wirtschaftsingenieurwesen-berufsbegleitend-bsc/das-duale-studienmodell/>, last access 17.05.2021.
- ▶ Überholz (Vorarlberg and Upper Austria): <https://www.schlosshofen.at/bildung/technik-gestaltung/ueberholz-msc/>, last access 17.05.2021.

- ▶ Duale Akademie der WKV (Vorarlberg): This programme is already implemented in Upper Austria: [https://www.wko.at/Content.Node/kampagnen/dualeakademie/A-WOOE-W18024\\_DA\\_Folder\\_Mechatronik.pdf](https://www.wko.at/Content.Node/kampagnen/dualeakademie/A-WOOE-W18024_DA_Folder_Mechatronik.pdf), last access 17.05.2021.

#### *Lower Austria / Vienna*

- ▶ Projekt "TalenteCheck Berufsbildung" (Vienna): <https://www.talentecheckwien.at/>, last access 17.05.2021.
- ▶ NÖ Begabungskompass (Lower Austria): [http://www.noe.gv.at/noe/Wissenschaft-Forschung/Noe\\_Begabungskompass.html](http://www.noe.gv.at/noe/Wissenschaft-Forschung/Noe_Begabungskompass.html), last access 17.05.2021.
- ▶ Bildungsmeile Amstetten-Scheibbs (Lower Austria): <https://www.berufsinfo-noe.at/bildungsmeile-amstetten-scheibbs-2019>, last access 17.05.2021.
- ▶ DUO\*\*STARS SUMMERSchool (Lower Austria): <https://docplayer.org/43360093-Duo-stars-summer-school-jugendliche-tauchen-in-die-welt-der-industrie-ein-und-entdecken-faszinierendes.html>, last access 17.05.2021.
- ▶ Duales Studienmodell – FH Technikum Wien (Vienna): <https://www.dualstudieren.at/hochschulen/fh-technikum-wien/>, last access 17.05.2021.
- ▶ Duales Studienmodell – FH St. Pölten (Lower Austria): <https://www.dualstudieren.at/hochschulen/fh-st-poelten/>, last access 17.05.2021.

#### **Successful dual education initiatives for in-company trainers**

##### *Vorarlberg*

- ▶ VEM Veranstaltungen (Vorarlberg): <https://technikland.at/>, last access 17.05.2021.
- ▶ Akademie für Ausbilder (Vorarlberg): <https://www.akademie-ausbilder.eu/vorarlberg/die-akademie/initiatoren/>, last access 17.05.2021.

##### *Lower Austria / Vienna*

- ▶ Projekt Lehrstellenakquise Wien (Vienna): <http://docplayer.org/17663123-Projekt-lehrstellenakquise-wien-in-kooperation-mit-waff.html>, last access 17.05.2021.

- ▶ Lehrgang Dipl. Industrie-Ausbilder/innen (Lower Austria): <https://www.wko.at/branchen/noe/industrie/lehrgang-dipl-industrie-ausbilder-innen.html>, last access 17.05.2021.

#### **BAVARIA**

##### **Successful training in companies**

- ▶ Kreiller KG (construction): <https://www.kreiller.de/>, last access 17.05.2021.
- ▶ Bachner Elektro GmbH & Co KG (electrical trade): <http://www.bachner.de/>, last access 17.05.2021.
- ▶ Martin Fassnacht GmbH (painting and varnishing): <https://www.maler-fassnacht.de/>, last access 17.05.2021.
- ▶ Ernst Pertler GmbH (building technology): <http://www.pertler.de/>, last access 17.05.2021.

##### **Successful education offers for in-company tutors and instructors**

- ▶ Stark für Ausbildung: [www.stark-fuer-ausbildung.de](http://www.stark-fuer-ausbildung.de), last access 17.05.2021.
- ▶ Ausbilderakademie: <https://ausbilden.bihk.de/>, last access 17.05.2021.

#### **ITALY**

- ▶ Talent Center Bolzano: <https://www.camcom.bz.it/en/node/5735>, last access 17.05.2021.
- ▶ Futurum: <http://www.provinz.bz.it/bildung-sprache/ausbildungsstudien-berufsberatung/futurum.asp>, last access 17.05.2021.
- ▶ JobInfo: <https://www.handelskammer.bz.it/de/bildungsmesse-futurum-jobinfo>, last access 17.05.2021.
- ▶ MINT: <http://www.provinz.bz.it/bildung-sprache/ausbildungsstudien-berufsberatung/mint.asp>, last access 17.05.2021.

#### **FRANCE**

- ▶ Axis 1 – Bravo les artisans: <https://www.crma-auvergnerhonealpes.fr/se-former/bravo-les-artisans>, last access 17.05.2021.
- ▶ Axis 2 – Development of the consular internships: <https://www.crma-auvergnerhonealpes.fr/se-former/mini-stages-decouverte>, last access 17.05.2021.

- ▶ Axis 3 – Promotion of crafts and trades:  
<https://www.crma-auvergnerhonealpes.fr/se-former/decouvrir-les-metiers>, last access 17.05.2021.

## SWITZERLAND

- ▶ State Secretariat for Education, Research and Innovation (SERI):  
<https://www.sbf.admin.ch/sbf/en/home.html>, last access 17.05.2021.
- ▶ Swiss Federal Institute for Vocational Education and Training (SFIVET): <https://www.sfivet.swiss>, last access 17.05.2021.
- ▶ BerufsbildungPlus: <https://www.berufsbildungplus.ch>, last access 17.05.2021.
- ▶ Berufsbildung 2030: <https://berufsbildung2030.ch/de/>, last access 17.05.2021.
- ▶ Blended learning: Basics and framework conditions:  
<https://berufsbildung2030.ch/de/projekte/21-projekte-de/241-blended-learning-grundlagen-und-rahmenbedingungen>, last access 17.05.2021.
- ▶ Orientation aid for digital transformation in basic vocational training:  
<https://berufsbildung2030.ch/de/projekte/21-projekte-de/48-orientierungshilfe-digitale-transformation-in-der-beruflichen-grundbildung>, last access 17.05.2021.
- ▶ Flexible vocational training from the perspective of the world of work: <https://berufsbildung2030.ch/de/projekte/21-projekte-de/45-flexible-berufsausbildung-arbeitswelt>, last access 17.05.2021.
- ▶ Lehrverbund Schreinermacher (apprenticeship company associations):  
<https://www.schreinermacher.swiss/index.html>, last access 17.05.2021.
- ▶ VIAMIA: Professional assessment and advice for people over 40:  
<https://www.viamia.ch/de>, last access 17.05.2021.
- ▶ Netzwerk Kleinstberufe (Network of Small-Scale Professions):  
<https://kleinstberufe.ch/>, last access 17.05.2021.

## 8. ANNEX

The following sections present the regional best practices (Chapter 4.2.) as well as the six partner reports on innovative dual training formats (Chapter 5.1.) in German, Italian, Slovenian and French languages.

### 8.1. BEST PRACTICE EXAMPLES IN ORIGINAL LANGUAGE

#### 8.1.1. ÖSTERREICH

##### HERAUSFORDERUNGEN IM DUALEN AUSBILDUNGSSYSTEM

Die österreichische Wirtschaft benötigt qualifizierte Arbeitskräfte, diese werden als Rückgrat der KMU angesehen. Der derzeitige Fachkräftemangel in verschiedenen Berufsfeldern ist nach Angaben der Wirtschaftskammer Vorarlberg die größte wirtschaftliche Herausforderung. So haben rund drei Viertel der österreichischen KMU Probleme ihren Bedarf an qualifizierten Mitarbeiter\*innen zu decken. Dies verdeutlicht die Relevanz von insbesondere dualer Ausbildung. Die hohe Nachfrage nach Auszubildenden seitens KMU führt zu Spannungen zwischen Industrie und Unternehmen. Hinzu kommt die kontinuierlich sinkende Geburtenrate in Österreich.

##### FÖRDERUNG DUALER AUSBILDUNG

Verschiedene Initiativen der österreichischen Bundesländer, regionaler Wirtschaftskammern, Gemeinden, Schulen und Berufsverbänden zielen zum einen auf die Verbesserung des Images und der Sichtbarkeit der Lehrlingsausbildung, zum anderen auf die Information und Beratung potenzieller Auszubildender im Hinblick auf bestimmte Berufsfelder. Neben der Öffentlichkeitsarbeit (z.B. Printmedien und Webartikel oder Plakate im öffentlichen Raum) gibt es **Job- und Karrieremessen, Informations- und Beratungstage** in Schulen, **Tage der offenen Tür** in Berufsschulen sowie in Ausbildungsbetrieben oder **öffentliche Lehrlingswettbewerbe**. Außerdem bieten außerschulische Bildungseinrichtungen (z. B. WIFI, BFI) **Kurse** an, um die für bestimmte Ausbildungsberufe notwendigen

Fähigkeiten nachzuholen, sowie die Abschlussprüfung der Lehrlingsausbildung und das Meister\*innen-Zertifikat zu absolvieren.

Um potenzielle Auszubildende zu gewinnen, präsentieren sich unterschiedliche Unternehmen auf **Job- und Karrieremessen** (z.B. jährliche Karriereinformationsmessen in Wien und Vorarlberg) sowie in Schulen. Sie nutzen auch diverse **Medienkanäle** (z. B. Zeitungen, Homepage, Social Media und Radio) für Werbe- und Evaluationszwecke. Größere Unternehmen laden Schüler\*innen außerdem zum **Tag der offenen Tür** ein, damit sie sich mit ihren Werkstätten vertraut machen bzw. die Arbeit mit bestimmten Materialien und technischen Werkzeugen ausprobieren können. Die Möglichkeiten zur Bewerbung und Bewertung sind in kleineren Unternehmen aufgrund von Personal, Zeit und räumlichen Ressourcen jedoch eher eingeschränkt.

### ZUSAMMENARBEIT VON KMU

Seit den 2000er Jahren gibt es verstärktes Bemühen Lehrlinge bei zwei oder mehr KMU auszubilden. Bei dieser überbetrieblichen Lehre teilen sich lokale heterogene Lehrbetriebe Auszubildende und bilden diese (gemeinsam) aus oder weiter.

Eine solche Kooperation ermöglicht eine duale Ausbildung, die auf sowohl Zukunft als auch Praxis ausgerichtet ist. Neben einer umfassenden Fachausbildung in Betrieb und Berufsschule werden die Auszubildenden in relevanten Schlüsselkompetenzen geschult.

Das Programm **HIPOS** in Vorarlberg war Vorbild für die Entwicklung verschiedener Initiativen zur Verbesserung dualer Ausbildung. Diese startete 2004 in Walgau und wurde 2008 mit dem Österreichischen Staatspreis für Beratung ausgezeichnet. Es folgten Best-Practice-Projektmodelle in Österreich und anderen Ländern.

### ERFOLGREICHE DUALE AUSBILDUNGSINITIATIVEN FÜR STUDIERENDE UND AUSZUBILDENDE

In den österreichischen Bundesländern gibt es zahlreiche Best-Practice-Beispiele für Schüler\*innen bzw. Studierende und Auszubildende in Kooperation zwischen Schulen, Universitäten und Ausbildungsbetrieben. Im Folgenden präsentieren wir eine repräsentative Auswahl von Initiativen und Programmen in **Vorarlberg, Wien** und **Niederösterreich**:

- ▶ **Digitale Lehrlingsmesse Montafon (Vorarlberg)**<sup>58</sup>: Aufgrund der COVID-19-Pandemie fand die Ausbildungsmesse in der Region Montafon 2020 erstmals online statt. Elf Unternehmen präsentierten ihre Ausbildungsbetriebe via Instagram Livestream. Nach der Veranstaltung wurden die Videos auf den WIGE Instagram Account @lehremontafon hochgeladen, wo sie jederzeit aufgerufen werden können.
- ▶ **AZV Ausbildungszentrum Vorarlberg (Vorarlberg)**<sup>59</sup>: Die Ausbildungsstätten in Hohenems und Rankweil bieten eine klassische duale Ausbildung für benachteiligte Jugendliche. Nach sechs bis zwölf Monaten Grundausbildung können diese eine reguläre Ausbildung in einem Unternehmen absolvieren.
- ▶ **Handelsschule + Lehre, Lustenau (Vorarlberg)**<sup>60</sup>: Die Marktstadt Lustenau entwickelte 2018 dieses Projekt, das höhere Berufsschulen mit Ausbildungsplätzen verbindet. Die Schüler\*innen besuchen drei Jahre eine Schule, während sie ihre zweijährige Ausbildung in einem von zwölf Partnerunternehmen absolvieren.
- ▶ **Werkraumschule Bregenzer Wald (Vorarlberg)**<sup>61</sup>: In der Region Bregenzerwald führt das Projekt Werkraumschule Schule und Lehre zusammen. In Kooperation mit der Handelsschule Bezau und dem Werkraum Bregenzerwald besuchen die Schüler\*innen ein fünfjähriges duales Ausbildungsprogramm.
- ▶ **Lehre im Walgau (Vorarlberg)**<sup>62</sup>: Die ehemalige HiPos-Lehrlingsoffensive (Traineeoffensive) in der Region Walgau ist eine Kooperation von

58 [www.lehremontafon.at](http://www.lehremontafon.at)

59 <http://www.ausbildungszentrum-vorarlberg.at/ausbildungszentrum-vorarlberg/azv-ausbildungszentrum-vorarlberg/>

60 <https://bhak-lustenau.snv.at/schule/has/>

61 <http://werkraum.at/werkraumschule/>

62 <http://www.lehre-im-walgau.at/>

78 Unternehmen, die derzeit 358 Lehrlinge in 77 Berufen ausbilden. Primäres Ziel ist es, den Austausch und die Kommunikation zwischen Ausbildungsbetrieben, Auszubildenden, Schüler\*innen, Lehrenden sowie Eltern zu dualer Ausbildung zu ermöglichen.

- ▶ **Extrix – Lehre am Kumma (Vorarlberg)**<sup>63</sup>: Diese Initiative der Wirtschaft am Kumma in Zusammenarbeit mit den Gemeinden Altach, Götzis, Koblach und Mäder startete 2014. Ziel ist es, den Austausch und die Unterstützung von 32 Ausbildungsbetrieben zu fördern.
- ▶ **GASCHT – Die neue duale Tourismusausbildung (Vorarlberg)**<sup>64</sup>: Das vierjährige Tourismus- und Gastronomieausbildungsprogramm in Zusammenarbeit mit 80 Partnern befindet sich in Bezau, Bludenz sowie Hohenems.
- ▶ **Lehrlings-Potenzialprogramm “Kern-Zeit” (Vorarlberg)**<sup>65</sup>: Ziel dieses “Potenzialprogramms” für Auszubildende ist es, sie in die Lage zu versetzen, ihre Persönlichkeit zu erforschen sowie ihre Fähigkeiten in ihren Ausbildungsbetrieben und darüber hinaus einzubringen und so die Beziehung zwischen Auszubildenden und Unternehmen zu stärken. Das Programm wurde von der Wirtschaftskammer Vorarlberg in Zusammenarbeit mit “tag eins - büro für wandel” entwickelt.
- ▶ **Duales Studienmodell – FH Vorarlberg**<sup>66</sup>: Das Bachelorstudium “WING” hat zehn duale Studienplätze. Das Programm “Wirtschaftsingenieurwesen Dual” verbindet die universitäre Ausbildung mit der praktischen Ausbildung in einem von vierzehn Partnerausbildungsbetrieben.
- ▶ **Überholz (Vorarlberg and Upper Austria)**<sup>67</sup>: Die Kunsthochschule Linz bietet ein zweijähriges interdisziplinäres duales Masterstudium in Holzbau in Dornbirn (Vorarlberg) und Linz (Oberösterreich) in Kooperation mit den Partnern Vorarlberger Architektur Institut (vai) und Architekturforum Oberösterreich (afo) an.

- ▶ **Duale Akademie der WKV (Vorarlberg)**<sup>68</sup>: Dieses Projekt in den Berufen “Technik” (aktueller Schwerpunkt: Mechatronik, Informatik und Codierung) startete im Herbst 2019. Die zweieinhalb- bis dreijährigen dualen Studiengänge richten sich an Maturant\*innen. Eine Kooperation mit der FH Vorarlberg ist geplant.
- ▶ **Projekt “TalenteCheck Berufsbildung” (Vienna)**<sup>69</sup>: In diesem Projekt der Wirtschaftskammer Wien und des Department of Education Vienna erforschen Schüler\*innen (achte Klasse) ihre persönlichen Fähigkeiten und lernen mehr über die Bedürfnisse des Arbeitsmarktes sowie die Rekrutierung durch Unternehmen.
- ▶ **NÖ Begabungskompass (Lower Austria)**<sup>70</sup>: Das Regionalprojekt unterstützt niederösterreichische Schüler\*innen (siebte oder achte Klasse) in ihrer beruflichen sowie weiteren Bildungsorientierung. Während eines “Talenttages” nehmen sie an strukturierten Fähigkeits- und Interessentests, Persönlichkeits- und Potenzialanalysen sowie Kursen zur Berufsorientierung teil. Danach gibt es eine Konsultation mit Schüler\*innen und ihren Eltern.
- ▶ **Bildungsmeile Amstetten-Scheibbs (Lower Austria)**<sup>71</sup>: Die Wirtschaftskammer Niederösterreich und bestimmte Partnerbetriebe ermöglichen an zwei Tagen Besuche von Schulklassen, Jugendlichen und Eltern, die einen Einblick in die Aufgaben, Materialien und Werkzeuge rund um die jeweiligen Berufsgruppen erhalten.
- ▶ **DUO\*\*STARS SUMMERSchool (Lower Austria)**<sup>72</sup>: Im ETZ-Projekt DUO\*\*STARS, Land Niederösterreich, hat die Wirtschaftskammer Niederösterreich in Zusammenarbeit mit Gemeinden, Schulen und Hochschulen Sommerschulprogramme für Schüler\*innen von Berufsschulen entwickelt. Diese Programme beinhalteten Karriereinformation und

63 <http://www.extrix.at/>

64 <https://www.gascht.at>

65 <https://www.tageins.net/wp-content/uploads/2019/04/Kernzeit-Lehrlinge-Flyer-4.pdf>

66 <https://www.fhv.at/studium/technik/wirtschaftsingenieurwesen-berufsbegleitend-bsc/das-duale-studienmodell/>

67 <https://www.schlosshofen.at/bildung/technik-gestaltung/ueberholz-msc/>

68 This programme is already implemented in Upper Austria: [https://www.wko.at/Content.Node/kampagnen/dualeakademie/A-WOOE-W18024\\_DA\\_Folder\\_Mechatronik.pdf](https://www.wko.at/Content.Node/kampagnen/dualeakademie/A-WOOE-W18024_DA_Folder_Mechatronik.pdf)

69 <https://www.talentecheckwien.at/>

70 [http://www.noe.gv.at/noe/Wissenschaft-Forschung/Noe\\_Begabungskompass.html](http://www.noe.gv.at/noe/Wissenschaft-Forschung/Noe_Begabungskompass.html)

71 <https://www.berufsinfo-noe.at/bildungsmeile-amstetten-scheibbs-2019>

72 <https://docplayer.org/43360093-Duo-stars-summerschul-jugendliche-tauchen-in-die-welt-der-industrie-ein-und-entdecken-faszinierendes.html>

Karriereberatung sowie Besuche in Bildungseinrichtungen, Ausbildungsbetrieben und Workshops, wo die Jugendlichen mehr über verschiedene Bildungswege und Berufe erfahren konnten.

- ▶ **Duales Studienmodell – FH Technikum Wien (Vienna)<sup>73</sup>:** Der duale Bachelorstudiengang “Informatik Dual” verbindet universitäre mit praktischer Ausbildung in einem von 23 Partnerausbildungsbetrieben.
- ▶ **Duales Studienmodell – FH St. Pölten (Lower Austria)<sup>74</sup>:** Im Bachelorstudium “Smart Engineering of Production Technologies and Processes” absolvieren die Studierenden ihre Hochschulausbildung sowie die praktische Ausbildung in einem von 63 Partnerunternehmen.

### ERFOLGREICHE DUALE BILDUNGSINITIATIVEN FÜR BETRIEBLICHE AUSBILDER\*INNEN

Darüber hinaus gibt es eine Reihe von Initiativen für (potentielle) betriebliche Ausbilder\*innen wie **Fortbildungen** (z.B. im Hinblick auf berufliche Kompetenzen, Persönlichkeitstraining) und **Netzwerktreffen** zum Austausch an WIFI-Standorten in Vorarlberg, Wien und Niederösterreich. Im Folgenden stellen wir einige Best-Practice-Beispiele für Ausbilder\*innen vor:

- ▶ **VEM Veranstaltungen (Vorarlberg)<sup>75</sup>:** Das außerschulische Bildungsinstitut Vorarlberger Elektro- und Metallindustrie (VEM) bietet Führungskräftebildungen und Arbeitsgruppen in verschiedenen Bereichen (z.B. Metall, Elektronik) an.
- ▶ **Akademie für Ausbilder (Vorarlberg)<sup>76</sup>:** Die Internationale Bodensee Konferenz (IBK) ist eine Kooperation der Kantone und Regionen Baden-Württemberg, Schaffhausen, Zürich, Thurgau, St. Gallen, Appenzell Ausserrhoden, Appenzell Innerhoden, Fürstentum Liechtenstein, Vorarlberg und Bayern. Die Ziele dieser Konferenz für betriebliche Ausbilder\*innen sind Vernetzung, Austausch und Themen wie Selbstkompetenz und Sozialkompetenz.
- ▶ **Projekt Lehrstellenakquise Wien (Vienna)<sup>77</sup>:** Ziel dieses Kooperationsprojekts zwischen der Wirtschaftskammer Wien und dem Wiener

Fonds für Beschäftigungsförderung (WAFF) ist es, potenzielle Ausbildungsbetriebe kostenlos zu informieren und zu beraten.

- ▶ **Lehrgang Dipl. Industrie-Ausbilder/innen (Lower Austria)<sup>78</sup>:** In Zusammenarbeit mit WIFI Niederösterreich bietet die Wirtschaftskammer Niederösterreich diese qualifizierte Ausbildung für betriebliche Ausbilder\*innen in Industrieberufen an. Das Curriculum ist auf die aktuellen Bedürfnisse des Arbeitsmarktes in Bezug auf berufliche, didaktische sowie soziale Kompetenzen abgestimmt.

### 8.1.2. BAYERN

#### AUSZEICHNUNG VON UNTERNEHMEN FÜR HOCHWERTIGE AUSBILDUNG

1993 initiierten die Stadt München, die regionale Handwerkskammer, die regionale Industrie- und Handelskammer und der Verband Freier Berufe den **Erasmus Grasser Preis**, einen Preis für Ausbildungsbetriebe mit Sitz in München. Er wird an Ausbildungsbetriebe vergeben, die eine qualitativ hochwertige Berufsausbildung anbieten, innovative Ansätze in der dualen Berufsausbildung anwenden oder sich kontinuierlich für die duale Berufsausbildung einer großen Anzahl junger Menschen engagieren.

Kriterien für die Auswahl von Ausbildungsbetrieben sind statistische Kennzahlen, wie die Anzahl der erfolgreichen Ausbildungsplätze, Zahl der Auszubildenden, Freiwilligenarbeit und Engagement im Zusammenhang mit der dualen Berufsausbildung sowie Diversity-Management und Aktivitäten im Zusammenhang mit der sozialen Eingliederung von Marginalisierten und Behinderten.

Bis 2017 konnte dieser Preis nur an Handwerksbetriebe vergeben werden, was sich 2018 änderte. Seit 2018 können sich alle Ausbildungsbetriebe in München bewerben. Um teilnehmen zu können, muss ein Bewerbungsformular von den Ausbildungsbetrieben ausgefüllt und der Stadt München innerhalb einer bestimmten Frist (in der Regel im August oder September eines jeden Jahres) vorgelegt werden. Der Preis ist mit 5.000 Euro dotiert und kann von bis zu fünf Preisträger\*innen geteilt werden.

73 <https://www.dualstudieren.at/hochschulen/fh-technikum-wien/>

74 <https://www.dualstudieren.at/hochschulen/fh-st-poelten/>

75 <https://technikland.at/>

76 <https://www.akademie-ausbilder.eu/vorarlberg/die-akademie/initiatoren/>

77 <http://docplayer.org/17663123-Projekt-lehrstellenakquise-wien-in-kooperation-mit-waff.html>

78 <https://www.wko.at/branchen/noe/industrie/lehrgang-dipl-industrie-ausbilder-innen.html>

## ERFOLGREICHE AUSBILDUNG IN BETRIEBEN

Im Freistaat Bayern gibt es viele Ausbildungsbetriebe und -initiativen, die eine außergewöhnliche duale Berufsausbildung anbieten. Die folgende Liste enthält eine repräsentative Auswahl von Best-Practice-Beispielen:

- **Kreiller<sup>79</sup>:** Die Firma Kreiller mit Sitz im Landkreis Traunstein beschäftigt dort mehr als 300 Mitarbeiter\*innen, davon 32 Auszubildende. Aktuell bilden sie an allen Standorten Auszubildende in kaufmännischen und administrativen Berufen sowie in der Logistik aus. Den meisten Auszubildenden wird nach erfolgreicher Beendigung der Ausbildung ein unbefristeter Arbeitsvertrag angeboten.

Darüber hinaus bietet Kreiller seinen Mitarbeiter\*innen die Möglichkeit, an einer Vielzahl von Weiterbildungsprogrammen teilzunehmen, die vom Unternehmen finanziell unterstützt werden und eine Vielzahl weiterer Karrieremöglichkeiten innerhalb der Organisation bieten.

Kreiller hat mit seinem speziellen Ausbildungskonzept mehrere Auszeichnungen für Ausbildungsbetriebe erhalten, u.a. den Rudolf-Egerer-Preis, der vom Ausbildungszentrum des Bayerischen Handels- und Wirtschaftsverbandes initiiert wurde. Kreiller wurde 2018 vom Wirtschafts\_magazin Focus Money auch als drittbester Ausbildungsbetrieb in Bayern ausgezeichnet.

Kreillers Ausbildungskonzept soll jungen Menschen den Zugang zum Berufsleben erleichtern und ihnen den erfolgreichen Abschluss ihrer Ausbildung und den damit verbundenen Ausbildungsnachweis ermöglichen.

Dies wird durch ergänzende Ausbildungsprogramme für die Auszubildenden wie eine Einführungswoche und produktspezifische sowie allgemeine Ausbildung während der gesamten Ausbildung erreicht.

Darüber hinaus wird ein Mentoring-Konzept in der Organisation umgesetzt. Das bedeutet, dass jeder Auszubildende in der Organisation eine\*n Mentor\*in erhält, die\*der den Auszubildenden vom ersten Tag an im Unternehmen unterstützt. Die Mentor\*innen beantworten Fragen, helfen dem Auszubildenden, sich mit dem Team und der Organisationskultur vertraut zu machen, unterstützen ihn/sie bei arbeitsbezogenen Problemen und kümmern sich um die Bedürfnisse und Interessen ihrer Auszubildenden.

Darüber hinaus haben die Auszubildenden die Möglichkeit, eine besondere Verantwortung in Projekten, wie die Teilnahme an Ausstellungen wie der zweijährlichen Truna und der firmeninternen Messe, zu übernehmen, wo die Auszubildenden ihren eigenen Stand organisieren, dekorieren und verwalten.

Um den Teamgeist unter den Auszubildenden zu steigern, findet jedes Jahr im September ein Ausflug statt, bei dem alle Auszubildenden die Möglichkeit haben, sich kennenzulernen. Zudem können Neulinge und ältere Auszubildende Erfahrungen austauschen.

Nicht zuletzt wird eine intensive Prüfungsvorbereitung für alle Auszubildenden von betrieblichen Tutor\*innen und Ausbilder\*innen vor der Abschlussprüfung angeboten.

- **Bachner Elektro GmbH & Co KG (electrical trade)<sup>80</sup>:** Das Unternehmen im Elektrobereich bildet seit 1937 Auszubildende aus. Vom ersten Tag ihrer Ausbildung an können sich alle Auszubildenden auf die Unterstützung von Koordinator\*innen für Auszubildende im Unternehmen verlassen, die immer für Fragen, Bedürfnisse, Anregungen und Probleme zur Verfügung stehen, die im Laufe des Ausbildungsprogramms auftreten könnten. Besonders aktiv ist das Unternehmen bei der Suche nach jungen Frauen für eine Ausbildung im Elektrohandwerk, das noch immer von Männern dominiert wird.

79 <https://www.kreiller.de/>

80 <http://www.bachner.de/>



Dank seiner besonderen Leistungen und der Qualität der Lehrlingsausbildung wurde das Unternehmen 2018 mit dem "Erasmus-Grasser-Preis" ausgezeichnet.

- ▶ **Martin Faßnacht GmbH (Fachbetrieb für Maler- und Lackierhandwerk)<sup>81</sup>:** Auch dieser Betrieb hat seit 1942 eine lange Tradition in der Ausbildung junger Menschen in der Malerei. Das Unternehmen übernimmt eine besondere soziale Verantwortung, indem es jungen Migrant\*innen und jungen Menschen systematisch die Möglichkeit bietet, in ihrer Organisation eine Ausbildung zu absolvieren. Darüber hinaus engagiert sich das Unternehmen dafür, im dritten Ausbildungsjahr sehr talentierte oder engagierte junge Menschen zu Fortbildungen der Maler- und Lackiergilde in München zu entsenden. Dadurch haben die Teilnehmer\*innen die Möglichkeit, spezielle Fertigkeiten und Techniken zu erlernen, die über die im normalen Ausbildungsreglement vorgesehenen hinausgehen. So werden sie für bessere Beschäftigungsmöglichkeiten in der Zukunft qualifiziert.

Aufgrund seiner besonderen Leistungen und der Qualität der Lehrlingsausbildung gewann das Unternehmen 2018 den "Erasmus-Grasser-Preis".

- **Ernst Pertler GmbH (Bautechnologie)<sup>82</sup>:** Das Unternehmen bildet seit über 30 Jahren Auszubildende aus. Es setzt sich insbesondere dafür ein, jungen Menschen, die die Schule oder frühere Ausbildungsberufe verlassen haben, eine weitere Chance zu geben. Jugendliche, die keinen Schulabschluss oder soziale Probleme haben, können eine Ausbildung im Unternehmen beginnen.

Dementsprechend unterstützt das Unternehmen auch seine Auszubildenden in sozialen und privaten Angelegenheiten, wie etwa bei der Wohnungssuche und dem Angebot von Reise- und Existenzzulagen.

Der Geschäftsführer sagte, dass die duale Ausbildung heute über den reinen Wissens- und Kompetenztransfer hinausgehen müsse. Die Aufgabe des Ausbildungsbetriebes besteht auch darin, die gesamte Persönlichkeitsentwicklung der Auszubildenden zu unterstützen und ihnen das Selbstvertrauen zu geben, sowohl in ihrer Arbeit als auch im Privatleben erfolgreich zu sein.

Aufgrund seiner besonderen Leistungsfähigkeit und Ausbildungsqualität wurde das Unternehmen 2018 mit dem "Erasmus-Grasser-Preis" ausgezeichnet

### ERFOLGREICHE BILDUNGSANGEBOTE FÜR BETRIEBLICHE TUTOR\*INNEN UND AUSBILDER\*INNEN

Es gibt auch Angebote für betriebliche Tutor\*innen und Ausbilder\*innen, die sie bei der Ausbildung von Lehrlingen unterstützen. In diesem Abschnitt werden zwei repräsentative Best-Practice-Beispiele vorgestellt:

- ▶ **Stark für Ausbildung<sup>83</sup>:** "Stark für die Ausbildung ist eine Initiative der Handwerks- und Handelskammern und wird vom Bundesministerium für Wirtschaft und Energie finanziell unterstützt. Ihr Auftrag ist es, die duale Berufsausbildung im Allgemeinen und die direkt daran beteiligten Personen im Besonderen zu stärken und zu unterstützen, zum Beispiel die Ausbildungsbetriebe, die Tutor\*innen/Ausbilder\*innen und die Auszubildenden.

Die Initiative betreibt eine Web-Plattform und eine Wissensdatenbank, die ein breites Spektrum an Informations- und Bildungsinhalten für Tutor\*innen, Ausbilder\*innen und Auszubildende bietet. Es hilft ihnen, schwierige Situationen innerhalb des Bildungsprozesses in den Ausbildungsbetrieben zu bewältigen, z. B. wie sie mit unterschiedlichen kulturellen Hintergründen umgehen und Migrant\*innen integrieren können.

Darüber hinaus bietet die Initiative gezielte Schulungen an, um die Kommunikations- und Führungskompetenzen der betrieblichen Tutor\*innen zu stärken und ihnen dabei zu helfen, den dualen Bildung-

81 <https://www.maler-fassnacht.de/>

82 <http://www.pertler.de/>

83 [www.stark-fuer-ausbildung.de](http://www.stark-fuer-ausbildung.de)

sprozess in ihren Unternehmen besser zu organisieren und mit allen Arten von Auszubildenden umzugehen, auch solchen aus "schwierigen" sozialen Verhältnissen.

Darüber hinaus versucht die Initiative einen Dialog über die Weiterentwicklung des betrieblichen Ausbildungsteils der dualen Ausbildung in Bayern sowie den Erfahrungs- und Erfahrungsaustausch unter den Tutor\*innen zu fördern.

- ▶ **Ausbilderakademie<sup>84</sup>**: Die "Ausbilderakademie" der Industrie- und Handwerkskammern in Bayern bietet ein grundlegendes Qualifizierungsprogramm für betriebliche Tutor\*innen und Ausbilder\*innen inklusive eines hoch anerkannten Zertifikats auf nationaler Ebene.

Darüber hinaus bietet die Akademie ein breites Angebot an Weiterbildungsangeboten und Seminaren in nahezu allen Kompetenzbereichen. Beispiele sind Arbeitstechniken und spezifische problembezogene Schulungen wie Trainee-Retention nach Abschluss der dualen Ausbildung, Coaching und Supervision von Trainees, Ausbildungsmethodik und Didaktik, Schreiben von Referenzschreiben und Zertifikaten, Management von Assessment-Gesprächen, Management von Recruiting-Prozessen und Auswahl der richtigen Kandidaten, Führungsqualitäten, Verständnis der Bedürfnisse der aktuellen Generation Z, Marketing und Förderung der dualen Ausbildung, rechtliche Grundlagen im Zusammenhang mit der dualen Ausbildung, digitale Kompetenzen in dualer Ausbildung und Zeit- und Selbstmanagement.

Es gibt auch berufliche Aus- und Weiterbildung Angebote für die Entwicklung der Persönlichkeit der Tutor\*innen und Trainer\*innen einschließlich Schulungen zur Kommunikationsfähigkeit, Konfliktmanagement, motivierende Management-Personal, Projektmanagement-Techniken, Small Talk im Geschäftsleben, interkulturelles Bewusstsein und die Integration von Flüchtlingen/ Migrant\*innen sowie der Umgang mit schwierigen oder kritischen Situationen.

Die Ausbilderakademie wurde vom EFRE bis 2013 finanziell unterstützt.

84 <https://ausbilden.bihk.de/>

### 8.1.3. ITALIEN / ITALIA

#### AUTONOME PROVINZ BOZEN

In Bozen gibt es vier Beispiele, die als Best Practices für die Region hervorgehoben werden können:

- ▶ Das **Talentcenter Bozen<sup>85</sup>** testet Schülerinnen und Schüler der Sekundarstufe und darüber hinaus auf ihre Fähigkeiten und Stärken, um sie bei der Studien- und Berufswahl zu unterstützen und dient als Impuls, ihr eigenes Potenzial genauer unter die Lupe zu nehmen. Anhand eines standardisierten Testverfahrens werden die Stärken, Interessen und Potenziale der Jugendlichen identifiziert. Basierend auf den Ergebnissen erhalten die Schüler\*innen wichtige Impulse für ihre zukünftige Kompetenzentwicklung, die als Grundlage für ein individuelles Beratungsgespräch im Büro für Bildungs- und Berufsberatung dienen können. Das Talent Center testet die Schülerinnen und Schüler von einem Jahr - rund 5.000 Jugendliche - im Laufe eines Schuljahres. Die zur Verfügung gestellten Teststationen ermöglichen es, etwa 30 junge Menschen gleichzeitig zu testen.
- ▶ Die digitale Ausbildungsmesse "**Futurum**"<sup>86</sup> zielt darauf ab, die Bildungswege von der Oberstufe über die Hochschulbildung bis zur Weiterbildung zu begleiten und berufliche Aktivitäten zu präsentieren. Die Angebote unterstützen junge Menschen bei ihren Bildungs- und Berufsentscheidungen.

Im Jahr 2020 fand die Messe aufgrund der außergewöhnlichen Situation von COVID-19 online statt und bot drei Tage lang Webinare im Live-Streaming und zahlreiche Webinare zu den Themen Ausbildung, Studium, Anerkennung von Studien- und Berufsbezeichnungen, Berufe und Anwendungen.

- ▶ Im Rahmen von **JobInfo<sup>87</sup>**, können Südtiroler Unternehmen aus den unterschiedlichsten Branchen und Größenkategorien über ihre

85 <https://www.camcom.bz.it/en/node/5735>

86 <http://www.provinz.bz.it/bildung-sprache/ausbildungs-studien-berufsberatung/futurum.asp>

87 <https://www.handelskammer.bz.it/de/bildungsmesse-futurum-jobinfo>

berufliche Tätigkeit informieren, die Berufsbilder im Unternehmen beschreiben und Aus- und Weiterbildungsmöglichkeiten aufzeigen. Die beteiligten Unternehmen kommen direkt mit Jugendlichen und Erwachsenen in Kontakt.

- ▶ Die **MINT<sup>88</sup>** (Mathematik, Informatik, Naturwissenschaften und Technik) Initiative hat sich zum Ziel gesetzt, Studierende und die Bevölkerung für wissenschaftliche und technische Wissens- und Wirtschaftsbereiche zu sensibilisieren sowie das Interesse an einer wissenschaftlichen Kultur zu wecken oder zu erhöhen.

Das Büro für Bildungs- und Berufsberatung koordiniert die MINT-Initiative in Südtirol und kooperiert mit verschiedenen Partnern. Alle Teilnehmer\*innen wecken seit Jahren die Neugier für den MINT-Bereich und sind aktiv vom Kindergarten über die Schule bis zur Universität und in der Weiterbildung, um der Bevölkerung Einblicke in Wissenschaft und Technik, Theorie, Praxis und Forschung zu geben.

Die deutschen, italienischen und ladinischen Bildungsdirektionen bieten beispielsweise eine fachspezifische Orientierung für junge Menschen, Weiterbildung für pädagogisches Personal und Projekte sowie Initiativen zur Förderung von Hochbegabung in den MINT-Fächern.

### PROVINCIA AUTONOMA DI TRENTO

Sin dal suo sviluppo in Trentino, il sistema di formazione/apprendistato duale ha visto le scuole come partner dominanti per tutti quegli aspetti legati alla progettazione e all'organizzazione dei percorsi di apprendistato: assegnazione degli studenti alle aziende, predisposizione dei Piani Individuali Formativi, etc. Per favorire l'apprendistato duale e renderlo più efficace, occorre rafforzare il punto di vista e il ruolo delle aziende, creare opportunità di collaborazione sia a livello istituzionale sia a livello degli attori economici ed educativi.

Un passo decisivo in questa direzione è quello di creare sinergie significative, a livello provinciale, tra stakeholder strategici sia del mondo dell'is-

truzione che del mondo professionale. Per tale ragione, nell'agosto 2020, il Dipartimento Istruzione e Cultura della Provincia autonoma di Trento e la Camera di Commercio Industria Artigianato e Agricoltura di Trento (CCIAA) hanno siglato un accordo con l'obiettivo di sviluppare, consolidare e potenziare i progetti di apprendistato duale attraverso la creazione di reti di collaborazione tra scuole e aziende. L'accordo prevede la predisposizione e la pubblicazione di un bando per l'invio di proposte da parte delle scuole, che riguardino la progettazione e la realizzazione - in collaborazione effettiva con almeno un'azienda - di percorsi di apprendistato duale innovativi, di successo e di alta qualità.

Le proposte riguardano diverse azioni:

- ▶ reclutamento di imprese e apprendisti
  - realizzazione di strumenti digitali (ad esempio app, siti web) per il reclutamento di imprese ed apprendisti, per facilitare l'incontro tra la domanda e l'offerta di apprendistato duale;
- ▶ progettazione dei percorsi di apprendistato duale
  - definizione di azioni-misure-strumenti di orientamento (materiale informativo, campagne di promozione, infoday, etc.) rivolti agli studenti e alle loro famiglie;
  - definizione di percorsi formativi rivolti al personale docente e/o ai tutor aziendali coinvolti nei percorsi duali;
  - elaborazione, in co-progettazione con le imprese, di piani formativi individuali rivolti agli apprendisti;
  - predisposizione di strumenti di valutazione e autovalutazione degli apprendimenti;
- ▶ realizzazione dei percorsi progettati
  - formazione interna ed esterna dell'apprendista;
  - realizzazione dei percorsi formativi rivolti al personale docente e ai tutor aziendali coinvolti nei percorsi duali;
  - utilizzo di strumenti di valutazione e autovalutazione degli apprendimenti.
- ▶ principali risultati attesi sono:
  - l'incremento della qualificazione (upskilling) del "sistema duale"

88 <http://www.provinz.bz.it/bildung-sprache/ausbildungs-studien-berufsberatung/mint.asp>

attraverso la coprogettazione di progetti finalizzati al sostegno di iniziative che vedano protagonisti studenti e imprenditori;

- la riduzione del mismatch tra domanda e offerta di lavoro;
- l'introduzione nel mondo del lavoro, attraverso le competenze digitali degli studenti, di una maggior consapevolezza nell'utilizzo delle nuove tecnologie;
- l'attivazione, nelle aziende, di processi volti a consolidare o rafforzare la competitività delle stesse sui mercati;
- l'opportunità per gli studenti di conseguire un titolo di studio coerente con le competenze tecniche e professionali richieste dal mondo del lavoro.

L'apertura del bando è prevista per fine giugno 2021 e i progetti candidati saranno valutati in base al numero di aziende coinvolte, ai percorsi di apprendistato da avviare e alla novità della proposta. I progetti selezionati saranno avviati nel mese di settembre 2021.

#### 8.1.4. SLOVENIJA

V Sloveniji je osnova za izvajanje praktičnega usposabljanja z delom v realnem okolju katalog praktičnega usposabljanja. Pri oblikovanju tega temeljnega dokumenta so sodelovali predstavniki zbornic, ki so strokovnjaki za posamezna področja.

Načrt vajeništva je orodje za uspešno praktično usposabljanje mentorjev, vajencev in šol. V tem dokumentu je navedena vsebina, ki jo morajo vajenci pridobiti pred določenim rokom. Poleg tega je navedena vsebina, ki jo mora mentor dati vajencu, do določenega roka. Delodajalec vajenca oceni skupaj z organizatorjem praktičnega programa. Za lažje ravnanje načrt vajeništva vsebuje ocenjevalne liste, ki so delodajalcu v podporo.

Načrt vajeništva ni izrecno opredeljen in ga je mogoče spremeniti iz posameznega izobraževalnega programa v šolo, kjer poteka izobraževalni program. Načrt vajeništva je individualni dokument vajenca, delodajalca in šole! Pri pripravi omenjenega dokumenta sodelujejo tudi pristojne zbornice.

Vajenec mora napisati dnevni vajeniški dnevnik, v katerem so zabeleženi vsi dogodki in vsebine, ki jih je vajenec opravil med svojim praktičnim usposabljanjem. Vajeniški dnevnik je tudi dokument, ki se predloži tekom obdobja vajeništva.

Uspeh in znanje vajencev se enkrat preveri v času vajeniškega razmerja, običajno ob koncu drugega leta. Vmesni čas ni izpit in se ne ocenjuje. Obdobje vajeništva je predvsem orodje za svetovanje in pridobivanje informacij o vajencu. Zbornice so prav tako odgovorne za izvedbo v obdobju vajeništva. Obdobje vajeništva poteka tam, kjer vajenec opravlja praktično usposabljanje. Delodajalec in vajenec sta o vsebini obdobja vajeništva obveščena vsaj en teden pred njegovim začetkom. Obdobje vajeništva preveri trenutno stanje vajencev v zvezi z načrtom vajeništva. Študent mora na vmesnem testu strokovnemu nadzorniku ali komisiji predložiti vajeniški dnevnik za 1. in 2. letnik. Izpolnjeno obdobje vajeništva je pogoj, da se vajenec lahko vpiše v naslednji letnik.

**Navodila, kako voditi obdobje vajeništva**, ki zagotavlja kakovostno izvajanje in dodatno pomoč odboru, lahko opišemo kot primer dobre prakse.

- ▶ Obdobje vajeništva poteka v podjetju v realnem delovnem okolju
- ▶ Zbornica uskladi datum obdobje vajeništva z delodajalcem / mentorjem in strokovnim nadzornikom
- ▶ Strokovni nadzornik in delodajalec / mentor se dogovorita za točen datum
- ▶ Začetni razgovor, vajenska in delodajalčeva / mentorjeva dokumentacija, ter določitev načina dokumentiranja vajenčeve spretnosti in znanja lahko trajajo do 15 minut
- ▶ Vmesni čas lahko traja do 60 minut. Vključuje zagovor in pogovor, ki ni povezan z delovnim testom, izdelkom ali storitvijo
- ▶ Intervju o vajeništvu z delodajalcem / mentorjem lahko traja do 15 minut
- ▶ Delodajalec / mentor mora zagotoviti enake delovne pogoje, ki so zagotovljeni med praktičnim usposabljanjem. Poudarek je na varovanju zdravja in varnosti pri delu.
- ▶ Če vajenec ne spoštuje varnostnih predpisov, lahko mentor prekine obdobje vajeništva
- ▶ Pred vmesnim obdobjem delodajalec izpolni Katalog praktičnega usposabljanja. Potrebno je pokazati realizacijo profesionalnih vsebin.

- ▶ Delodajalec / mentor pripravi sklop delovnih testov (3-5 testov). Pri tem se upošteva uresničitev ciljev iz Kataloga praktičnega usposabljanja
- ▶ Strokovni nadzornik izbere 3 delovne teste iz sklopa testov, ki jih delodajalec / mentor predhodno pripravi
- ▶ Strokovni nadzornik določi delovni test in vajenec ga lahko začne opravljati
- ▶ Delodajalec / mentor poskrbi, da ima vajenec pri roki vsa potrebna orodja, stroje in naprave
- ▶ Strokovni nadzornik ocenjuje:
- ▶ Vajeniški dnevnik iz 1. in 2. letnika
- ▶ Ocenjevalni listi / zbirka ocen, ki so sestavni del vajeništva
- ▶ Izpolnjen katalog praktičnega usposabljanja v zvezi z delom
- ▶ Opravljen strokovni pogovor z vajencem in delodajalcem / mentorjem
- ▶ Po zaključku razgovora mora strokovni nadzornik opraviti pregled preteklega obdobja vajeništva. Strokovni nadzornik poda mnenje o uspešnosti srednjeročnega študija in ustno obvesti vajenca in delodajalca / mentorja
- ▶ Pregled je izveden v treh izvodih. En izvod prejme delodajalec / mentor, enega vajenec in enega zbornica.
- ▶ Vajenec priloži pregled v Vajeniški dnevnik
- ▶ Vajenec nadaljuje izobraževanje tako, da opravi srednjo šolo.

Merila za **opazovanje** vajencev med obdobjem vajeništva vključujejo:

- ▶ Kako se je vajenec pripravil na ocenjevanje?
- ▶ Je vajenec upošteval vse predpise o varnosti in zdravju pri delu?
- ▶ Kako vajenec izbere orodje in pripravi sredstva za delo?
- ▶ Kako vajenec išče in prenese dimenzije iz načrta na izdelek?
- ▶ Je vajenec sledil tehnološkemu postopku v skladu z vajeniškim dnevnikom?
- ▶ Kako hitro je vajenec opravil delovni preizkus?
- ▶ Kako natančen je bil vajenec med nastopom?

Merila za **poklicni pogovor** med vmesnim obdobjem:

- ▶ Kako vajenec razloži postopek delovnega preizkusa?
- ▶ Ali lahko vajenec uporablja strokovne izraze in ali vajenec razume pogovorni jezik v podjetju?

- ▶ Kako se je vajenec uvrstil v ekipo? Se dobro razume s sodelavci?
- ▶ Kako dobro vajenec pozna pravila in organizacijo podjetja?
- ▶ Kako dobro vajenec v celoti pozna proizvodnjo / storitve podjetja?
- ▶ S koliko oddelki je vajenec sodeloval?
- ▶ Kje vajenec vidi svoje praktično usposabljanje naslednje leto?

### 8.1.5. LA FRANCE

Dès la création de la Chambre de métiers et de l'artisanat (CMA), le Code de l'artisanat lui a donné compétence en matière d'orientation. Cette compétence a abouti à la création au sein de **centres d'aide** à la décision (CAD – Centres d'aide à la Décision) qui mettent en œuvre la volonté de la CMA de contribuer au Service régional d'orientation (SPRO – Service Public Régional d'Orientation).

Le CAD effectue des activités de promotion de l'emploi afin de mieux répondre aux besoins des jeunes, des familles, des entreprises artisanales et des écoles, afin de sensibiliser les gens à la réalité des métiers et de l'entreprise. Le CAD contribue également à l'information sur les secteurs de la formation professionnelle, en particulier sur l'apprentissage.

Les missions définies à l'échelle nationale pour les CAD du réseau des CMA font d'abord la promotion des métiers et de l'artisanat. Deuxièmement, informer les jeunes et leurs familles sur les métiers et la formation, les perspectives d'emploi et de carrière, les changements dans les techniques d'emploi et les conditions de travail. Troisièmement, soutenir les jeunes dans leur orientation et la construction de leurs projets personnels et professionnels. Quatrièmement, établir les partenariats nécessaires à la mise en œuvre des projets, en particulier avec les différents réseaux AIO (Accueil Information Orientation / Orientation d'information de bienvenue). Cinquièmement, soutenir les entreprises dans leurs processus d'accueil et de formation.

Le CAD participe activement, entre autres, aux politiques d'information sur les métiers, de découverte des entreprises, de promotion de l'entrepreneuriat, d'accès à la formation et à l'emploi des jeunes, de raccrocheurs

à la formation, d'intégration des personnes handicapées, de diversité des genres dans les différentes professions.

Chaque année, près de 7 000 jeunes d'Auvergne-Rhône-Alpes profitent des différentes actions menées par la CAD. Le Conseil Régional Auvergne-Rhône-Alpes, les académies de Clermont-Ferrand, Grenoble et Lyon, ainsi que la CMA Auvergne-Rhône-Alpes souhaitent poursuivre leur coopération dans le domaine de la relation Ecole-Entreprise pour 2019-2021.

Le partenariat entre la Région Auvergne-Rhône-Alpes, les académies de Clermont-Ferrand, Grenoble et Lyon et la CMA Auvergne-Rhône-Alpes poursuit l'objectif suivant : soutenir les jeunes dans la construction de leur formation professionnelle et de leur insertion professionnelle dans le cadre de la SPRO - Service Public Régional d'Orientation.

En France, **les axes d'intervention** sont à citer comme exemples de bonnes pratiques. Le Conseil Régional Auvergne-Rhône-Alpes, les académies de Clermont-Ferrand, Grenoble et Lyon et la CMA Auvergne-Rhône-Alpes se sont mis d'accord, dans le cadre d'un pilotage partagé, pour déployer les axes définis ci-dessous :

► **Axe 1 - Bravo les artisans**

- Objectifs : L'objectif de l'opération « Bravo aux artisans » est d'initier les élèves du secondaire à la réalité d'une entreprise artisanale. Les élèves se illustrent dans les entreprises pour réaliser un projet, puis transmettent à leurs camarades de classe les connaissances et les informations qu'ils ont acquises lors de leur présence dans l'entreprise. Il permet, à travers ce dernier point, une multiplication avec d'autres élèves et une forte implication des équipes pédagogiques.
- Groupes cibles : Les publics cibles de cette action sont les élèves de 4<sup>e</sup>, 3<sup>e</sup>, et les lycéens (lycées généraux, professionnels ou technologiques).
- Mise en œuvre des actions : L'action vise à atteindre le plus grand nombre possible de jeunes par une double approche :
  - Par établissement d'abord avec la présentation des métiers et de l'artisanat ainsi que les grandes lignes de l'action à toutes les classes d'un niveau au sein de chaque établissement concerné par l'action.

- Par classe : avec l'approfondissement de deux métiers différents par classe grâce à une immersion d'étudiants dans une entreprise.
- L'opération implique directement les équipes éducatives et les entreprises artisanales participantes et contribue ainsi à la logique du rapprochement école-entreprise. Les parents d'élèves en immersion en milieu de travail sont également mis au courant des projets menés par les élèves.

► **Axe 2 - Développement des stages consulaires**

- Objectifs : L'objectif de cette action est d'augmenter le nombre de stages proposés dans les entreprises artisanales aux jeunes d'Auvergne-Rhône-Alpes. Cela présente des intérêts différents pour les jeunes dans le contexte de leur orientation en fonction de leur problème, en leur permettant soit de découvrir un métier, de valider un projet professionnel, soit de tester une entreprise d'accueil dans le cadre d'un contrat d'apprentissage ou d'une formation professionnelle.
- Groupes cibles : Le public cible de cette action est les jeunes à l'école et au moins 14 ans. Cela s'applique directement aux élèves des deux derniers niveaux de l'enseignement secondaire, aux élèves des écoles secondaires (lycées généraux, professionnels ou technologiques) pendant les vacances scolaires ainsi qu'aux étudiants de l'enseignement supérieur, en dehors des semaines réservées aux cours et aux tests de connaissances.

► **Axe 3 - Promotion de l'artisanat et de ses métiers**

- Objectifs : Promouvoir les métiers d'art, les PME artisanales, la formation et les possibilités d'emploi dans le secteur.
- Groupes cibles : Cette action s'adresse aux jeunes scolarisés et à leurs familles dans le cadre de leur orientation visant à promouvoir les possibilités de formation et d'intégration professionnelle offertes par le secteur artisanal.
- Mise en œuvre des actions : Tout d'abord, par le biais de sessions d'information collectives au sein de la CMA, dans des institutions ou sur des forums tels que le Mondial des Métiers. Deuxièmement, au creux des entretiens individuels à la Chambre de métiers et d'ar-

tisanat et de la procédure de positionnement dans le cadre d'un projet de formation professionnelle lié à l'artisanat.

Selon les partenariats avec différentes institutions, d'autres thèmes transversaux peuvent être abordés plus spécifiquement, tels que la diversité, la diversité des genres ou le handicap.

Pour ce faire, les CAD mobilisent des outils développés à l'échelle nationale pour promouvoir le secteur :

- Fiches commerciales du site web national [www.artisanat.info](http://www.artisanat.info)
- Module développé en partenariat avec l'ONISEP pour initier un premier niveau de réflexion sur son projet de type orientation « questionnaire d'intérêt »: [www.orienter-metiers.org](http://www.orienter-metiers.org);
- Déploiement des « artimobiles » et de leurs outils pour promouvoir les métiers dans les collèges
- Valorisation des « virus artisanaux » pour introduire les quatre secteurs de l'activité artisanale d'une manière amusante

### 8.1.6. SCHWEIZ

Das duale Berufsbildungssystem in der Schweiz (VET/PET) verdankt seinen Erfolg vor allem der Tatsache, dass Bund, Kantone und die Organisationen der Arbeitswelt (OdA) sich die Verantwortung teilen und eng zusammenarbeiten, um eine hohe Qualität der Berufsausbildung zu gewährleisten und sicherzustellen, dass ausreichend Ausbildungsplätze zur Verfügung stehen.

Die Bundesverwaltung agiert dabei als Steuerungs- und Entwicklungsorgan für die Berufsbildung. Zwei Institutionen stehen ihr dabei unterstützend zur Verfügung:

- ▶ Das **Staatssekretariat für Bildung, Forschung und Innovation (SBFI)**<sup>89</sup> sichert und stärkt die Qualität und Attraktivität der Berufsbildung entsprechend den sich wandelnden Bedürfnissen des Arbeitsmarktes. Es tut dies unter Einbezug der Kantone, der Organisationen der Arbeitswelt usw. Des Weiteren setzt sich das SBFI für die internation-

ale Vernetzung und die Integration der Schweiz in den europäischen und weltweiten Bildungs-, Forschungs- und Innovationsraum ein.

- ▶ Das **Eidgenössische Hochschulinstitut für Berufsbildung (EHB)**<sup>90</sup> bietet Aus- und Weiterbildung für Berufsbildungsbeauftragte und Prüfungsexperten an. Darüber hinaus ist sie für das wissenschaftliche Monitoring der beruflichen Bildung (Forschung, Pilotversuche) zuständig.

Die "Organisationen der Arbeitswelt" sind Berufsverbände, Branchenverbände und Sozialpartner. Sie definieren die Bildungsinhalte der beruflichen Grundausbildung, sind für betriebliche Ausbildungen zuständig, bieten höhere Berufsausbildungen an und beteiligen sich an der Weiterentwicklung der Berufsausbildung.

Die Kantone implementieren und beaufsichtigen die Berufsbildung. Sie erteilen Bildungsgenehmigungen für Unternehmen, betreiben Berufsschulen, genehmigen Ausbildungsverträge und bieten Berufs-, Hochschul- und Berufsberatung an.

Eine solche Zusammenarbeit kann bereits als Best-Practice-Beispiel angesehen werden.

- ▶ **BerufsbildungPlus**<sup>91</sup>, die Dachkampagne für die Schweizer Berufsbildung wurde 2007 von Bund, Kantonen und Organisationen der Arbeitswelt ins Leben gerufen, um die Berufsbildung zu stärken und ihre Bedeutung für Wirtschaft und Gesellschaft bekannt zu machen.

Mit Slogans wie "*Elektriker lernen, Elektroingenieur werden*" oder "*Friseur lernen, Biologe werden*" macht die aktuelle Kampagne auf die hohe Durchlässigkeit des Schweizer Bildungssystems aufmerksam.

- ▶ **Berufsbildung 2030**<sup>92</sup> ist eine gemeinsame Initiative der Schweizerischen Eidgenossenschaft, der Kantone und Organisationen der Arbeitswelt

<sup>90</sup> <https://www.ehb.swiss/>

<sup>91</sup> <https://www.berufsbildungplus.ch>

<sup>92</sup> <https://berufsbildung2030.ch/de/>

<sup>89</sup> <https://www.sbf.admin.ch/sbfi/de/home.html>

mit dem Ziel, soziale und berufliche marktspezifische Veränderungen vorwegzunehmen und die Berufsausbildung nachhaltig zu gestalten.

Priorisierte Fokusbereiche wurden in einem Leitbild als Orientierungsrahmen definiert; mit Beginn der Umsetzungsphase im Jahr 2018 wurden 30 Projekte entwickelt und werden in der Partnerschaft umgesetzt.

Die Projekte gliedern sich in folgende Teilbereiche: *Lebenslanges Lernen, Digitalisierung, Information und Beratung, Flexibilisierung von Bildungsangeboten, Bürokratieabbau und Governance.*

Einige der entwickelten Projekte sind:

- **Blended Learning: Grundlagen und Rahmenbedingungen**<sup>93</sup>: Das Projekt zielt darauf ab, innovative Lernformen (hier: Blended Learning) auf etablierter Basis durch gemeinsam vereinbarte Rahmenbedingungen anzubieten. Diese Rahmenbedingungen gewährleisten die Qualität und Einheitlichkeit der Umsetzung von Blended-Learning-Sequenzen und gewährleisten Effizienz und Rechtssicherheit bei der Einführung von Blended-Learning-Sequenzen im Rahmen des Reformprozesses.
- **Orientierungshilfe digitale Transformation in der beruflichen Grundbildung**<sup>94</sup>: Das Projekt entwickelt eine Orientierungshilfe für die Träger der beruflichen Grundausbildung.

Die Förderung dient den Sponsoren dazu, die vom Arbeitsmarkt geforderten digitalen Kompetenzen zu erkennen und in die Berufsausbildung einzubinden.

Um sicherzustellen, dass das Thema der digitalen Transformation in die Fünf-Jahres-Reviews aufgenommen wird, integriert der SBF

93 <https://berufsbildung2030.ch/de/projekte/21-projekte-de/241-blended-learning-grundlagen-und-rahmenbedingungen>

94 <https://berufsbildung2030.ch/de/projekte/21-projekte-de/48-orientierungshilfe-digitale-transformation-in-der-beruflichen-grundbildung>

dieses Thema als Aspekt der beruflichen Entwicklung in das Handbuch zur beruflichen Weiterbildung.

- **Flexible Berufsausbildung aus Sicht der Arbeitswelt**<sup>95</sup>: Ein Verbund aus mehreren Organisationen der Arbeitswelt definiert unter Einbezug von Bund und Kantonen ein gemeinsames Verständnis für eine zukünftige, flexible, berufliche Grundbildung und erarbeitet eine Grundlage für daran anschliessende Modellentwicklungen.

Aufgrund des technologischen Wandels und der Digitalisierung sind Ausbildungsinhalte in der Grundbildung heute immer kürzeren Lebenszyklen unterworfen. Gleichzeitig werden immer mehr der Grundkompetenzen über einzelnen Berufsgruppen hinaus relevant.

Diese veränderten Anforderungen verlangen nach neuen Ausbildungsstrukturen, Modellen und Werkzeugen, welche es den Organisationen der Arbeitswelt (OdA) ermöglichen, berufliche Grundbildungen flexibel, effizient und auch ausserhalb der gängigen und langwierigen Revisionsprozesse anpassen zu können.

- ▶ **Lehrverbund Schreinermacher (Berufsgenossenschaften für die Ausbildung)**<sup>96</sup>: Der Lehrbetriebs-Verbund *schreinermacher* ist ein sehr gutes Beispiel für einen Ausbildungsverbund. Er wurde 2005 gegründet und schliesst sich aus 24 Fachbetrieben zusammen mit dem Ziel, der Abnahme der Schreiner-Lehrstellenangebote und den zunehmenden Veränderungen in den Betrieben entgegenzuwirken. Den Auszubildenden wird eine umfassende Ausbildung zu teil, entweder in einem Betrieb oder nach dem Rotationsprinzip in mehreren. So können auch Unternehmen einbezogen werden die zum Beispiel nur einen Teil des Ausbildungs-Spektrums des Schreinerberufes abdecken können, sich aber trotzdem für die Ausbildung engagieren

95 <https://berufsbildung2030.ch/de/projekte/21-projekte-de/45-flexible-berufsausbildung-arbeitswelt>

96 <https://www.schreinermacher.swiss/index.html>



wollen. Zudem werden die Lehrbetriebe von administrativen Arbeiten entlastet (von der Rekrutierung bis zum Lehrabschluss).

- ▶ **VIAMIA: Berufliche Standortbestimmung und Beratung für Personen über 40<sup>97</sup>:** Um auf den raschen Wandel der Arbeitswelt zu reagieren ist eine aktive Gestaltung der eigenen Laufbahn wichtig. Aus diesem Grund möchten der Schweizerische Bundesrat und die Sozialpartner, dass Arbeitnehmende ab 40 Jahren regelmässig eine Standortbestimmung vornehmen. Vor diesem Hintergrund subventioniert das Staatssekretariat für Bildung, Forschung und Innovation (SBFI) im Auftrag des Bundesrates die Entwicklung und Implementierung des kostenlosen Angebots «viamia». <sup>98</sup>

Personen, die «viamia» in Anspruch nehmen, absolvieren in einem ersten Schritt einen «Employability-Check». Mittels dieses Tests wird die Arbeitsmarktfähigkeit erhoben. Die Testresultate dienen als Grundlage für die Standortbestimmung, bei der die persönliche und berufliche Situation analysiert und ein allfälliger Handlungsbedarf ermittelt wird. Gemeinsam mit einer Laufbahnberaterin oder einem Laufbahnberater entwickelt und plant die ratsuchende Person dann konkrete Massnahmen zum Erhalt oder der Verbesserung ihrer Arbeitsmarktfähigkeit.

- ▶ **Netzwerk für Kleinsterufe<sup>99</sup>:** Das Netzwerk Kleinsterufe NWKB wurde im Nachgang der Sonderschau Kleinsterufe an den SwissSkills 2014 als Projekt auf den Weg gebracht und von Beginn an stark durch Eidgenössischen Hochschulinstitut für Berufsbildung EHB und den Schweizerischen Gewerbeverband SGV unterstützt. Hinzukommt das eine Parlamentarische Gruppe zur Unterstützung der Kleinsterufe die Anliegen der NWKB im Parlament und in den Kommissionen unterstützen.

Ziele des NWKB sind unter anderem die Entwicklung eines nachhaltig tragfähigen Netzwerkes, Entwicklung und Umsetzung von Bildungsangeboten sowie die Verbesserung der Rahmenbedingungen für Kleinsterufe.

## 8.2. DUAL TRAINING REPORTS IN ORIGINAL LANGUAGE

In the following, you find the six partner reports on the training formats developed in Vorarlberg (AT), Lower Austria (AT), Bavaria (D), Trento (IT), Bolzano (IT) and Auvergne-Rhône-Alpes (FR) in their original languages.

97 <https://www.viamia.ch/de>

98 <https://www.sbfi.admin.ch/sbfi/de/home/bildung/berufsbildungssteuerung-und--politik/projekte-und-initiativen/foerderung-der-inlaendischen-arbeitskraefte/kostenlose-standortbestimmung.html>

99 <https://kleinstberufe.ch/>



Photo: WIGE Montafon

## LERNEN FÜR DAS LEBEN

GANZHEITLICHES AUS- UND WEITERBILDUNGSKONZEPT FÜR LEHRLINGE

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### ● ERSTELLUNGSDATUM

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### ● ARBEITSPAKET

T2 - Innovation und Qualität der dualen Ausbildung

### ● ERGEBNIS

D2.4.1 Training programmes reports

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## ZUSAMMENFASSUNG

Unter dem Motto "Lernen für das Leben" wird im Montafon (Vorarlberg, Österreich) im Zuge des Projektes DuALPlus ein ganzheitliches und innovatives Aus- und Weiterbildungskonzept für Lehrlinge entwickelt und in der Form eines Pilotprojektes im Frühjahr 2021 in das bestehende Programm als dritte Säule integriert. Neben der Ausbildung im Betrieb und in der Berufsschule werden in einem regionalen Kooperationsprojekt der KMUs vor allem Sach-, Sozial- und Selbstkompetenzen der Jugendlichen gestärkt. Neben der Steigerung der Attraktivität der dualen Ausbildung steht die Persönlichkeitsbildung der Teilnehmer\*innen im Fokus. Mit dem Ziel des lebenslangen Lernens werden auf Basis des österreichischen Bildungssystems den Auszubildenden allgemein aber auch jedem individuell mögliche Bildungs- und Karrierewege aufgezeigt.



1 Das Ausbildungskonzept "Lernen für das Leben" stärkt die Persönlichkeit von Lehrlingen und zeigt mögliche Bildungswege auf. Grafik: Ausbildungskompaß der Region Montafon, telesi Entwicklungs- und Management GmbH

## EINLEITUNG

DuALPlus ist ein internationales Projekt, das sich mit der Entwicklung der dualen Ausbildung im Alpenraum beschäftigt. Duale Ausbildung bedeutet in diesem Zusammenhang grundsätzlich die Ausbildung als Kombination von Beruf und schulischer Aus- und Weiterbildung. In der Entwicklung innovativer Bildungsformen steht die Ausbildungsform der Lehre im Mittelpunkt: Die Lehre als Ausgangspunkt für weiteres lebenslanges duales Lernen.

Vorarlberg als Partnerregion im europäischen Projekt DuALPlus

In Vorarlberg entscheidet sich etwa jede\*r zweite Jugendliche für eine qualifizierte Lehre. Dieser große Zuspruch ist dem breit gefächerten Ausbildungsangebot zu verdanken. Die duale Ausbildung bietet Jugendlichen Zukunftsaussichten und trägt entscheidend zur Sicherung des Wirtschaftsstandortes und damit zur hohen Lebensqualität in Vorarlberg bei.

In Vorarlberg ist das Montafon einer der regionalen Partner im internationalen Bil-

dungsprojekt DuALPlus. Ziele des Projektes sind es,

- die Attraktivität der dualen Ausbildung vor allem bei Klein- und Mittelbetrieben in den Regionen zu erhöhen,
- zusätzlich zur bestehenden Ausbildung innovative Bildungsformen einzuführen
- und die Durchlässigkeit des Bildungssystems als Basis für weiterführendes Lernen zu vermitteln und zu verbessern.

Das Projekt DuALPlus arbeitet mit vielen unterschiedlichen Partnern interdisziplinär zusammen, die mit dualer Ausbildung direkt oder indirekt in Beziehung stehen. Für diese Kooperationen wird das internationale Netzwerk des Projektes intensiv genutzt, um die aktuellen Informationen und innovativsten Entwicklungsplattformen für Aus- und Weiterbildung auch auf regionaler Ebene nutzen und umsetzen zu können.

## HINTERGRUND

Die Fachkräfte sind das Rückgrat unserer Klein- und Mittelbetriebe, kurz KMU genannt. Der Fachkräftemangel wird als eine der größten Herausforderungen für die österreichische Wirtschaft angesehen. Drei Viertel der Unternehmen haben bereits Probleme, ihren Bedarf an qualifizierten Mitarbeiter\*innen zu decken.

Daher kommt dem Lehrlingswesen eine sehr große Bedeutung zu und die Nachfrage seitens der Klein- und Mittelbetriebe ist sehr groß und führt auf Grund von geburtschwächeren Jahrgängen zu Spannungen zwischen Industrie und Gewerbeunternehmen.

Großbetriebe versuchen, ihren Bedarf an Nachwuchskräften durch Lehrlings-Castings, Schnuppertage und ihre Lehrwerkstätten zu gewinnen. Kleine Unternehmen haben es dabei wesentlich schwerer, da die/der Ausbilder\*in neben der Geschäftstätigkeit auch noch die Ausbildung des Lehrlings in Fach- und Sozialkompetenz übernehmen muss.

## ZIELE

Im Rahmen von DuALPlus wurden fünf ausgewählte Module der neuen Aus- und Weiterbildungsformen als Pilotprojekt im Montafon entwickelt und den Firmen bzw. deren Lehrlingen zur Teilnahme angeboten.

**Motto: „Lernen für das Leben“**

Das innovative Aus- und Weiterbildungsprogramm legt den Fokus neben der Arbeit im Betrieb und dem Besuch der Berufsschule als dritte Säule auf die weitere Ent-

**Direkter Nutzen von innovativen Aus- und Weiterbildungssystemen für KMUs**

In diesem Zuge werden innovative Aus- und Weiterbildungsformen entwickelt, die neben der direkten Lehrausbildung im Unternehmen selbst und dem Besuch der Berufsschule zusätzlich als dritte Säule im Sinne einer innovativen ganzheitlichen Ausbildung umgesetzt werden können. Dies erfolgt nicht nur – wie bisher meist üblich – in großen Firmen, sondern auch in kleinen Unternehmen und dies vor allem in regionalen Kooperationen.

Dies steigert die Attraktivität für eine duale Ausbildung auch in kleinen und mittleren Unternehmen und die Auszubildenden werden auf ihrem Weg zu ihrer Lehrabschlussprüfung direkt und zu möglichen weiteren individuellen Aus- und Weiterbildungsschritten zielgerichtet unterstützt.

wicklung von Sach-, Sozial- und Selbstkompetenz der Teilnehmer\*innen.

Ziel dabei ist es vor allem, dass junge Menschen modernste Instrumente in die Hand bekommen, um ihre aktuellen und zukünftigen Herausforderungen erfolgreich bewältigen zu können. „Lernen für das Leben“ ist das Motto für jede\*n Teilnehmer\*in.

## BESCHREIBUNG DES PROGRAMMS

### ANFORDERUNGEN

Damit auf die jeweiligen Bedürfnisse der Teilnehmer\*innen bestmöglich eingegangen werden kann, werden die Module grundsätzlich in Kleingruppen von zumeist sechs Personen in systemisch aufbauenden Tagesseminaren durchgeführt.

Am Pilotprojekt im Montafon nehmen sechs Lehrlinge und drei Schüler\*innen der Polytechnischen Schule Montafon teil. Das Pilotprojekt ist Bestandteil des Projektes DuALPlus und somit für die Lehrlinge der teilnehmenden Firmen kostenlos.

Für die Auswahl der Teilnehmer\*innen wurden die Unternehmen schriftlich über das Angebot informiert. Von den teilnehmenden Lehrlingen sind vier männlich und zwei weiblich. Dabei sind drei Lehrlinge im ersten, zwei im zweiten und ein Lehrling im dritten Lehrjahr.

### INHALT UND STRUKTUR

Die definierten fünf Module des Pilotprojektes im Montafon bauen systemisch aufeinander auf und sind Teil einer umfangreicheren, 18 Tage dauernden Ausbildungsreihe (siehe Übersicht), die im Zeitraum von drei bis vier Jahren während der Lehrzeit der Jugendlichen als dritte Säule neben Ar-

beit und Berufsschule durchgeführt wird.

Das gesamte Programm basiert auf einem systemkybernetischen Ansatz und ist sowohl in wissenschaftlich-strategischer als auch in praktisch-operativer Hinsicht mehrfach zertifiziert und ausgezeichnet. Neben der Ausbildungsreihe umfasst das Gesamtprogramm weitere Elemente wie Projektorganisation, zielgruppenorientierte Information zum Beispiel durch Elternabende, Öffentlichkeitsarbeit oder ganzheitliche Projekte wie Erlebnistage Natur.

Die fünf Module wurden für das Pilotprojekt ausgewählt, weil die ersten drei Seminare die Basis für Selbstkompetenz legen, das Seminar Mathematik als das größte Problemfeld von Schüler\*innen gilt und als Basis für die MINT-Strategie im Montafon Sachkompetenz vermittelt und weil das Wirtschaftsspielfeld wirtschaftliches Wissen in kommunikativer Form zur Stärkung der Sozialkompetenz gemeinsam darstellt.

Die Abbildung zeigt aus dem gesamten Programm als dritte Säule den Punkt persönlichkeitsorientierte Aus- und Weiterbildung. Die fünf entwickelten und im Pilotprojekt angebotenen Module bilden den kompakten Einstieg im Frühjahr 2021 im Zuge des Projektes DuALPlus.

2 Aus- und Weiterbildungssystem (3. Säule) der WIGE Montafon

Nr	Inhalte	Kat. Kompetenz	Anz. Pers.	Anz. Tage
1	Zeit- und Zielmanagement	Selbstkompetenz	6	1,00
2	Lernen lernen	Selbstkompetenz	6	1,00
3	Kommunikation	Selbstkompetenz	6	1,00
4	Ganzheitliches Denken und Handeln	Selbstkompetenz	6	1,00
5	Mentales Training	Selbstkompetenz	6	1,00
6	Grundlagen Mathematik	Sachkompetenz	6	1,00
7	Angewandte Mathematik I	Sachkompetenz	6	1,00
8	Angewandte Mathematik II	Sachkompetenz	6	1,00
9	Betriebswirtschaftliches Rechnen I	Sachkompetenz	6	1,00
10	Betriebswirtschaftliches Rechnen II	Sachkompetenz	6	1,00
11	Wirtschaftsspielfeld	Sach-, Sozial-, Selbstkompetenz	9-12	2,00
12	Angewandtes Projektmanagement	Sozialkompetenz	10-20	4,00
13	Job Rotation	Sozialkompetenz	10-50	2,00
<b>Summe Tage in der Lehrzeit</b>				<b>18,00</b>

### MODUL 1 ZEIT UND ZIELMANAGEMENT: „JETZT GEHT'S LOS!“

Die Teilnehmer\*innen erkennen, dass das Management von Zeit und Ziel einer der wichtigsten Erfolgsfaktoren für effektives und effizientes Handeln ist – sowohl im beruflichen als auch im privaten Bereich. Die eigene Verantwortung, allgemeine Grundsätze, definierte Aufgaben und anwendbare Werkzeuge sind Inhalt des ersten Moduls.

### MODUL 2 LERNEN: „RICHTIG LERNEN LERNEN“

Das Modul zeigt auf, was Lernen wirklich ist und wie es gemäß neuesten Erkenntnissen aus der Bildungs- und Hirnforschung funktioniert. Moderne und innovative Möglichkeiten des individuellen Lernens werden vorgestellt, um schneller, gründlicher und vor allem nachhaltiger zu lernen.

### MODUL 3 PROBLEME LÖSEN: „DURCH GANZHEITLICHES DENKEN UND HANDELN“

Ein erster Überblick über die Bausteine von Systemen und mögliche Zusammenhänge als Wirkfaktoren werden dargestellt. Erkennen von Komplexität ist die Grundlage dafür, Situationen und Herausforderungen ganzheitlich anzunehmen, um zielgerichtet und erfolgreich zu handeln.

### MODUL 4 MATHEMATIK: „GRUNDLAGEN MATHEMATIK FÜR LEHR-LINGE“

Mathematik ist das Fach, das in unserem Bildungssystem vielen Schüler\*innen Probleme bereitet. Es ist unabdingbare Voraussetzung für die erfolgreiche Anwendung von definierten MINT-Strategien in den jeweiligen Regionen. Die Mathematik wird in diesem Modul aus einem systemischen Blickwinkel dargestellt. Das Modul gibt einen Überblick über das Gebiet der Mathematik, damit die Teilnehmer\*innen ihren aktuellen Wissenstand richtig einordnen, bewerten und womöglich erweitern können.

### MODUL 5 ZWEITÄGIGES, INTERAKTIVES WIRTSCHAFTSPILANSPIEL: „LEARNING BY DOING“

Planspiele sind Modelle, mit denen komplexe Zusammenhänge in einfacher Form dargestellt werden können. Mit dieser didaktischen, handlungsorientierten Methode, die Abläufe und Zielkonflikte simuliert, sammeln die Teilnehmer\*innen nach dem Prinzip „Learning by doing“ in kurzer Zeit nachhaltige Erfahrungen.

In einem simulierten Marktumfeld wird interaktiv „Wirtschaft in drei Firmen in mehreren Geschäftsjahren“ gespielt. Nach dem Motto der indischen Volksweisheit: Erzähle es mir – und ich werde es vergessen. Zeige es mir – und ich werde mich erinnern. Lass es mich tun – und ich werde es behalten!

## UMSETZUNG

Die bei der Entwicklung und Umsetzung beteiligten Akteur\*innen sind definiert.

### AKTEUR\*INNEN

Akteur\*innen des Pilotprojektes sind:

- 6 Lehrlinge von Mitgliedsbetrieben der Wirtschaftsgemeinschaft Montafon
- 6 Schüler\*innen der Polytechnischen Schule Montafon (Teilnahme beim Wirtschaftsplanspiel)
- das Kernteam DuALPlus Montafon:
  - Elke Martin (Jugendkoordinatorin Stand Montafon)
  - Christian Zver (Geschäftsführer WIGE Montafon)
  - Martin Plöger (Direktor Polytechnische Schule Montafon)
- der Referent Pilotprojekte:
  - Markus Gamon (Regio-V; telesis Entwicklungs- und Management GmbH)

Die fünf Seminarblöcke werden im Montafon von Markus Gamon als Referent geleitet. Für seine Arbeiten zum Thema Innova-

tionen in dualen Aus- und Weiterbildungssystemen ist Markus Gamon als Gewinner des Österreichischen Staatspreises für Consulting und mit dem Constantinus Award ausgezeichnet worden.

### BEDINGUNGEN

Das Pilotprojekt wurde in den Firmen der Wirtschaftsgemeinschaft Montafon ausgeschrieben. Die sechs am Pilotprojekt teilnehmenden Lehrlinge werden für die Dauer von 6 Arbeitstagen freigestellt.

Zum Planspiel werden aus der Polytechnischen Schule Montafon 6 Schüler\*innen zusätzlich beigestellt.

### EINFÜHRUNGSPROZEB

Die Durchführung der fünf Module ist im Zeitraum Mai bis Juni 2021 geplant (je nach aktueller Situation und Möglichkeiten durch Corona). Dabei erfolgen die Seminartage in drei Einheiten zu jeweils zwei Tagen.

## EVALUATION

### Covid 19-Pandemie

*Durch die aktuelle Situation bedingt durch die Covid 19-Pandemie musste die Umsetzung des Pilotmodells verschoben werden. Die Evaluierung liegt deshalb aktuell noch nicht vor.*

### EVALUATIONSPROZEB

Mit Evaluation ist eine systematische Untersuchung und Bewertung eines Gegenstands auf der Basis empirischer, d.h. erfahrungsbasierter Informationen gemeint, in der Absicht, seine Qualität und seinen Nutzen sicherzustellen und weiterzuentwickeln. Der „Gegenstand“ von Evaluation in

diesem vorliegenden Fall ist die Umsetzung des Pilotprojektes in seinem aktuell bestehenden Entwicklungsstadium. Die Evaluation läuft grundsätzlich in einer systematischen Form ab, die sich in vier aufeinander folgende Phasen gliedern lässt.

### PHASE 1: DER EINSTIEG

Eine gute Vorbereitung schafft eine solide Basis. Es geht dabei darum, einen passenden Einstieg zu finden, Rahmenbedingungen und Ziele zu klären und grundlegende Entscheidungen zu treffen, auf denen die konkrete Planung und Durchführung der Evaluation aufbaut.

Der Anfang ist entscheidend: Wie etwas beginnt und wer daran beteiligt ist, beeinflusst das Ergebnis eines Prozesses in hohem Grad. Es ist daher wichtig, Betroffene und Beteiligte „abzuholen“. Selbst wenn bereits Vorbereitungen getroffen wurden, z.B. von der Schulleitung, dem Qualitätsteam, oder manche Weichenstellungen vorgegeben sind: Es empfiehlt sich in jedem Fall, eine Evaluation gemeinsam zu beginnen, z.B. mit einer Konferenz oder einem Auftaktworkshop, an dem alle Betroffenen und Beteiligten teilnehmen.

### PHASE 2: PLANUNG UND DURCHFÜHRUNG

Sobald feststeht, welche Fragestellungen mit der Evaluation beantwortet werden sollen und wer dabei berücksichtigt werden muss, geht es in die methodische Planung. Zuständig ist am besten eine kleinere Gruppe, z.B. ein Evaluationsteam, welches mit der Planung und Umsetzung betraut wird. Das Evaluationsteam wählt nun geeignete Untersuchungsmethoden aus und stellt passende Erhebungsinstrumente zusammen.

Die Ablaufplanung der einzelnen Erhebungs- und Auswertungsschritte fügt sich in die Gesamtplanung des Evaluationsprojekts ein. Es hat sich bewährt, während der Erhebungen selbst auf eine gute Information zu achten: Das erzeugt Motivation und Transparenz und trägt zur Datenqualität bei. Im Sinne der Effizienz ist eine systematische begleitende Dokumentation zu erstellen: Sie erspart mühsames und zeitaufwändiges Nacharbeiten.

### PHASE 3: AUSWERTUNG UND ERGEBNISDARSTELLUNG

Zu Beginn der Datenanalyse macht es Sinn, sich einen Überblick zu verschaffen und die Datenbasis auch noch einmal kritisch zu hinterfragen („Quellenkritik“, Datenprüfung). Dann werden die Rohdaten in einer Form ausgewertet und aufbereitet, die die Weiterarbeit ermöglicht. Es handelt sich dabei z.B. um die statistische Analyse von Befragungsdaten oder auch eine erste systematische Zusammenfassung von qualitativen Befunden. Die Ergebnisse werden leicht fassbar, übersichtlich und adressatengerecht aufbereitet. Im nächsten Schritt sind nun die Analyseergebnisse zu validie-

ren, zu interpretieren und zu bewerten - am besten mit einem größeren Kreis an Betroffenen und Beteiligten in einem Validierungsworkshop / einer Auswertungskonferenz. Während die (kommunikative) Validierung und die Interpretation noch um die Daten kreisen (Wie plausibel sind sie? Was sagen sie uns?), geht es beim Bewerten und Schlussfolgern darum, Stellung zu beziehen:

- Wo stehen wir?
- Wie zufrieden sind wir?
- Wo besteht Handlungsbedarf?

Eine abschließende schriftliche Darstellung der Ergebnisse ist die Basis für die Schul- bzw. Unterrichtsentwicklung und dient der Ergebnissicherung, der Nachvollziehbarkeit und der Verbreitung, d.h. durch sie werden Evaluationsergebnisse anderen zugänglich gemacht. Eine schlanke und übersichtliche schriftliche Darstellung gibt einen Überblick über Anlass und Ziel, methodische Vorgangsweise, Ergebnisse und Schlussfolgerungen. Sie basiert auf einer begleitenden Dokumentation aller Schritte.

### PHASE 4: START UMSETZUNG

In der Phase 4 schließlich geht es darum, die Evaluationsergebnisse nutzbar zu machen. Mit ihr fügt sich die Evaluation in den Qualitätskreislauf ein. Erfolgreiche Evaluationen führen zu Schlussfolgerungen und weiteren Schritten in der Schul- bzw. Unterrichtsentwicklung. Dazu braucht es zusätzliche Informationsaktivitäten, um eine (intensive) Beschäftigung mit den Evaluationsergebnissen bei den Betroffenen und Beteiligten anzustoßen.

Sind Ziele und Maßnahmen vereinbart, ist es wichtig, durch ein vom Kollegium gemeinsam erstelltes und verabschiedetes Arbeitsprogramm Verbindlichkeit herzustellen: Es wird die Umsetzung der Maßnahmen angegangen, mit klaren Aufträgen und namentlich Verantwortlichen.

## ERGEBNISSE

Die Evaluation soll gemäß dem definierten Ablauf in vier Phasen durchgeführt werden. Diese Vorgangsweise wurde vor allem für die mögliche Durchführung des Gesamtprojektes definiert. Für das Pilotprojekt soll es eine Evaluation geben, weil das Pilotprojekt die Basis für eine mögliche Einführung der

geplanten 3. Säule im Schuljahr 2021/22 darstellt. Der genaue Ablauf der Evaluation des Pilotprojektes wird im Zuge der Umsetzung im Detail vereinbart.

Die Ergebnisse des Evaluationsprozesses werden in folgenden 7 Punkten auszugsweise beschrieben:

### MOTIVATION ZUR TEILNAHME

Was bewegt die Firmen und Jugendlichen zur Teilnahme?

In welchem Grad sind die Jugendlichen motiviert?

Durch welche Maßnahmen könnte die Motivation gesteigert werden?

### ERWARTUNGEN AN DAS PILOTMODELL

Welche Erwartungen an das Pilotprojekt werden seitens der teilnehmenden Firmen gestellt?

Welche Erwartungen haben die Teilnehmer\*innen selbst?

### ZIELE VOR DEM START DES PILOTMODELLS

Welche Ziele werden vor dem Start des Pilotprojektes definiert?

## AUSBLICK

Die gewonnenen Erkenntnisse werden in einem kontinuierlichen Verbesserungsprozess umgesetzt und weiterentwickelt.

Ziel ist, dass aus den Erfahrungen des Pilotprojektes im Montafon im Herbst 2021 ein kooperatives ganzheitliches Entwicklungs- und Bildungskonzept für Ausbildungsbetriebe als dritte Säule neben Lernen am Arbeitsplatz und Besuch der Berufsschule umgesetzt wird.

Die Finanzierung der dritten Säule als ganzheitliches innovatives Aus- und Weiterbildungsprojekt basiert auf Basis privater Finanzierung durch die KMUs selbst und einem öffentlichen Anteil in Form von Förderungen seitens Land Vorarlberg, Wirtschafts- und Arbeiterkammern und kom-

munalen Zuschüssen. Ein Finanzierungsmodell wurde entwickelt und liegt als Basis für die mögliche Umsetzung vor.

### ZUFRIEDENHEIT MIT DEM PILOTMODELL

Wie groß ist die Zufriedenheit mit dem Pilotmodell in einem Soll-Ist-Vergleich?

### ERREICHTE ZIELE

Sind die erreichten Ziele ausreichend?

### ZUKUNFTSAUSSICHTEN DER TEILNEHMER\*INNEN

Welche Möglichkeiten haben die Teilnehmer\*innen nach Absolvierung des Pilotmodells?

### ABSCHLUSSPRÜFUNG

Die Ergebnisse der abschließenden analytischen Prüfung des Pilotprojektes sind für die Einführung der dritten Säule als gesamte Aus- und Weiterbildungsinitiative brauchbar und notwendig.

Durch die Institutionalisierung dieser dritten Säule werden die dualen Ausbildungsmöglichkeiten im Montafon attraktiver und den Jugendlichen wird die Notwendigkeit für weiteres lebenslanges Lernen aufgezeigt.

Die Teilnehmer\*innen des ganzheitlichen Entwicklungs- und Bildungskonzeptes bekommen vor allem für sich selbst aufgezeigt, dass jede\*r für ihre/seine weitere berufliche und private Entwicklung verantwortlich ist. Das Bildungssystem ist offen für individuelle Entwicklungsschritte jedes einzelnen.



# Interreg Alpine Space DuALPlus

European Regional Development Fund



[www.alpine-space.eu/dualplus](http://www.alpine-space.eu/dualplus)



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## FACHARBEITER\*INNEN- AUSBILDUNG FÜR STUDIERENDE

BERICHT ZUM TRAININGSPROGRAMM

- **ARBEITSPAKET**  
T2 - Innovation and Quality in Dual Education
  - **AUTOR\*INNEN**  
JULIA PINTSUK-CHRISTOF - NDU  
STEFAN MORITSCH – NDU
- **ERGEBNIS**  
D2.4.1 Training programmes reports
  - **ERSTELLUNGSDATUM**  
19. Februar 2021

DuALPlus - D2.4.1 Training programmes report 1



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## 1 ZUSAMMENFASSUNG



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### EINLEITUNG

Das Produktdesign und Handwerk verbindende Bachelorstudium „Design, Handwerk und materielle Kultur“ an der New Design University (NDU) in St. Pölten soll Studierende u.a. auf die eigene Selbstständigkeit im Design oder Handwerk, führende Positionen in mittelständischen Unternehmen oder Designbüros vorbereiten. Es werden zwei praktische Zusatzkurse im Rahmen des Studiums (Metall und Holz) angeboten, die jedoch für Personen ohne entsprechende praktische Ausbildung keine fundierte Lehre ersetzen können. Der in Zusammenarbeit mit Kooperationspartner\*innen entwickelte Kurs „Facharbeiter\*innenausbildung für Studierende“ ist als konsekutives Modell konzipiert, um Studierenden einen Facharbeiter\*innenabschluss zu ermöglichen, der im Rahmen des bisherigen Metallkurses des Studiengangs nicht möglich ist.

Das Pilotmodell wurde in der zweiten Jahreshälfte 2019 entwickelt und im Rahmen von vierzehn Theorie- und 18 Praxiseinheiten zwischen März und August 2020 umgesetzt.

Der kostenlose Kurs sollte ursprünglich zwischen 29. Juni und 3. Juli 2020 mit der Lehrabschlussprüfung der Teilnehmenden enden. Aufgrund der Covid-19-Pandemie wurde der NDU-Lehrbetrieb 2020 phasenweise auf Distance- oder Hybrid-Betrieb

gestellt. Aufgrund der Pandemie musste außerdem die Lehrabschlussprüfung bereits dreimal verschoben werden und wird voraussichtlich im Juli 2021 stattfinden.

Das Pilotmodell wurde begleitend mittels zwei Fragebogenerhebungen und einer abschließenden Fokusgruppendifkussion evaluiert. Die Ergebnisse aus der Evaluation (s. Kapitel 6) wiesen insbesondere auf die Relevanz der Positionierung der Facharbeiter\*innenausbildung im Studium sowie einer theoretischen und praktischen Vertiefung in Form eines verpflichtenden Betriebspraktikums und optionalen Intensivausbildung zur Vorbereitung auf die Lehrabschlussprüfung.

Die Facharbeiter\*innenausbildung soll gemäß der Learnings (s. Kapitel 7) überarbeitet und baldmöglichst umgesetzt werden. Weiters ist eine entsprechende Fachausbildung für den Holzbereich geplant.

Die Verbindung von Universitätsstudium und Lehrabschluss trägt sowohl zur Qualität und Attraktivität dualer Ausbildung als auch der New Design University und dem Bachelorstudiengang „Design, Handwerk und materielle Kultur“ nach außen hin bei.

### INVOLVIERTE EXPERT\*INNEN

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## 2 HINTERGRUND

Österreich besteht aus neun Bundesländern, die ein gewisses Maß an Autonomie haben. Im Hinblick auf das Berufsbildungssystem ist die Bundesregierung hauptverantwortlich.

Der Erfolg des dualen Systems ist das Ergebnis eines Prozesses, an dem viele Institutionen und Einrichtungen auf verschiedenen Ebenen beteiligt sind. Auf Bundesebene gibt es das Ministerium für Digitales und Wirtschaft (BMDW) sowie das Ministerium für Bildung, Wissenschaft und Forschung (BMBWF). Letzteres definiert den Lehrplan und finanziert teilweise die Berufsschulen. Jedes Bundesland verfügt über eine Lehrlingsstelle, die bei der Regionalen Wirtschaftskammer (WKO) angesiedelt ist, jedoch dem Bundesministerium für Wirtschaft (BMDW) unterstellt ist.

Die Landesregierungen stellen die finanziellen Mittel für den Bau und die Instandhaltung der Berufsschulen, für den Kauf von Geräten, Maschinen und Lehrmitteln zur Verfügung und kofinanzieren (gemeinsam mit der Bundesregierung) die Gehälter von Lehrer\*innen und Ausbilder\*innen. Die Beteiligung von Unternehmen und Arbeitnehmer\*innen am dualen System erfolgt über mehrere Gremien.

Auf lokaler Ebene stellen Unternehmen Auszubildende ein. Die Ausbildung am Arbeitsplatz erfolgt über autorisierte Trainer\*innen oder Ausbilder\*innen. Berufsschulen bieten allgemeine und theoretische sowie praktische Ausbildung.

Bevor sie Auszubildende einstellen können, müssen die Unternehmen nachweisen, dass sie die gesetzlichen Anforderungen in Bezug auf geeignete Maschinen und Geräte sowie die Fähigkeiten der Trainer\*innen oder Ausbilder\*innen, die die Ausbildung am Arbeitsplatz anbieten, erfüllen. Als Trainer\*innen können die Unternehmer\*innen selbst oder andere von ihnen bestellte Mitarbeiter\*innen eingesetzt werden. Ausbilder\*innen müssen über eine professionelle Sachkenntnis im entsprechenden Bereich oder in einem ähnlichen sowie über eine Ausbildung zur Lehrlingsausbildung verfügen.

Außerdem können sich Unternehmen für die Ausbildung von Lehrlingen im Rahmen von

Ausbildungsbündnissen mit anderen Unternehmen entscheiden. Seit 2009 ist es möglich, die Ausbildung durch ein überbetriebliches Ausbildungsmodell (ÜBA) durchzuführen, wenn Berufsschüler\*innen keine Stelle in einem Unternehmen finden können.

Über die berufsbegleitende Ausbildung hinaus müssen die Auszubildenden einen Tag oder anderthalb Tage pro Woche eine Berufsschule besuchen, also 20% der Zeit. Die Organisation des Lernens an der Berufsschule kann auch blockiert werden, z. B. kontinuierlich für acht Wochen pro Jahr. Die Lehrpläne der Berufsschulen enthalten primär grundlegende Kenntnisse und Fertigkeiten im Zusammenhang mit dem gewählten Beruf. Obwohl die Lehrpläne auf Bundesebene definiert sind, verfügen die Schulen über ein gewisses Maß an Autonomie.

Die Ausbildungszeit endet mit einer (praktischen sowie theoretischen) Abschlussprüfung, die nachweist, dass die Auszubildenden die erforderlichen Fähigkeiten ordnungsgemäß erworben haben.

Das österreichische duale Bildungssystem orientiert sich primär an Jugendlichen. Neben der klassischen dualen Ausbildung, richten sich die meisten bestehenden Bildungs- und Ausbildungsangebote an Personen mit entsprechender Berufspraxis oder Arbeitslose mit höchstens Sekundarstufe. Es gibt derzeit noch kaum Angebote für Erwachsene mit einem höheren Bildungsabschluss, um einen Beruf als zweiten Bildungsweg zu erlernen. Unter anderem diese Lücke soll das entwickelte Ausbildungsformat schließen.

## 3 ZIEL

Das Bachelorstudium „Design, Handwerk und materielle Kultur“ an der New Design University (NDU) in St. Pölten richtet sich sowohl an Personen mit Lehrabschluss als auch jene mit Matura. In dem Produktdesign und Handwerk verbindenden Studiengang werden Lehrabsolvent\*innen Werkzeuge für professionelle Designarbeit vermittelt, während Absolvent\*innen und Abgänger\*innen von höherer Schule und Hochschule fundierte Holz- oder Metallbearbeitungskompetenzen im Rahmen eines Zusatzkurses erwerben können. Studierende sollen u.a. auf die eigene Selbstständigkeit im Design oder Handwerk, führende Positionen in mittelständischen Unternehmen oder Designbüros vorbereitet werden.

Die Zusatzkurse im Rahmen des Bachelorstudiums können jedoch für Personen ohne entsprechende praktische Ausbildung keine fundierte Lehre ersetzen. Der in den folgenden Abschnitten vorgestellte Kurs „Facharbeiter\*innenausbildung für Studierende“ ist als konsekutives Modell konzipiert, um Studierenden einen Facharbeiter\*innenabschluss zu ermöglichen, der im Rahmen des bisherigen Metallkurses des Studiengangs nicht möglich ist.

Das entwickelte Ausbildungsformat strebt einen zeitgleichen Abschluss des Bachelorstudiums und der Metalltechniklehre an.

Dieses soll Studierende dazu befähigen, nach Absolvierung ihre eigenen Projekte selbstständig produzieren sowie durch die zusätzliche Facharbeiter\*innenausbildung ihre fachlichen Kompetenzen fruchtbarer in ihre beruflichen Tätigkeiten einbringen zu können.

Weiters stärkt das Format durch Verbindung von Universitätsstudium und Lehre die Qualität und Attraktivität dualer Ausbildung nach außen hin.

## 4 BESCHREIBUNG DES PROGRAMMS

Das Ausbildungsformat „Facharbeiter\*innenausbildung für Studierende“ wurde in der zweiten Jahreshälfte 2019 unter Einbezug der, als „Community of Practice“ bezeichneten Arbeitsgruppe, bestehend aus Kooperationspartner\*innen, an der New Design University entwickelt und mithilfe des zu der Arbeitsgruppe zählenden und zudem den Metallkurs im Rahmen des Bachelorstudiums „Design, Handwerk und materielle Kultur“ leitenden Metalltechniklers Pascal Ernst zwischen März 2020 und Jänner 2021 als Pilotmodell für Studierende sowie Absolvent\*innen des Studiengangs umgesetzt. Die Evaluation erfolgte während der sowie im Anschluss an die Testphase.

### 4.1 VORAUSSETZUNGEN

Das Pilotmodell war kostenlos und richtete sich an Studierende sowie Absolvent\*innen des Bachelorstudiums „Design, Handwerk und materielle Kultur“ und somit, entsprechend der Voraussetzung für den Studiengang, an Personen mit Matura oder/und Lehrabschluss.

### 4.2 INHALT UND STRUKTUR

Ziel der Facharbeiter\*innenausbildung ist, Studierenden fachliche und soziale Kompetenzen sowie auch Selbstlernkompetenzen zu vermitteln.

Die fachlichen Kompetenzen orientieren sich nach der Metalltechnik-Ausbildungsordnung laut Bundesgesetzblatt<sup>1</sup> für den Lehrberuf Stahlbautechnik und beinhalten dementsprechend (komprimierte) Inhalte zu integrierter Energiegewinnung, Glas und Glasbauteile, Metalltechnik-Projektpraxis, Stahlbau/Metallbau – Grundlagen (inklusive Festigkeitslehre), Werkstofftechnik (inklusive Werkstoffprüfung), Bauphysik und Brandschutz, Schlösser und Schlossarten, Geländer, Gitter und Roste sowie Fassaden, Glasbauten und Dächer.

Eine Steigerung sozialer Kompetenzen soll durch verschiedene Sozialformen von Arbeitsgruppen realisiert werden. Im Rahmen der Facharbeiter\*innenausbildung soll dementsprechend sowohl in Kleingruppen als auch einzeln gearbeitet werden.

Die Dokumentation und Reflexion einzelner Ausbildungsinhalte und Arbeitsschritte im Rahmen eines eigenen, frei zu gestaltenden Portfolios soll Studierende bei der Stärkung ihrer Selbstlernkompetenzen unterstützen.

Die Facharbeiter\*innenausbildung endet mit einem positiven Lehrabschluss im Bereich Metalltechnik / Stahlbautechnik.

Im Entwicklungsprozess wurden für das künftige Ausbildungsformat im Rahmen des Bachelorstudiums „Design, Handwerk und materielle Kultur“ ein Zeitrahmen von insgesamt 256 Stunden (80 Stunden Theorie-, 176 Stunden Praxiseinheiten) während der Diplomarbeitsemester (5./6.) vorgeschlagen.

Seminarinhalt	Gesamtstunden / Modul
Theorie	80 Stunden
Praxis	176 Stunden
Gesamt	256 Stunden

Das Ausbildungsmodell wurde in einem Pilotversuch zwischen März und August 2020 in komprimierter Form (s. Kapitel 5) getestet und anschließend evaluiert. Die folgenden Abschnitte widmen sich der Umsetzung und Evaluation des Pilotmodells.

<sup>1</sup> 148. Verordnung des Bundesministers für Wirtschaft, Familie und Jugend über die Berufsausbildung im Lehrberuf Metalltechnik (Metalltechnik-Ausbildungsordnung), <https://www.ris.bka.gv.at/>.

## 5 UMSETZUNG

### 5.1 AKTEUR\*INNEN

Das Pilotmodell wurde in der zweiten Jahreshälfte 2019 entwickelt und im Sommersemester 2020 umgesetzt. Involviert in die Entwicklung und Umsetzung waren erstens, das NDU-Kernteam des Projekts DuALPlus, Stefan Moritsch und Julia Pintsuk-Christof, zweitens, die in laufende Projektprozesse einbezogene Community of Practice, bestehend aus sechs Meister\*innen und/oder Designer\*innen aus den Bereichen Metalltechnik, Kunstspenglerei, Tischlerei, Orthopädienschuhmacherei, Keramik und Schmuckkunst. Darunter ist insbesondere der Metalltechniker Pascal Ernst zu nennen, der bereits den Metallkurs im Rahmen des Bachelorstudiums „Design, Handwerk und materielle Kultur“ leitet und folglich auch die Leitung des Pilotmodells übernahm.

Nicht zuletzt zählen auch die zehn teilnehmenden Studierenden bzw. Alumni des Bachelorstudiums „Design, Handwerk und materielle Kultur“ zu den Akteur\*innen des Pilotmodells. Diese setzten sich aus vier Frauen und sechs Männern zwischen 23 und 38 Jahren aus Österreich (sieben) und Deutschland (drei) zusammen. Sieben Personen haben als höchsten Schulabschluss die Matura absolviert, zwei verfügen über Meisterabschluss und Matura, eine Person über Lehrabschluss und Matura. Sechs der zehn Teilnehmenden haben bereits eine oder mehrere Berufsausbildungen im Rahmen einer Lehre, Fachschule und/oder berufsbildenden höheren Schule (Abschluss mit Matura) in den Bereichen Bautechnik, Innenraumgestaltung und Möbelbau, Landwirtschaft, Mechatronik, Produktdesign, Tischlerei und/oder technisches Zeichnen absolviert.

### 5.2 RAHMENBEDINGUNGE

#### N

Vor der konkreten Umsetzung des Pilotmodells bedurfte es einer Klärung formaler Rahmenbedingungen. Dazu zählten die inhaltliche Abstimmung mit dem Rektorat und der Geschäftsführung der New Design University,

organisatorische und rechtliche Fragen sowie die finanziellen, personellen und räumlichen Ressourcen.

Das Pilotmodell wurde für eine Teilnehmendenzahl von mindestens zwei und maximal zehn Personen konzipiert. Für die Theorieeinheiten sollten Räumlichkeiten der New Design University, für die Praxiseinheiten Werkstätten des WIFI Niederösterreich zur Verfügung gestellt werden, die sich im selben Gebäude befinden. Das WIFI ist eine Aus- und Weiterbildungsinstitution, die, genau wie die New Design University, zur Wirtschaftskammer Niederösterreich gehört.

### 5.3 ABLAUF DER UMSETZUNG

Für das Pilotmodell waren vierzehn Theorie- und 18 Praxiseinheiten von fünf bis acht Stunden zwischen März und Juni 2020 vorgesehen. Der kostenlose Kurs sollte zwischen 29. Juni und 3. Juli 2020 mit der Lehrabschlussprüfung der Teilnehmenden enden.

Die Teilnahme an dem Pilotmodell war kostenlos, die zehn Teilnehmenden wurden über die Studiengangsleitung rekrutiert.

Aufgrund der Covid-Pandemie wurde der NDU-Lehrbetrieb 2020 phasenweise auf Distance- oder Hybrid-Betrieb gestellt. Diese Situation verlangte auch von dem Leiter und den Teilnehmenden des Pilotmodells erhöhte Flexibilität und Engagement. So mussten die theoretischen Inhalte etwa weitgehend im Selbststudium erlernt werden. Dennoch konnte der Zeitplan der Theorie- und Praxiseinheiten größtenteils eingehalten werden, letztere fanden über den Sommer 2020 statt und wurden mit Anfang August abgeschlossen.

Die Lehrabschlussprüfung musste jedoch aufgrund der Pandemie bereits dreimal verschoben werden und wird im Juli 2021 stattfinden.

## 6 EVALUATION

### 6.1 ABLAUF DER EVALUATION

Die Evaluation des Pilotmodells „Facharbeiter\*innenausbildung für Studierende“ erfolgte zwischen Februar und August 2020.

Nach einem Kick-off-Treffen mit Studiengangsleiter, Trainer und Studierenden bzw. Alumni wurde noch vor Start des Kurses ein Fragebogen an alle Teilnehmenden ausgesendet, um primär deren Motivation für die Teilnahme sowie ihre Erwartungen an den Kurs zu erheben.

Ein zweiter Fragebogen wurde gegen Ende des Pilotmodells, Anfang Juli 2020, an die einzelnen Teilnehmer\*innen ausgesendet, um deren Zufriedenheit mit dem Kurs zu erheben.

Nach Abschluss des Pilotmodells Anfang August 2020 wurden im Rahmen einer Fokusgruppe Erfahrungen, Perspektiven und Empfehlungen mit den Teilnehmenden sowie dem Trainer diskutiert.

Im Folgenden sollen die zentralen Ergebnisse skizziert werden.

### 6.2 ERGEBNISSE

#### 6.2.1 MOTIVATION ZUR TEILNAHME

Sechs der zehn teilnehmenden Personen haben bereits eine oder mehrere Berufsausbildung im technischen, handwerklichen bzw. gestalterischen Bereich absolviert.

Die Entscheidung, neben bzw. nach dem Bachelorstudium „Design, Handwerk und materielle Kultur“ noch die als Pilotmodell angebotene „Facharbeiter\*innenausbildung für Studierende“ zu absolvieren, wurde primär mit dem Wunsch, bisherige Kompetenzen zu erweitern bzw. zu vertiefen begründet.

„Da ich den Metallkurs vier Semester absolviert habe und ein Lehrabschluss in Metall meine Kenntnisse stärkt.“

Die stärkere Verknüpfung von Theorie und Praxis verspreche überdies bessere Chancen am Arbeitsmarkt.

„[...] Da ich eine spätere Selbstständigkeit im Möbel & Prototypenbau anstrebe, wird dies durch die Facharbeiterausstellung deutlich gefördert. Nur wenn man das Handwerk versteht, kann passend geplant werden.“

Ein Ranking unterschiedlicher potenzieller Motive zeigte folgende Prioritäten:

- Erweiterung handwerklicher Kompetenzen
- Vielfalt beruflicher Möglichkeiten
- Gründung eines eigenen Unternehmens mit praktischem Handwerksbezug (Ausführung von sowohl Entwurf als auch Produktion)
- Berufstätigkeit im Handwerk
- Spezielles Fachinteresse
- Absolvierung der Lehrabschlussprüfung
- Zulassung zu Meisterkursen/Meisterprüfung
- Gründung eines eigenen Unternehmens mit theoretischem Handwerksbezug (Kompetenz im Handwerk aber Beschränkung auf Entwurfsarbeit)

#### 6.2.2 ERWARTUNGEN AN DAS PILOTMODELL

Von der Facharbeiter\*innenausbildung erwarteten sich die Teilnehmenden primär eine umfangreiche Ausbildung in Metalltechnik („So viel lernen wie möglich“) sowie praktische Erfahrungen zu erlangen, hinsichtlich ihrer Selbstverwirklichung gefördert und auf die künftige Selbstständigkeit vorbereitet zu werden sowie den Kurs erfolgreich mit der Lehrabschlussprüfung abschließen zu können.

Hinsichtlich fachlicher Kompetenzen erwarteten die Teilnehmenden primär das Erlernen spezifischer Techniken (z.B. beim Schweißen, Drehen, Fräsen). Soziale Kompetenzen sollen durch eine weitgehende Balance von Einzel- und Gruppenarbeiten gestärkt werden, Selbstlernkompetenzen durch Erarbeiten von Werkstücken sowie Raum für Experimentieren und Reflexion.

Retrospektiv betrachtet, haben sich die Erwartungen der Teilnehmenden überwiegend erfüllt. So beschrieb die Mehrheit die erlernten fachlichen Kompetenzen als essentiell und praxisorientiert. Ein Teil der Teilnehmenden hätte sich noch etwas Vertiefung hinsichtlich spezifischer Kenntnisse gewünscht, um sich besser auf die Lehrabschlussprüfung vorbereitet zu fühlen.

Die Förderung der Sozialkompetenz wurde aufgrund des positiven Arbeitsklimas, der offenen Austausch- und Diskussionsmöglichkeiten sowie Balance zwischen Einzel- und Gruppenarbeiten als durchwegs gelungen wahrgenommen.

Die Erwartungen hinsichtlich Förderung der Selbstlernkompetenz erfüllten sich weitgehend ebenfalls aufgrund der Möglichkeit, sich in der Praxis zu entfalten und der selbstständigen Ausarbeitung theoretischer Inhalte.

Aus Sicht des Trainers hatten mehrere Teilnehmende Schwierigkeiten beim selbstständigen Erlernen theoretischen Wissens, weshalb er für die Lehrabschlussprüfung weiteres Theoriematerial zur Verfügung stellte.

#### 6.2.3 ZIEL VOR START DES PILOTMODELLS

Die Mehrheit der Teilnehmenden gab im ersten Fragebogen an, nach Abschluss des Pilotmodells einen Berufseinstieg bzw. konkrete berufliche Pläne zu verfolgen, wie etwa sich mit der Planung und Umsetzung von Projekten selbstständig zu machen oder in einem „innovativ kreativen“ Handwerksunternehmen bzw. Designbüro mitzuarbeiten. Drei Personen planen nach erfolgreichem Lehrabschluss, den Meister in Metallbau, ein weiterführendes Studium oder noch weitere Handwerksausbildungen zu absolvieren. Eine Person ist bereits selbstständig beschäftigt und möchte die zusätzlich erworbenen Kompetenzen im Rahmen ihres Unternehmens einsetzen.

#### 6.2.4 ZUFRIEDENHEIT MIT DEM PILOTMODELL

Der zweite Fragebogen sowie die Fokusgruppendifkussion fokussierten sich primär auf die Erfahrungen und Perspektiven der Teilnehmenden nach Abschluss der Theorie- und Praxiseinheiten des Pilotmodells.

Der Kurs stieß retrospektiv auf überwiegende Zufriedenheit, wenn auch konstruktive Kritik geäußert wurde, die es bei der Überarbeitung der Ausbildung zu beachten gilt.

Besonders positiv wurden die offene Atmosphäre im Kurs, die Arbeit in der Werkstatt, die Möglichkeit sich gestalterisch einzubringen, der starke Praxisbezug sowie die Möglichkeit zu gemeinsamer Diskussion beschrieben.

Verbesserungspotenzial wurde hingegen vor allem hinsichtlich der zeitlichen Ressourcen für Theorie und Praxis genannt.

„Es ist ein enges Zeitkorsett mit sehr vielen praktischen und theoretischen Inhalten zu bewältigen. Die Vorzüge der gebotenen Vielfalt überwiegen dennoch.“

Insbesondere für die teilnehmenden Studierenden war die Absolvierung des Kurses parallel zur Diplomarbeit eine Herausforderung. Hinzu kamen eingeschränkte zeitliche sowie räumliche Ressourcen aufgrund der Covid-19-Situation.

Weiters hätten sich die Teilnehmenden einen stärkeren theoretischen Input in Form von etwa Lehrbüchern, Formelsammlungen oder Leitfäden während des Kurses gewünscht. Einzelnen wurde auch der Mangel einer Struktur im Unterrichtsplan erwähnt.

#### 6.2.5 ERREICHEN VON ZIELEN

Das angebotene Pilotmodell trug trotz der Einschränkungen aufgrund der Covid-19-Pandemie weitgehend zum Erreichen der gesetzten Ziele bei. So beschrieben alle Teilnehmenden ihre bisherigen Kompetenzen allgemein durch den Umfang „gebotene[r] Verfahrens- Bearbeitungstechniken in Verbindung mit branche-gerechte[r] Fachkompetenz“ verbessert. Die Erweiterung des fachlichen Wissens im Allgemeinen sowie der stärkeren Verbindung von Theorie und Praxis im Vergleich zum Bachelorstudiengang „Design, Handwerk und materielle Kultur“ habe überdies zu mehr Selbstbewusstsein hinsichtlich der Umsetzung eigener Projekte geführt. Ob die im Pilotmodell erlernten Kompetenzen jedoch für einen positiven Lehrabschluss ausreichen, bezweifelten mehrere Teilnehmende.

„Erweiterung der Kompetenzen findet klar statt. Allerdings steht zur Frage, ob so ein Lehrabschluss bestanden werden kann.“

Noch größere Zweifel bestehen hinsichtlich des Anschlusses eines Meisterkurses, für den noch deutlich mehr Praxiseinheiten erforderlich seien.

„Der Facharbeiterkurs ist ein guter Einstieg, aber mir persönlich fehlt einfach die Praxis, um mir den Meisterkurs zu zutrauen.“

Mehr Praxis bedürfe es auch für eine Arbeit im Handwerksberuf, so habe das Pilotmodell sich mehr auf die Vermittlung von Grundlagen fokussiert. Die Teilnehmenden trauen sich aber zu, auf den erworbenen Kenntnisstand aufzubauen und diesen auch in Unternehmen mit mehr theoretischem Handwerksbezug (Schwerpunkt auf Entwurfsarbeit)



einzusetzen. Somit habe sich auch die Vielfalt an beruflichen Möglichkeiten und Arbeitsmarktchancen erhöht.

### 6.2.6 ZUKUNFTSPERSPEKTIVE DER TEILNEHMENDEN

Die Mehrheit der Teilnehmenden möchte erworbene Kompetenzen in bisherigen und künftigen Beschäftigungen einsetzen und diese durch mehr Praxiserfahrung vertiefen. Mehrere wollen direkt in den Beruf einsteigen und sich früher oder später mit

einem eigenen Unternehmen selbstständig machen. Drei Teilnehmende möchten eine weitere Ausbildung anschließen.

### 6.2.7 LEHRABSCHLUSSPRÜFUNG

Die Lehrabschlussprüfung wird im Juli 2021 stattfinden.

## 7 ERKENNTNISSE

Aus der Evaluation des Pilotmodells „Facharbeiter\*innenausbildung für Studierende“ lassen sich folgende Erkenntnisse ableiten, die in der Überarbeitung des Kurses berücksichtigt werden:

- **Facharbeiter\*innenausbildung zwischen viertem und fünftem Semester:** Die teilnehmenden Studierenden bewerteten die Absolvierung der Facharbeiter\*innenausbildung parallel zu ihren Diplomarbeiten im sechsten Semester als herausfordernd. Aufgrund dessen empfehlen wir eine Verlegung der 80 Stunden Theorieeinheiten und 176 Stunden Praxiseinheiten auf die Sommerpause zwischen viertem und fünftem Semester (z.B. Theorie freitagabends, je vier Stunden; Praxis ganztägig samstags, je acht Stunden).

- **Verpflichtendes Betriebspraktikum zwischen zweitem und viertem Semester:** Die Teilnehmenden konnten ihre Kompetenzen im Rahmen des Pilotmodells grundlegend erweitern, äußerten jedoch mehrheitlich Zweifel hinsichtlich einer ausreichenden Vorbereitung auf die Lehrabschlussprüfung sowie praktischen Arbeit im Handwerk. Um künftigen Studierenden umfangreiche Praxiskompetenz zu ermöglichen, empfehlen wir ein verpflichtendes Betriebspraktikum von ca. 160 Stunden in einem metallverarbeitenden Betrieb zwischen zweitem und viertem Semester, spätestens aber vor Antritt zur Lehrabschlussprüfung.

Die Evaluation der Facharbeiter\*innenausbildung hat gezeigt, dass ein solches Modell grundlegend zur Förderung dualer Ausbildung auf tertiärer Ebene sowie zur Verbindung von Design und Handwerk beitragen kann. Diese soll gemäß der Erkenntnisse überarbeitet und baldmöglichst umgesetzt werden. Weiters ist eine entsprechende Fachausbildung für den Holzbereich geplant.

Der Praktikumsbetrieb wird von den Studierenden selbst gewählt. Dieser muss über keine Ausbildungsprüfung verfügen, aber fachspezifisch und im Zeitraum des Praktikums durchgehend geöffnet sein. Die Studierenden müssen ihre Arbeit in wöchentlichen Praktikumsberichten dokumentieren.

- **Optionale Intensivausbildung:** Um die Studierenden gezielt auf die Lehrabschlussprüfung vorzubereiten, empfehlen wir eine optionale Intensivausbildung von 40 Stunden nach Abschluss der Theorie- und Praxiseinheiten. Trainer\*innen und Studierende können gemeinsam entscheiden, ob Bedarf für diese besteht.

Seminarinhalt	Gesamtstunden Modul	/
Theorie	80 Stunden	
Praxis	176 Stunden	
Intensivausbildung	40 Stunden	
Betriebspraktikum	160 Stunden	
<b>Gesamt</b>	<b>456 Stunden</b>	



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## TEILQUALIFIKATION IM BAUBEREICH MIT EXTERNENPRÜFUNG

### BERICHT ZUM SCHULUNGSPROGRAMM

#### ● ARBEITSPAKET

T2 - Innovation und Qualität in der dualen Ausbildung

#### ● AUTOR

Adriana Bär, Handwerkskammer für München und Oberbayern

#### ● ERGEBNIS

D2.4.1 Bericht zum Schulungsprogramm

#### ● VORLAGEDATUM

30. April 2021

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# 1 ZUSAMMENFASSUNG

## EINLEITUNG

Der vorliegende Bericht fasst die Aktivitäten zusammen, die von der Handwerkskammer für München und Oberbayern im Rahmen des Projekts DuALPlus durchgeführt wurden, um Innovation in das bereits etablierte duale Ausbildungsangebot in Bayern zu bringen und dieses zu ergänzen.

Die Intention hinter dem im Folgenden beschriebenen innovativen dualen Ausbildungsprogramm war es, die duale Ausbildung nicht nur für Absolventen der Sekundarstufe, sondern auch für Erwachsene und bisher sozial Benachteiligte wie Flüchtlinge, Schulabbrecher etc. zugänglich zu machen. Zum anderen ist der flexiblere Ansatz des dualen Ausbildungsprogramms, wie sie in diesem Konzept vorgeschlagen wird, eine Antwort auf den dringenden Bedarf der Bauwirtschaft an Fachkräften.

Im Folgenden stellen wir den Hintergrund und die Ziele des innovativen dualen Ausbildungskonzepts vor, beschreiben das Curriculum und die Struktur sowie unseren Versuch, einen Pilotkurs durchzuführen und unsere Lehren aus dem Prozess.

## KURZTITEL

Teilqualifizierung im Baugewerbe (Teilqualifizierung im Baugewerbe)

## BETEILIGTE EXPERTEN

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## DANKSAGUNG

Wir danken dem Landesverband Bayerischer Bauinnungen und der Regionaldirektion Bayern der Bundesagentur für Arbeit für die Unterstützung bei der Entwicklung des Konzeptes.

## 2 HINTERGRUND

### 2.1 SITUATION IM BAUSEKTOR

Das Handwerk, insbesondere das Baugewerbe, steht vor einem gravierenden Fachkräftemangel, der durch die Zahl der regulären Auszubildenden in der dualen Ausbildung nicht vollständig gedeckt werden kann.

Infolgedessen greifen die Bauunternehmen derzeit auf ungelernete Arbeiter zurück, viele von ihnen sind Migranten, Schulabbrecher oder andere gering qualifizierte Arbeiter, die ins Bauhandwerk wechseln.

Dies ist jedoch nicht die ideale Lösung für das Bauhandwerk, das eigentlich mehr fachlich qualifizierte als ungelernete Arbeitskräfte benötigen würde.

### 2.2 BEDARF AN EINEM NEUEM DUALEM FORMAT

Vor dem Hintergrund dieser Entwicklungen hat die Handwerkskammer für München und Oberbayern gemeinsam mit dem Landesverband der Bayerischen Bauinnungen ein Modellkonzept der Teilqualifizierung für die Bauwirtschaft zur Vorbereitung auf die Externprüfung entwickelt. Im Gegensatz zur traditionellen dualen Berufsausbildung für Handwerksberufe im Baubereich, welche in der Regel in Vollzeit stattfinden,

soll dieses neue Format den Zugang zur dualen Berufsausbildung für Zielgruppen ermöglichen, die direkt nach dem Schulabschluss nicht die Möglichkeit hatten, eine klassische Vollzeitausbildung zu absolvieren, sondern zu einem späteren Zeitpunkt ihres Lebens in die Bauwirtschaft gewechselt sind oder wechseln möchten.

Darüber hinaus erleichtert dieses neue Format die Arbeitsmarktintegration der oben beschriebenen Zielgruppen, die auf dem Arbeitsmarkt eine immer wichtigere Rolle spielen: die NEETs und andere gering qualifizierte Arbeitskräfte, z. B. Migranten oder Schulabbrecher.

Das neue duale Ausbildungsprogramm gibt ihnen die Möglichkeit, auf ihren bisherigen Berufserfahrungen aufzubauen und gleichzeitig von der hohen Qualität der deutschen dualen Berufsausbildung zu profitieren, da die Inhalte in Umfang und Niveau der regulären dualen Ausbildung entsprechen.

Durch die Anmeldung zur Externprüfung bei der Handwerkskammer nach Absolvierung der Qualifizierungsbausteine der Stufe 3 (TQ3) und der Stufe 5 (TQ5) erhalten sie sogar die Möglichkeit, voll anerkannte Berufsabschlüsse im Bauwesen zu erwerben.

## 3 ZIEL

### 3.1 ZIELE DES NEUEN FORMATS

Die Ziele des Teilqualifizierungsformats lassen sich wie folgt zusammenfassen:

- Integration neuer Zielgruppen auf dem Arbeitsmarkt in die duale Ausbildung, wie z. B. Geringqualifizierte, wie Migranten, NEETs, Schulabbrecher und andere oft vom Arbeitsmarkt ausgegrenzte Personen
- Duale Ausbildung nicht nur direkt nach der Sekundarschule, sondern auch in einem späteren Lebensabschnitt zugänglich machen
- Vereinbarkeit der dualen Ausbildung mit Familie und Beruf durch duale Ausbildungsbausteine in Teilzeit
- Schulabbrechern, Migranten oder anderen marginalisierten Personen, die keine Chance hatten, am regulären Schulsystem teilzunehmen oder dort erfolgreich zu sein, eine zweite Chance bieten, einen voll anerkannten handwerklichen Abschluss im dualen Bildungssystem zu erlangen
- Unterstützung des Bauhandwerks durch die Ausbildung ihrer ungelerneten Arbeiter zu Fachkräften nach den deutschen Qualitätsstandards in der dualen Ausbildung.

### 3.2 INNOVATIVE ELEMENTE DES NEUEN FORMATS

Die Teilqualifizierung für das Bauwesen ist ein völlig neues, modularisiertes Qualifizierungskonzept. Sie be-

steht aus 5 aufeinander aufbauenden Modulen, die verschiedene Teilqualifikationsstufen darstellen.

Das Niveau des Bausteins 1 ist das niedrigste und das Niveau des Bausteins 5 ist das höchste Qualifikationsniveau. Dieser hochgradig modulare Ansatz ermöglicht es NEETs und anderen gering qualifizierten Arbeitnehmern, vom dualen Berufsbildungssystem zu profitieren, indem sie entsprechend ihrer früheren Berufserfahrung auf verschiedenen Berufsbildungsniveaus ein- und aussteigen.

Am Ende jeder Teilqualifikationsstufe findet eine Kompetenzfeststellung statt. Bei erfolgreichem Abschluss erwirbt der Auszubildende ein Zertifikat, das bundesweit angerechnet werden kann.

Bei erfolgreicher Absolvierung des Bausteins 3 hat der Auszubildende die Möglichkeit, an einer Externprüfung vor der Kammer teilzunehmen und die offizielle Qualifikation "Hochbaufacharbeiter" zu erwerben.

Die erfolgreiche Absolvierung der Externprüfung nach Baustein 5 führt zum Abschluss "Maurergeselle".

Das Konzept konkurriert nicht mit der regulären dualen Ausbildung, die für Berufe in der Baubranche eingerichtet ist. Es ergänzt sie perfekt, da es auf die Bedürfnisse einer spezifischen neuen Zielgruppe zugeschnitten ist, die durch die übliche Organisation der dualen Berufsausbildung nicht erreicht werden könnte.



## 4 BESCHREIBUNG DES NEU ENTWICKELTEN PROGRAMMS

### 4.1 LEHRPLAN

Das komplette Teilqualifizierungskonzept für die Bauwirtschaft besteht aus fünf Qualifizierungsbausteinen mit einer Gesamtdauer von 12 Monaten.

Baustein 1: Allgemeine Grundausbildung im Bauhandwerk

Baustein 2: Spezialisierte Ausbildung in einem der drei Bereiche: Hochbau, Tiefbau, Innenausbau

Baustein 3: Spezialisierte Ausbildung in einem der drei Bereiche

Baustein 4: Spezialisierte Ausbildung in einem der drei Bereiche

Baustein 5: Spezialisierte Ausbildung in einem der drei Bereiche

Im Rahmen des Projektes DuALPlus wurden die Ausbildungsinhalte der Bausteine weiter ausdefiniert und umfassen die folgenden 6 Lernbereiche:

Lernfeld 1: Einrichten der Baustelle

Lernfeld 2: Erschließen und Ergründen des Bauwerks

Lernfeld 3: Mauern eines einschaligen Baukörpers

Lernfeld 4: Herstellung von Stahlbetonelementen

Lernfeld 5: Herstellung einer Holzkonstruktion

Lernfeld 6: Beschichten und Bekleiden eines Baukörpers

Begleitet werden diese Ausbildungsinhalte von Deutschunterricht, Sozialkunde und Fachrechnen.

Angesichts der Besonderheiten der Zielgruppe (NEETs, Migrantinnen) ist eine sozialpädagogische Begleitung der Pilotausbildung vorgesehen.

### 4.2 ZIELGRUPPEN DER AUSBILDUNG

Die Zielgruppe sind gering qualifizierte Erwachsene, die 25 Jahre alt und älter sind. Dazu gehören Erwachsene:

- ohne berufliche Qualifikation
- mit einer formalen beruflichen Qualifikation, aber ohne Beschäftigung
- die arbeitslos oder von Arbeitslosigkeit bedroht sind
- die durch ihre früheren Berufserfahrungen Kompetenzen erworben haben, aber keinen Qualifikationsnachweis besitzen
- die eine unterbrochene Berufsbiografie mit mehreren Phasen der Arbeitslosigkeit haben
- nach Abbruch der Berufsausbildung
- mit abgebrochenem Universitäts-/ Hochschulstudium
- Berufsrückkehrer (nach längerer Beurlaubung)
- die nach Deutschland eingewandert sind und eine Bleibeperspektive haben
- die im Besitz ausländischer Qualifikationsnachweise und Abschlüsse sind, die in Deutschland nicht anerkannt werden.

### 4.3 ANFORDERUNGEN AN DIE TEILNEHMER

Die vorherige schulische Ausbildung der Auszubildenden ist nicht relevant. Praktische Berufserfahrung in einem einschlägigen Beruf ist jedoch von Vorteil.

Um sich für die Externenprüfung vor der Handwerkskammer zu qualifizieren und den offiziellen Abschluss zu erwerben, sind ca. 4,5 Jahre einschlägige Berufserfahrung erforderlich (nach dem Berufsbildungsgesetz).

### 4.4 GEBÜHREN

Die Ausbildungskosten bis zum Baustein 3 werden mit 8.352,00 EUR kalkuliert. Die Kosten für die weiteren

Bausteine bis zur Gesellenprüfung betragen 7.497,60 EUR.

Da die Ausbildung jedoch von der Agentur für Arbeit nach AZAV-Standard zertifiziert wurde, können die

Teilnehmer eine Förderung durch die Agentur für Arbeit von bis zu 100 % der Ausbildungskosten beantragen.

## 5 IMPLEMENTIERUNG

### 5.1 RESSOURCEN UND AKTEURE

Für die Durchführung der Qualifizierungskurse werden die folgenden Ressourcen/ Partner benötigt:

- das Bildungszentrum Traunstein der Handwerkskammer für München und Oberbayern
- berufliche Ausbilder (externe Experten) für die Ausbildung der Schulungsteilnehmer off-the-job
- sozialpädagogisches Personal
- Unterstützung durch die Agentur für Arbeit Traunstein bei der Werbung für die Pilotausbildung bei den Zielgruppen und bei der Gewährung der finanziellen Unterstützung, die sie für die Teilnahme an der Ausbildung benötigen

her hat die Handwerkskammer für München und Oberbayern Anfang 2020 das AZAV-Zertifizierungsverfahren für den Lehrgang angestrebt und mit erfolgreichem Ergebnis umgesetzt.

Sowohl die regionale Arbeitsagentur als auch das Bildungszentrum Traunstein begannen daraufhin, in ihren Netzwerken für die Teilqualifizierung im Baugewerbe zu werben. Das Bildungszentrum Traunstein informierte alle regionalen Akteure der Baubranche wie die Bauinnung und die Kreishandwerkerschaft, um möglichst viele Baubetriebe über diese Qualifizierungsmöglichkeit für ihre gering qualifizierten Arbeitskräfte zu informieren. Eine Pressemitteilung in der lokalen Zeitung über den Start der Pilotausbildung, die im August 2020 veröffentlicht wurde, sollte ein noch größeres Publikum informieren.

Die Agentur für Arbeit wandte sich an arbeitslos gemeldete Geringqualifizierte aus den umliegenden Landkreisen und informierte sie über die hervorragende Möglichkeit, ihre beruflichen Perspektiven und Karrieren zu verbessern.

Obwohl beide Einrichtungen bereits im Frühjahr/Sommer mit der Aktion begannen, war die Rücklaufquote sehr gering. Bis Oktober meldeten sich nur zwei Teilnehmer zur Schulung an, so dass sich das Schulungszentrum Traunstein entschied, den Start der Maßnahme auf November 2020 zu verschieben.

Anfang November zählten wir vier angemeldete Teilnehmer und hätten den Lehrgang trotzdem gestartet. Doch Anfang November verkündete die Bayerische Staatsregierung einen erneuten Lockdown aufgrund zunehmender Covid 19-Infektionen in Stadt und Landkreis Traunstein und der gesamten Region Oberbayern.

Aufgrund des anhaltenden Lockdowns in Bayern seit November mit nur sehr kurzen Phasen der Unterbrechung war es uns nicht möglich, mit der Schulungsmaßnahme vor April 2021 zu beginnen.

Die Durchführung der Schulungsmaßnahme online war keine Option, da der Zielgruppe die IT-Kenntnisse, die

### 5.2 BESCHREIBUNG DER TESTPHASE

Unsere Erprobungsphase sollte im Frühjahr 2020 mit der Bekanntmachung des Teilqualifizierungskonzepts bei den Zielgruppen beginnen. Das waren vor allem Migrantinnen und NEETs, die derzeit arbeitslos sind bzw. als ungelernete Arbeitskräfte bei Baufirmen arbeiten.

Die Handwerkskammer für München und Oberbayern hatte beschlossen, das neu entwickelte Ausbildungskonzept im Einzugsbereich des Bildungszentrums Traunstein umzusetzen.

Um die erste Umsetzung des neuen dualen Ausbildungsformats zu planen, zu organisieren und zu bewerben, bezog die Kammer auch die örtliche Agentur für Arbeit mit ein, da diese einen direkten Zugang zu den mit diesem Ausbildungsformat anvisierten Zielgruppen hat, d.h. Geringqualifizierte, arbeitslose Migrantinnen und Schulabbrecher. Um bei der Förderung und Finanzierung der Bildungsmaßnahme unterstützen zu können, musste der Lehrgang nach den AZAV-Standards der Arbeitsagentur zertifiziert werden. Da-

technischen Geräte und die Infrastruktur fehlen, um an Online-Schulungen teilnehmen zu können. Außerdem besteht ein großer Teil der Ausbildung aus praktischem Training, das in den Werkstätten des Ausbildungszentrums Traunstein durchgeführt werden muss.

Wir hoffen, dass der Lockdown Mitte Mai / Anfang Juni endet, aber die Durchführung der Ausbildung in den Frühjahrs- und Sommermonaten, der Hochsaison des Baugeschäfts, ist keine sinnvolle Option, da die Unternehmen in dieser Periode keine Zeit haben, die Auszu-

bildenden ordnungsgemäß auszubilden, wie es unser duales Ausbildungsprogramm vorsieht.

Wir haben daher die Absicht, im Oktober 2021 einen weiteren Versuch zur Durchführung unseres Trainings zu starten. Das bedeutet jedoch leider, dass wir nicht mehr innerhalb des Projektzeitraums über die Durchführung und die Evaluation berichten werden können.

## 6 EVALUATION

Da wir unsere Pilotimplementierung nicht wie geplant durchführen konnten, konnten wir auch keine Evaluation durchführen.

Ursprünglich war geplant, ein 360-Grad-Feedback durchzuführen und die Evaluation dieses Feedbacks war nach der Schulung durch Feedbackbögen vorgesehen, die den folgenden Beteiligten ausgehändigt werden sollten:

- den Auszubildenden
- den Trainern
- den Beratern der Agentur für Arbeit
- den Ausbildern in den Ausbildungsbetrieben

Aspekte und Kriterien der Bewertung wären gewesen:

- der Prozess der Werbung für das Training bei den Zielgruppen

- die Angemessenheit der Inhalte, Didaktik, Methoden und Werkzeuge der außerbetrieblichen Ausbildung
- die Angemessenheit der Dauer und des Zeitrahmens des Schulungsmoduls
- die Qualität der praktischen Ausbildung im Ausbildungsbetrieb
- der Kooperations- und Kommunikationsprozess zwischen allen beteiligten Akteuren
- die sozialpädagogischen Herausforderungen während des Pilottrainings
- der Prozess der Bewertung der von den Auszubildenden nach der Ausbildung erworbenen Kompetenzen
- die Kosten für die Realisierung des Schulungsmoduls

## 7 GELERTE LEKTIONEN

Obwohl wir keine vollständige Umsetzung der dualen Ausbildungsmaßnahme durchführen konnten, gibt es einige Lektionen, die wir im Laufe der Organisation und Durchführung des dualen Ausbildungsprogramms lernen konnten.

Unsere Werbemaßnahmen erwiesen sich als nicht so effektiv, wie wir es geplant hatten, da sie nur zu vier registrierten Teilnehmern an der dualen Ausbildung führten, was angesichts der Tatsache, dass es im Einzugsbereich der Agentur für Arbeit eine beträchtliche

Anzahl von gering qualifizierten Personen, arbeitslosen Flüchtlingen oder Migranten gibt, eine viel zu niedrige Zahl ist.

Zu unserer Werbestrategie gehörte es, die Bauinnung mit einzubeziehen, denn die Baubetriebe klagen oft darüber, dass sie gering qualifizierte Arbeitskräfte beschäftigen müssen, weil sie auf dem Arbeitsmarkt keine qualifizierten Bauarbeiter finden. Wir waren also sehr zuversichtlich, dass die Bauunternehmen uns ihre ungelerten Arbeiter zur Ausbildung schicken würden,

sobald sie von der attraktiven Qualifizierungsmöglichkeit erfahren würden.

Allerdings scheint es einen gewissen Widerspruch zu geben zwischen dem, was die Bauunternehmen üblicherweise behaupten und beklagen, und dem, was sie tatsächlich haben wollen.

Auf der einen Seite beklagen sie den Mangel an qualifizierten Arbeitskräften im Baugewerbe, auf der anderen Seite profitieren sie aber auch von den gering qualifizierten Arbeitern, da diese billige Arbeitskräfte darstellen, die sie nicht nach den Tarifverträgen der Branche bezahlen müssen. Es hat den Anschein, dass die Baubetriebe zögern, ihre Geringqualifizierten in die Ausbildung zu schicken, denn sobald die Geringqualifizierten ihr Qualifikationsniveau verbessern und eine anerkannte Berufsausbildung erreichen würden, müssten die Baubetriebe höhere Löhne nach dem Tarifvertrag der Bauwirtschaft zahlen.

Auch die Zusammenarbeit mit der Agentur für Arbeit zeigte einige Schwierigkeiten. Es schien, dass nicht alle Berater vollständig über die Ziele und Möglichkeit der Teilqualifizierung informiert waren und daher nicht ausreichend bei ihren Kunden dafür warben. Wir er-

fuhren auch von interessierten Personen, die sich bei der Agentur für Arbeit für die duale Ausbildung beworben hatten, aber abgelehnt wurden, da die Auswahlkriterien für die Teilnahme an der Ausbildung den Beratern nicht vollständig klar waren.

Auf der Grundlage dieser Erkenntnisse wird die Handwerkskammer für München und Oberbayern die Werbestrategie für die nächste Teilqualifizierung, die für Oktober 2021 vorgesehen ist, folgendermaßen anpassen:

- Einbindung der Bauinnung und Kreishandwerkerschaft, jedoch mit mehr Informationen über die Vorteile und den Nutzen für ihre Betriebe, wenn sie ihre gering qualifizierten Arbeiter zur Ausbildung schicken
- Bessere Einweisung der hinsichtlich der Ziele der Teilqualifikation und der Auswahlkriterien für die Teilnehmer
- Stärkere Einbindung der lokalen Medien und Zeitungen, um die duale Ausbildungsmaßnahme direkt bei interessierten Personen zu bewerben.



[www.alpine-space.eu/dualplus](http://www.alpine-space.eu/dualplus)



Dieses Projekt wird durch den Europäischen Fonds für regionale Entwicklung kofinanziert durch das Interreg-Alpenraumprogramm



## ATELIER

### DELL'APPRENDIMENTO:

#### LABORATORIO DI DESIGN THINKING DI PRATICHE E PROCESSI DI APPRENDIMENTO NELLA FORMAZIONE DUALE

- **PACCHETTO DI LAVORO**

T2 – Innovazione e qualità nel sistema duale

- **REPORT**

D2.4.1 Report sui programmi di formazione

- **AUTORI**

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- **DATA DI RILASCIO**

28 Maggio 2021

DuALPlus - D.T2.4.1 Report sui programmi di formazione

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## 2 CONTESTO

### 2.1 LA FORMAZIONE DUALE IN TRENTINO

A livello normativo e attuativo, l'apprendistato duale è stato disciplinato da decreti nazionali e risoluzioni provinciali tra il 2015 e il 2016 [1-6]. La PAT ha definito il modello di apprendistato per il conseguimento di una qualifica o di un diploma che si aggiunge, e non si sostituisce, ai percorsi di Istruzione e Formazione Professionale a tempo pieno. Il modello è stato attuato per la prima volta nell'anno scolastico 2016/2017 attraverso il programma "Garanzia Giovani".

Il nuovo schema di apprendistato si rivolge principalmente ai giovani tra i 15 e i 25 anni non compiuti e prevede tre/quattro anni per ottenere una/un qualifica/diploma.

Oltre alle parti sociali, alle associazioni dei datori di lavoro e alle istituzioni scolastiche e formative, uno degli attori più importanti del processo di attuazione del sistema duale è il Dipartimento Istruzione e Cultura della PAT, che definisce l'organizzazione, le specializzazioni, le linee guida e le risorse coinvolte nel sistema di apprendistato.

Nel corso degli anni la PAT ha promosso, sia a livello provinciale sia a livello nazionale ed internazionale, diverse azioni di accompagnamento per promuovere l'apprendistato duale:

- Dal 2014 al 2017, ha partecipato in qualità di capofila al progetto Erasmus+ SWORD "School and Work-Related Dual Learning" finalizzato a facilitare la transizione dalla formazione professionale al mondo del lavoro, attraverso un'analisi comparativa della formazione duale dei vari partner europei, l'avvio di progetti pilota e la definizione di linee guida a

supporto dei percorsi di apprendimento duale. Gli output prodotti dal progetto SWORD hanno costituito un'importante base metodologica per l'avvio del sistema duale in Trentino;

- Dal 2017, come membro del Gruppo d'azione 3 di EUSALP, Strategia dell'Unione europea per la Macrorregione Alpina, promuove i Forum della Formazione Duale;
- Dal 2018, partecipa come membro della European Alliance for Apprenticeships (EAFA), una piattaforma multi-stakeholder che mira a rafforzare la qualità, l'offerta e l'immagine dell'apprendistato in Europa e a promuovere la mobilità degli apprendisti e l'occupazione giovanile;
- Nel 2018 ha stipulato una convenzione con ANPAL (Agenzia Nazionale per le Politiche Attive del Lavoro) per la promozione, sviluppo e consolidamento del sistema duale;
- Sempre nel 2018, PAT ha indetto un bando per la presentazione di progetti legati allo sviluppo di percorsi di apprendistato duale, al quale hanno partecipato 10 istituzioni scolastiche/formative con 8 progetti finanziati;
- Nel 2019, ha organizzato seminari e tavole rotonde per presentare ai soggetti istituzionali e ai diversi attori coinvolti l'attuazione e le esperienze avviate nell'apprendistato duale in Trentino, nonché per riflettere su possibili sviluppi e nuovi scenari;
- Nel 2020, ha siglato un accordo con la Camera di Commercio, Industria, Artigianato e Agricoltura di Trento (CCIAA) con l'obiettivo di sviluppare,

consolidare e potenziare i progetti di apprendistato duale attraverso l'avvio di bandi per la progettazione e realizzazione di percorsi di apprendistato duale co-progettati tra istituzioni scolastiche/formative e imprese del territorio.

L'iniziativa Atelier dell'Apprendimento intende consolidare e valorizzare il sistema duale in Trentino e si colloca nel contesto appena descritto, in continuità con le politiche attuate dalla PAT volte a promuovere l'apprendistato duale.

### 2.2 LA NECESSITÀ DI INIZIATIVE DI PIANIFICAZIONE PARTECIPATA

Le interviste ai rappresentanti aziendali, realizzate nel 2019 nell'ambito del progetto DuALPlus, hanno evidenziato tre necessità principali:

- per la formazione dei tutor aziendali, evitare situazioni formative più tradizionali (lunghe ore in aula, situazioni di ascolto passivo, contenuti troppo teorici, etc.);
- favorire una maggiore interazione con i soggetti (stakeholders) coinvolti nel sistema duale, in primis i tutor scolastici;
- comprendere meglio il processo di apprendimento degli studenti/apprendisti, come prepararli, gestirli e valutarli per contribuire alla loro crescita, non solo professionale, con un focus specifico sulle cosiddette soft skills, o competenze non cognitive.

Emerge quindi l'importanza di offrire percorsi formativi brevi, che possano permettere un processo di condivisione tra le varie figure coinvolte nel sistema duale (tutor aziendali e scolastici); un processo capace di condurre analisi approfondite, soprattutto sugli aspetti legati alla gestione del processo di apprendimento durante l'esperienza duale in azienda.

Nella pianificazione di questi percorsi, è fondamentale adottare approcci partecipativi e metodi di lavoro che alternano trasmissività, lavoro di gruppo, restituzione, rielaborazione e sintesi finale.

Le strategie e le metodologie utilizzate devono essere adattate ai profili dei partecipanti per permettere la loro attivazione attraverso la condivisione e la valorizzazione delle loro conoscenze ed esperienze. Il coinvolgimento diretto dei partecipanti aiuterebbe, si ritiene, il consolidamento di "nuove idee" e "nuove conoscenze" costruite insieme dal gruppo che potrebbe appropriarsene più profondamente e consapevolmente.

Poiché il sistema duale trentino non è del tutto affermato e consolidato, e per i motivi appena descritti, c'è bisogno e spazio per lo sviluppo di nuovi programmi che offrano modalità formative innovative e non convenzionali in grado di favorire la condivisione di idee ed esperienze.

Il presente rapporto illustra l'iniziativa dell'Atelier dell'Apprendimento come un primo passo per soddisfare le esigenze appena descritte.

## 3 OBIETTIVI

### 3.1 OBIETTIVI DELL'ATELIER DELL'APPRENDIMENTO

Attraverso workshop di Design Thinking, l'Atelier di apprendimento mira a tre obiettivi principali:

1. permettere a due o più comunità professionali di condividere le loro conoscenze professionali, "superando i confini" dei propri ambiti e delle proprie competenze, per crearne di nuove;
2. fornire ai tutor aziendali una migliore comprensione dei processi di apprendimento degli apprendisti coinvolti nei percorsi duali;
3. promuovere un ruolo più attivo delle aziende.

### 3.2 IL RUOLO ATTIVO DEI TUTOR AZIENDALI

In Trentino, i programmi di formazione duale sono per lo più sotto il controllo delle istituzioni scolastiche e formative. Per esempio, i referenti scolastici sono generalmente preposti all'assegnazione dei candidati apprendisti alle aziende; questo potrebbe comportare alcuni svantaggi:

1. I tutor scolastici potrebbero avere pregiudizi impliciti sui singoli stu-

denti che potrebbero influenzare l'assegnazione alle aziende; questo potrebbe non tener conto del fatto che molti studenti spesso si comportano diversamente a scuola rispetto a come si comporterebbero in un contesto di lavoro;

2. Gli studenti e/o le aziende potrebbero vivere passivamente questa decisione mediata, e questo potrebbe influenzare la loro motivazione durante il periodo di formazione;
3. Il tutor scolastico spesso redige il piano di formazione individuale e, di nuovo, l'azienda potrebbe accettarlo passivamente senza mettere in discussione il suo potenziale di efficacia.

L'Atelier dell'apprendimento vuole muovere il primo passo verso un ruolo più attivo del tutor aziendale. Ciò viene perseguito creando le condizioni affinché le due parti (mondo aziendale e mondo scolastico) possano avviare percorsi di progettazione condivisa e partecipata.

L'Atelier dell'Apprendimento punta a rendere attivo e obbligatorio il coinvolgimento dei tutor aziendali al fine di garantire la co-progettazione e la co-realizzazione di percorsi duali. Sotto questo aspetto, la proposta dell'Atelier si differenzia dai format già esistenti in Trentino che propongono esperienze forse più tradizionali di informazione-apprendimento.

## 4 DESCRIZIONE DEL PROGRAMMA

### 4.1 INTRODUZIONE ALLA METODOLOGIA DELL'ATELIER

Il percorso ha preso le mosse da un dispositivo formativo chiamato "Atelier per l'apprendimento" (nella versione originale in inglese è "Change Laboratory").

Il metodo proposto per la realizzazione del percorso è l'esito della combinazione di due approcci riflessivi per 1) l'analisi delle situazioni di apprendimento e 2) lo sviluppo di prototipi di attività e pratiche basati su tale analisi.

Il primo approccio ha come strumento principali il cosiddetto "Atelier dell'apprendimento", sviluppato nell'ambito della psicologia dell'apprendimento [8]. Lo scopo dell'atelier è fare in modo che più rappresentanti di comunità professionali diverse (nel nostro caso le aziende e le istituzioni scolastiche/formative), attraverso appositi input forniti dal facilitatore, possano generare nuove conoscenze a partire dalle singole competenze ed esperienze.

Il secondo approccio è il Design Thinking, un insieme di pratiche specifiche (questioning, mapping, visualization, ...) a supporto di progettazione di attività e servizi, in questo caso nel contesto dell'apprendimento in situazioni lavorative.

L'integrazione tra i due approcci fa sì che le pratiche di design possano essere situate e collegate alle attività già svolte dai partecipanti.

Nell'Atelier, il lavoro si svolge in piccoli gruppi di composizione eterogenea. Uno o più facilitatori gestiscono il processo.

In generale, la sequenza di attività comprende:

- una parte introduttiva in cui si identifica un problema o una questione da affrontare;
- una seconda parte in cui, con il supporto del facilitatore, tutti i partecipanti esprimono il loro punto di vista nell'affrontare il problema, presentando le loro esperienze e pratiche già in atto;
- una terza parte di riflessione in cui si definiscono le pratiche apprese e "trasferibili" dai partecipanti nella propria esperienza lavorativa.

In tutte queste fasi vengono utilizzati gli strumenti di Design Thinking, a supporto della progettazione di nuove pratiche di apprendimento. E' nella fase finale che si realizza "l'attraversamento dei confini", perché una pratica precedentemente sviluppata in un contesto specifico, è stata, nel corso dell'atelier, ri-orientata, espandendola, in uno o più contesti differenti.

Il risultato del laboratorio sarà quindi la produzione di uno o più "prototipi di servizio", intesi come dispositivi atti a orientare e gestire l'apprendimento dell'apprendista in luoghi di lavoro nel duale.



## 4.2 L'APPROCCIO DEL DESIGN THINKING

Il Design Thinking (DT) è una metodologia di ottimizzazione dei processi decisionali inerenti alla soluzione di un problema. Nel settore della Pubblica Amministrazione, e nelle attività profit e no-profit il DT è finalizzato allo sviluppo di nuovi servizi e prodotti.

Il principio base è rendere visibile il pensiero dei partecipanti mediante tecniche di rappresentazione non-linguistica delle informazioni e delle conoscenze elaborate dai partecipanti

Esistono diverse tipologie di DT. In generale, si procede per strati di rappresentazione (uno per ogni sessione di lavoro), e si coinvolge il gruppo mediante consegne specifiche - individuali, di gruppo, di aula - da realizzare entro tempi definiti.

In sintesi, il facilitatore aiuta il gruppo a rappresentare il problema, a prendere decisioni, individuare i momenti critici di un flusso di azioni, a definire l'utente finale, il risultato di breve termine e l'obiettivo di lungo termine.

Nel contesto dell'Atelier, è stata proposta la seguente metodologia:

- definire il problema e scegliere l'utente finale;
- abbozzare la soluzione;
- decidere e rendere fattibile la soluzione;
- progettare un prototipo realistico;
- verificare la soluzione con l'utente finale.

## 4.3 DESTINATARI

I principali destinatari dell'Atelier dell'apprendimento sono i tutor aziendali. Come sottolineato prima, per stimolare e favorire lo scambio di idee, conoscenze e buone pratiche tra le due comunità principali (aziende e istituzioni scolastiche/formative), la presenza dei tutor scolastici, anche se in percentuale

minore, è essenziale. Inoltre, altre parti interessate (e.g., responsabili politici, dirigenti di soggetti rappresentativi e associazioni, rappresentanti di organizzazioni che si occupano di formazione duale a diversi livelli) possono partecipare all'Atelier: la loro presenza arricchirebbe la comunità e garantirebbe scambi ancora più interessanti.

## 4.4 REQUISITI

L'Atelier dell'apprendimento prevede la partecipazione di tutor aziendali e scolastici con esperienza nella gestione di apprendistati di formazione duale. Naturalmente, i tutor nuovi a questo compito, sono incoraggiati a partecipare all'Atelier per creare reti e ottenere suggerimenti preziosi.

L'Atelier dell'Apprendimento è condotto da uno o due facilitatori esperti e prevede la presenza di circa 30 persone; poiché la presenza fisica dei partecipanti è cruciale per stimolare interazioni significative e assicurare lavori di gruppo efficaci, è importante avere a disposizione 3 o 4 sale per sessioni plenarie e di gruppo. Se possibile, sarebbe ideale svolgere l'evento in una sede aziendale e prevedere una pausa pranzo tra le sessioni di lavoro, permettendo così ai partecipanti di interagire in modo più informale.

I costi dell'Atelier (facilitatore, location, materiali, cibo) possono essere coperti dai partecipanti o - come nel caso qui presentato - da fondi dedicati volti a favorire la formazione duale.

## 4.5 STRUTTURA DEL PROGRAMMA

Il percorso formativo è articolato come segue:

- Diffusione di materiale informativo rivolto ai partecipanti, con particolare riferimento ai seguenti argomenti: modelli di apprendimento, modelli motivazionali e casi di valutazione



pertinenti ai processi formativi in ambito duale;

- Momento di scambio con tutte le persone coinvolte per rompere il ghiaccio, valutare l'impatto del materiale fornito e conoscere i partecipanti;
- Serie di Atelier basati sull'approccio DT. Ogni Design Thinking Workshop (DTW) ha lo scopo di indagare un particolare aspetto di un processo di apprendimento: preparare gli studenti, definire e progettare, implementare e valutare il processo di apprendimento.

La struttura del singolo DTW è comune a tutti i workshop e si svolge in tre fasi principali:

- Nella parte iniziale di ciascun atelier (primi 30 minuti), il facilitatore definisce innanzitutto un problema o una questione da affrontare con dei brevi e sintetici riferimenti teorici (ad es. preparare all'apprendimento uno studente potrà essere trasformato in un caso reale ambientato nell'azienda o nella scuola);
- Successivamente (nelle due ore e mezza successive), accompagna i partecipanti a descrivere le pratiche che attualmente stanno utilizzando per, ad esempio, preparare gli studenti all'apprendimento; si realizzano schemi e rappresentazioni, attraverso il supporto delle procedure di DT, che servono per definire tali pratiche (l'approccio dell'atelier ha uno schema fisso di rappresentazione che considera: l'oggetto della pratica, i soggetti che la applicano, gli strumenti che utilizzano, le regole che seguono, la divisione del lavoro e dei compiti, il punto di vista della comunità professionale di riferimento);
- Infine, nell'ultima ora, il facilitatore sviluppa, insieme ai partecipanti, una sequenza di pratiche possibili (ad esempio "10 modi per preparare all'apprendimento lo studente in

azienda") da applicare per affrontare il problema, concludendo il percorso di progettazione collettiva iniziato con i partecipanti.

L'esito di ciascun atelier è una lista di pratiche e strategie per comprendere meglio e affrontare tale problema; tali pratiche e strategie possono servire sia ai tutor aziendali sia ai tutor scolastici per il proprio sviluppo professionale e, dopo l'atelier, non saranno più solo scolastiche o solo "aziendali", ma saranno una integrazione tra queste.

L'insieme delle pratiche e delle strategie messe a punto durante i tre incontri in presenza costituisce il risultato del percorso formativo: uno o più "prototipi di servizio", ovvero un toolkit di buone pratiche di intervento e di metodologie per l'orientamento e la gestione dell'apprendimento dell'apprendista durante l'esperienza duale in azienda.

Al termine della formazione viene rilasciato un attestato di partecipazione riconosciuto valido per l'aggiornamento obbligatorio degli insegnanti in servizio impiegati nelle istituzioni scolastiche e formative del Trentino.

Il prossimo capitolo descrive come è stato organizzato L'Atelier dell'Apprendimento a Trento, nell'ambito del progetto DuALPlus.



## 5 IMPLEMENTAZIONE

### 5.1 PARTECIPANTI

Il laboratorio ha visto la presenza di 26 partecipanti: 16 partecipanti "target", 4 funzionari PAT dell'ufficio pedagogico didattico, 2 osservatori della Scuola Centrale di Formazione, 3 membri dello staff DuALPlus-PAT tra cui il dott. Francesco Pisanu in qualità di esperto nel campo della valutazione delle politiche scolastiche, e 1 esperto facilitatore: Maurizio Gentile - Professore Associato di Didattica e Pedagogia Speciale presso l'Università LUMSA di Roma - è stato incaricato di condurre il laboratorio incentrato sui processi di apprendimento. La distribuzione dei 16 partecipanti è stata la seguente:

- Tutor aziendali (CT): 4
- Tutor scolastici (ST): 7
- Referenti scolastici per l'apprendimento duale: 1
- Referenti per la Federazione Trentina della Cooperazione: 2
- Referenti per la Confederazione Nazionale Coltivatori Diretti (Coldiretti): 2

I partecipanti attivi (16 partecipanti "target" più 2 funzionari PAT) sono stati divisi in tre gruppi. I gruppi sono stati formati dagli organizzatori in modo da garantire l'eterogeneità all'interno dello stesso gruppo e la presenza di almeno un tutor aziendale.

### 5.2 PROGRAMMA DEI LAVORI

L'Atelier dell'Apprendimento si è svolto a Trento presso il DIC nel settembre 2020:

martedì 1 (online), giovedì 3, venerdì 4 e sabato 5 (DTW in presenza). È durato 14 ore ed è stato organizzato secondo il programma descritto nelle prossime sottosezioni.



Figura 1: una sessione plenaria in cui due partecipanti presentano il risultato del loro lavoro di gruppo mentre il facilitatore prende nota sulla lavagna.

#### 5.2.1 DIFFUSIONE DEL MATERIALE PREPARATORIO

Il 26 agosto 2020 è stato inviato ai partecipanti del materiale informativo con particolare riferimento ai modelli di apprendimento, ai modelli motivazionali e ai casi di valutazione pertinenti ai processi di formazione nell'ambiente duale. Il materiale consegnato ai partecipanti ha incluso: (a) un documento di descrizione del percorso formativo e il calendario previsto; (b) tre video-presentazioni; (c) tre presentazioni powerpoint con letture suggerite ([9,10,11,12]); (d) fogli di lavoro; (e) un glossario relativo ai concetti delle presentazioni; (f) dichiarazione di missione dell' Atelier.

#### 5.2.2 WEBINAR ONLINE

Il 1° settembre 2020, un webinar online di 2 ore ha coinvolto 12 partecipanti e lo staff organizzativo per promuovere la conoscenza reciproca all'interno del gruppo e per discu-

tere/valutare l'impatto del materiale informativo fornito. La formula online è stata scelta per evitare il più possibile incontri in presenza a causa della pandemia.

Nel contesto dell'Atelier, la metodologia descritta nella sezione 4.2 è stata proposta con tre DTW (punti rossi in Fig.2).



Figura 2: Metodologia di DT adottata nell'Atelier.

#### 5.2.3 PRIMO DTW: PREPARARE GLI STUDENTI ALL'APPRENDIMENTO

Il 3 settembre 2020 ha avuto luogo il primo DTW di 4 ore: si è concentrato sulla preparazione degli studenti al processo di apprendimento. Gli input iniziali del facilitatore: focalizzare l'attenzione degli studenti; stimolare la motivazione prima dell'apprendimento, richiamare le conoscenze pregresse, coltivare l'impegno e la perseveranza, apprendere in una organizzazione di lavoro.

#### 5.2.4 SECONDO DTW: DEFINIRE E PROGETTARE UN PROCESSO DI APPRENDIMENTO

Il 4 settembre 2020 ha avuto luogo il secondo DTW di 4 ore: si è concentrato sul tema della definizione e progettazione di un processo di apprendimento. Input iniziali del facilitatore: pianificare le attività da realizzare con lo studente/apprendista; simulare scenari possibili per anticipare problemi/errori; considerare le caratteristiche e i bisogni dello studente/apprendista; definire obiettivi da raggiungere e

condividerli; integrare le esigenze di produzione con il processo di apprendimento individuale.

La Fig. 3 mostra secondo strato di rappresentazione realizzato dal gruppo nella seconda sessione di DT.



Figura 3: Strato II - Strategia generale di co-progettazione del percorso formativo duale.

#### 5.2.5 TERZO DTW: IMPLEMENTARE E VALUTARE IL PROCESSO DI APPRENDIMENTO

Il 5 settembre 2020 ha avuto luogo l'ultimo DTW di 4 ore: si è concentrato sul tema dell'attuazione e della valutazione del processo di apprendimento. Input iniziali del facilitatore: stimolare la motivazione all'apprendimento; monitorare l'applicazione del processo di apprendimento (feedback); sviluppare strumenti per la valutazione formativa; utilizzare gli esiti della valutazione per migliorare l'apprendimento; riconoscere/validare le competenze acquisite per supportare la permeabilità orizzontale e verticale nel sistema Trentino e al di fuori del sistema Trentino.

## 5.3 RISULTATI

L'esito principale dei tre incontri è stato la definizione di una strategia per la co-progettazione del processo di apprendimento nel percorso duale. Tale strategia prevede quattro aspetti:

1. **L'utente finale:** l'allievo;
2. Tre **momenti critici:**
  - a. Coinvolgimento diretto dei TS in Azienda e Profilo dell'apprendista;
  - b. Definizione di accordi estesi sul territorio (Reti) e di Profili Aziendali (Qual è l'ambiente ideale di apprendimento per quell'allievo in quel settore?)
  - c. Gestione e condivisione del piano formativo negli aspetti cognitivi, motivazionali e valutativi ("SI apprendimento", "No addestramento") ritagliando un percorso su misura;
3. **Risultato concreto:** necessità del sistema Scuola-Azienda di co-progettare i percorsi di formazione duale;
4. **Fine generale:** Attrattività del duale ("In azienda imparo bene, imparo tanto").

### 5.3.1 MOMENTO CRITICO (A) - COINVOLGIMENTO DIRETTO DEI TS IN AZIENDA E PROFILO DELL'ALLIEVO CANDIDATO

La principale criticità emersa è la visione che la scuola ha del DUALE e la necessità di individuare gli apprendisti in base ad almeno due profili. I due profili sono stati definiti (provvisoriamente) definiti in base alle seguenti categorie:

- A. "fragili e/o a rischio di insuccesso formativo";
- B. "consapevoli e pronti ad entrare nel mondo del lavoro".

Allo stato attuale, sembra che l'offerta di percorso duale sia percepita dalle scuole come una misura di contrasto all'abbandono scolastico rivolta soprattutto al profilo A; quindi un uso "rimediale" del percorso, piuttosto che un'opportunità formativa per migliorare i propri apprendimenti. Al contrario, la visione a cui puntare è di un percorso duale come

opportunità di apprendimento, per i fragili e i consapevoli. In quest'ottica, il gruppo di progetto GP1 ha avanzato le seguenti soluzioni:

1. **Incremento della selezione di allievi "consapevoli"**, idonei e pronti ad entrare nel mondo del lavoro.
2. **Progettazione e realizzazione di momenti di interazione** tra percorsi di apprendimento in azienda/scuola: il TA va a scuola, il TS va in azienda;
3. **Rimodellare il profilo dello studente** durante il corso, per tenere conto degli sviluppi dell'esperienza. Ad esempio, uno degli scenari auspicabili (ma non necessariamente verificabili) è il passaggio da un "profilo fragile" ad un "profilo consapevole" per effetto dell'interazione con l'ambiente lavorativo. La profilazione, sia in fase iniziale e sia che durante il percorso, dovrebbe suggerire se l'azienda scelta è l'ambiente ideale di apprendimento per quel specifico ragazzo e se quest'ultimo sta ottenendo dall'esperienza i guadagni cognitivi e motivazionali attesi;
4. Definire il piano di apprendimento individuale come risultato di un **lavoro condiviso tra l'azienda e la scuola**;
5. valutazione finale del percorso come esito della condivisione tra azienda e scuola mediante **strumenti di auto-valutazione [10] e colloqui simulati in presenza delle aziende**.

### 5.3.2 MOMENTO CRITICO (B) - DEFINIZIONI DI ACCORDI ESTESI SUL TERRITORIO (RETI) E DI PROFILI AZIENDALI

La seconda criticità ha riguardato l'ambiente ideale per un determinato studente e settore. In particolare, sono stati discussi dal gruppo due nodi critici:

- A. Tenere conto del macro-settore produttivo distinguendo tra aziende di manutenzione e aziende di produzione. Per i primi è piuttosto difficile

### 5.3.3 MOMENTO CRITICO (C) - GESTIONE E CONDIVISIONE DEL PIANO FORMATIVO

La terza criticità è relativa al fatto di considerare il sistema duale come una forma di addestramento al lavoro o come un processo di apprendimento in senso stretto. In particolare, sono stati discussi dal gruppo due nodi critici:

- A. Come l'azienda può sostenere la motivazione dell'allievo;
- B. Come dare direzione e valutare l'apprendimento nel percorso duale.

La soluzione proposta dal gruppo di progetto GP3 implica una **condivisione tra TA e TS del piano formativo e delle procedure operative di gestione del percorso duale**. Tale soluzione si articola nei seguenti elementi:

1. Per il profilo dell'allievo (fragile, consapevole, ecc.) definire:
  - a. modalità di apprendimento
  - b. modalità di rinforzo e auto-valutazione
  - c. tempo in azienda per rielaborare
  - d. in base alle criticità osservate si ridefinisce il punto a).
2. Supporto all'azienda:
  - a. nel definire tempi e spazi da dedicare al percorso di apprendimento dell'allievo
  - b. nella valutazione passo dopo passo del percorso condivisa tra TA e TS.

Anche questa terzo momento critico della strategia generale di gestione del percorso duale implica un incremento dell'interazione tra scuola e azienda. Tale interazione prende corpo quando TA e TS supportano la motivazione dell'allievo mediante rinforzo e valutazione.

programmare l'inserimento di nuove risorse umane nel ciclo produttivo. Per le seconde tale compito si rivela più agevole in base ai cicli produttivi e alla domanda. Tuttavia, rimane aperto il tema di come la scuola intesse rapporti stabili con il sistema produttivo tanto da formare reti di scuole-aziende dedicate al duale [13];

- B. Una seconda tipologia di profilazione è legata alla probabilità di attrarre e mantenere nell'organico nuove risorse umane e di come questa scommessa sulle competenze dei giovani può essere giocata in termini di nuova occupabilità.

Il gruppo di lavoro GP2, dedicato a questo secondo punto, ha avanzato le seguenti soluzioni:

1. **Costituire una rete** di referenti del duale composta da: tutor scolastici (TS), tutor aziendali (TA), referenti della Camera di Commercio e delle Associazioni di Categoria. Le attività principali della Rete sono due: (a) confronto mediante un *tavolo di lavoro stabile* per garantire nel tempo l'allineamento tra scuola e azienda; (b) *sviluppare un piano di proposte* per informare e sensibilizzare la comunità sulle opportunità di apprendimento duale;
2. **Profilazione delle aziende secondo tre categorie.**
  - a. "Micro aziende" con alte opportunità di apprendimento;
  - b. "Piccole aziende" con buone possibilità di assunzione;
  - c. "Medie aziende" ottime possibilità di assunzione.
3. **Formazione dei referenti aziendali** nell'ottica dell'azienda di ottenere una certificazione di struttura formativa.

## 6 VALUTAZIONE

### 6.1 FEEDBACK DEI PARTECIPANTI

Come illustrato nel capitolo precedente, il Learning Atelier ha coinvolto attivamente circa 2 funzionari di servizio e 16 persone tra tutor scolastici e aziendali e altri referenti.

Alla fine del programma, lo staff del progetto ha inviato un sondaggio online ai partecipanti per raccogliere informazioni sulla loro esperienza di formazione. Il sondaggio ha previsto 5 domande su:

- logistica;
- materiale fornito;
- grado di soddisfazione riguardo la coerenza e la chiarezza dei contenuti proposti, la conduzione del facilitatore, la metodologia utilizzata (design thinking), la trasferibilità delle soluzioni proposte;
- necessità di formazione futura
- osservazioni e commenti liberi.

In 14 hanno risposto al questionario e i risultati hanno rivelato un feedback positivo: il 64,3% degli intervistati è stato altamente soddisfatto sui punti a) e b). Sulla voce c), una media del 75% si è dichiarata altamente soddisfatta, a parte la trasferibilità percepita dei risultati, che sono giudicati leggermente positivi (50% degli intervistati altamente soddisfatti).

Considerando i bisogni formativi futuri espressi nell'indagine, sono state evidenziate tre categorie principali: a) progettazione dei processi di apprendimento; b) esplorazione dei bisogni degli studenti per la preparazione all'apprendimento; c) valutazione dell'apprendimento (Fig.4).

DuALPlus - D.T2.4.1 Report sui programmi di formazione



Figura 4: risposte alla domanda: "quali tematiche vorresti esplorare se venissero organizzati altri workshop?".

Tra i commenti, è emersa la necessità di promuovere tali opportunità di formazione e un maggiore scambio con le aziende interessate all'apprendistato duale.

Da un lato, un tutor scolastico ha detto: "progettare e condividere il percorso formativo duale con i tutor aziendali mi stimola molto. Finora abbiamo lavorato cercando di condividere il più possibile ma il linguaggio di base era quello scolastico".

Dall'altro lato, un tutor aziendale ha dichiarato: "serve un maggiore coinvolgimento del tutor aziendale nella formazione e nello scambio con i peer tutor"; e ancora: "non vediamo ostacoli a livello organizzativo, ma solo impegno e dedizione da parte del tutor aziendale nel trasmettere la passione per il lavoro allo studente".

Pertanto, sembra fondamentale sviluppare un linguaggio comune e condiviso come base per un efficace processo di pianificazione partecipata. I tutor aziendali sono disposti a svolgere un ruolo attivo nel sistema duale!

Infine, mentre le discussioni tra i gruppi di lavoro e il facilitatore sono state ampie e profonde, sarebbe stato necessario dedicare più tempo alla fase delle conclusioni.

## 7 LEZIONI APPRESE

### 7.1 SUGGERIMENTI PER IL FUTURO

Delle cinque fasi previste dai laboratori del DT, nelle 12 ore a disposizione si sono svolte le prime tre: definire, abbozzare, decidere. Lo sviluppo dell'Atelier implicherebbe un lavoro di continuità finalizzato alla prototipazione e alla verifica della soluzione, rispettivamente quarta e quinta fase del DT.

Di seguito alcune indicazioni per il futuro:

- Si suggerisce di concludere il ciclo di lavoro del DT con la fase di prototipazione e verifica sul campo della strategia generale di co-gestione e progettazione del percorso duale. Questa prima attività implica il richiamo in aula del gruppo che ha partecipato alla tre giorni di settembre 2020;
- Consequente al primo punto si suggerisce di definire un numero congruo di ore con lo scopo di approfondire i dettagli operativi della co-progettazione e gestione dell'allievo lungo i quattro momenti chiave del duale: preparare, dirigere, motivare, valutare l'apprendimento. Su questi elementi è necessario rafforzare il gruppo con un linguaggio e delle conoscenze di base più consolidate (si veda le video-presentazioni dedicate ai temi dell'apprendimento, motivazione, valutazione e relativi glossari);
- Vista la buona riuscita dell'attività formativa e i riscontri ricevuti, si suggerisce di organizzare attività di DT da offrire ai TS e TA impegnati nei percorsi di formazione e apprendimento a la-

voro, all'interno di una programmazione annuale/biennale. Tale misura può essere adottata ai fini di una maggiore sensibilizzazione e cambio di visione del duale (da forma rimediale di intervento a reale opportunità di apprendimento);

- Come antecedente o conseguente al punto 3 definire una campagna di sensibilizzazione più intensa rivolta a scuole, aziende e consulenti di lavoro tesa a promuovere una maggiore "attrattività del DUALE". Il messaggio della campagna potrebbe essere: "In azienda imparo bene, imparo tanto";
- Il numero dei tutor aziendali partecipanti è stato adeguato; tuttavia, i tutor scolastici e le altre figure erano numericamente prevalenti. Sarebbe consigliabile intensificare la promozione del percorso formativo Atelier dell'Apprendimento all'interno delle aziende, tenendo conto di alcune delle soluzioni emerse durante questa esperienza (e.g., riconoscere la formazione dei tutor aziendali).

### 7.2 FAMIGLIE DI STRATEGIE PER LA GESTIONE DEI PROCESSI DI APPRENDIMENTO NEL CONTESTO DUALE

Un'altra lezione appresa è il potere generativo che l'Atelier può avere nelle pratiche di apprendimento per gli studenti negli ambienti di lavoro. Come già detto, i principali

processi trattati all'interno dell'Atelier dell'Apprendimento realizzato per il progetto Dual Plus sono stati:

- introdurre e preparare lo studente/apprendista all'esperienza di apprendimento in azienda;
- pianificare le attività di apprendimento in azienda;
- gestire la motivazione all'apprendimento in azienda;
- valutare l'apprendimento in azienda.

Ciascuno di tali processi è affrontabile, considerando il punto di vista dell'organizzazione che ospita l'apprendista in fase di apprendimento, e dunque considerando il prevalenza il tutor aziendale, attraverso l'uso di strategie e di relative attività/tecniche, che possono essere applicate nei momenti strategici dell'esperienza di apprendimento.

Le strategie, essendo generative per l'identificazione o la rimodulazione delle attività da proporre all'apprendista, sono inquadrabili all'interno del concetto di "famiglia" di strategie, in cui:

- ciascuna strategia è collegabile ad un'altra attraverso le attività/tecniche proposte;
- tutte le strategie possono generarne delle altre attraverso attività di combinazione o di integrazione delle preesistenti;
- è presente un "filo-conduttore", o uno o più elementi caratterizzanti le strategie e le attività presenti all'interno.

In base agli esiti dell'atelier dell'apprendimento per Dual Plus, è stato possibile identificare una prima famiglia di strategie, considerando i quattro processi strategici precedentemente indicati.

Nella seguente tabella è possibile avere una sintesi delle due strategie proposte per ciascuno di tali processi.

Processi per la gestione dell'apprendista	Famiglia di strategie
Introdurre e preparare lo studente all'esperienza di apprendimento in azienda.	"Dare una cittadinanza all'apprendista" "Dare un gruppo all'apprendista"
Pianificare le attività di apprendimento in azienda.	"Costruiamo insieme gli obiettivi di apprendimento"
Gestire la motivazione all'apprendimento in azienda.	"I modelli sono importanti" "Arricchiamo il lavoro"
Valutare l'apprendimento in azienda.	"Feedback che fanno pensare" "Ti valuto per farti crescere. La valutazione formativa"

## 8 BIBLIOGRAFIA

**[1] Decreto Legislativo n.81 del 15 giugno 2015:** [Nuova disciplina nazionale dell'apprendistato duale](#), 2015.

**[2] Decreto Ministeriale del 12 ottobre 2015:** [definizione degli standard formativi dell'apprendistato duale e criteri generali per la realizzazione dei percorsi di apprendistato](#), 2015.

**[3] Legge Provinciale n.10 del 20 giugno 2016:** [modificazioni della legge provinciale sulla scuola](#) 2006, 2016.

**[4] Deliberazione n. 1391 del 19 agosto 2016:** "Adozione degli obiettivi generali dell'apprendistato volto al conseguimento dei titoli di studio e degli standard formativi di cui agli articoli 43 e 45 del Decreto Legislativo n. 81 del 2015 e dell'articolo 30 della Legge provinciale 20 giugno 2016, n. 10".

**[5] Deliberazione n.1398 del 19 agosto 2016:** "Adozione degli standard e dei criteri generali per la realizzazione dell'apprendistato di cui agli articoli 43 e 45 del Decreto Legislativo n.81/2015 e approvazione dello schema di protocollo per l'attuazione.

**[6] Raccomandazione della Commissione Europea del 5 ottobre 2015:** [proposta per un quadro europeo per apprendistati efficaci e di qualità](#).

**[7] Julia Pintsuk-Christof**  
Training Needs of SMEs in the Skilled Crafts and Trades Regarding Dual Education - [SME needs assessment report \(D.T2.2\)](#), 2019.

**[8] Terttu Tuomi-Grohn, Yrjo Engestrom**  
Tra scuola e lavoro. Studi su transfer e attraversamento dei confini; Ed. Il Mulino, 2013.

**[9] National Academies of Sciences, Engineering, and Medicine.**  
Come apprendiamo: Discenti, contesti, culture. Roma: LAS, 2019.

**[10] Maurizio Gentile**  
Valutare per apprendere. Attività e strumenti per il lavoro in classe. Novara: UTET, 2019.

**[11] Maurizio Gentile**  
Motivare ad apprendere. Isre, vol. 5, p. 43-5, 1998.  
Disponibile su: [www.successoformativo.it/request.php?87](http://www.successoformativo.it/request.php?87).

**[12] Jere Brophy**  
Motivare gli studenti ad apprendere. Roma: LAS, 2003.

**[13] Fondazione Di Vittorio**  
I modelli di successo della formazione duale. 25 casi di Alternanza Scuola-Lavoro e Apprendistato Formativo di Qualità!  
Disponibile su: [www.sodalitas.it/public/alle-gati/\\_W4Y-1803-EXECUTIVE-SUMMARY-\(1\)\\_2018320173036830.pdf](http://www.sodalitas.it/public/alle-gati/_W4Y-1803-EXECUTIVE-SUMMARY-(1)_2018320173036830.pdf)

**[14] Euridice Italia**  
Il Sistema Scuola-lavoro in Germania.  
Fonte generale: EURYBASE – Banca dati della rete Eurydice sui sistemi educativi europei (dossier Germania): <http://www.eurydice.org>



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## ZUKUNFTSFIT: DUALE AUSBILDUNG VERBESSERN

- **ARBEITSPAKET**

T2 - Innovation und Qualität der dualen Ausbildung

- **AUTOR**

Hannelore Schwabl - lvh

- **ERGEBNIS**

D2.4.1 Training programmes reports

- **ERSTELLUNGSDATUM**

30. Juni 2020

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# 1 ZUSAMMENFASSUNG

## EINLEITUNG

Der Schwerpunkt des Projektes DuALPlus ist es, die duale Ausbildung in den Alpenregionen zu fördern und weiter zu verbessern.

Erstens wird das Projekt die Beratung zur richtigen Berufswahl von Jugendlichen verbessern und die öffentliche Anerkennung der dualen Ausbildung als wertvoller Lernweg steigern.

Zweitens wird sie Innovation und Qualität in der dualen Ausbildung fördern.

Als dritten Schwerpunkt werden die Ergebnisse des Projekts die Rahmenbedingungen für Innovation verbessern, indem sie die horizontalen und die vertikale Durchlässigkeit des dualen Ausbildungssystems heben.

Zum Thema „Karriereberatung und Anerkennung“ wurde eine Umfrage gestaltet. Ein Ergebnis den Befragungen von Jugendlichen und Ausbilder\*innen zu Beginn des Projekts war es, dass Prestige und gesellschaftliche Anerkennung für das duale Ausbildungsprogramme recht gering sind. Außerdem haben Jugendliche immer höhere Ansprüche an ihre zukünftigen Arbeitgeber und Unternehmen suchen fittere Lehrlinge. Diesen Problemen kann mit der Verbesserung der dualen Ausbildung entgegengewirkt werden. Beim Thema „Innovation und Qualität in der dualen Ausbildung“. Das Projekt hat als Ziel ein mehrsprachiges Handbuch zu innovativen Methoden in der dualen Ausbildung zu entwickeln und teilt sich in fünf Zwischenstufen auf. Der erste Schritt ist die Einrichtung einer Lerngruppe „Community of practice“, gefolgt von qualitativen und quantitativen Umfragen zu den Bedürfnissen von KMUs, um die duale Ausbildung zu optimieren. Weiter werden Anregungen für die Ausbildung von Betriebstutoren gesammelt und eventuell ein Trainingsprogramm für Ausbilder in Zusammenarbeit mit KMUs eingeführt.

Die letzte Stufe ist die Entwicklung eines Erfahrungsberichts zu Ausbildung der Betriebsausbilder.

All das Wissen, welches in den verschiedenen Stufen angesammelt wurde, fließt in die Entwicklung des mehrsprachigen Handbuchs.

Ein wichtiges Ziel dieses Projektes ist die Entwicklung und Verbesserung von Schulungsprogrammen. Hier sind die Projektpartner aufgefordert, eigene Trainingsprogramme für Ausbilder zu verbessern und/oder neue einführen. Dies geschieht in Zusammenarbeit mit KMU und Ausbilder.

Lvh hat zu diesem Thema das Konzept „Zukunftsfit“ entwickelt, ein Workshop gemeinsam mit Ausbildern und Lehrlingen.

Im Mittelpunkt stehen das gegenseitige Kennenlernen und die Klärung offener organisatorischer Fragen.

Gemeinsam schauen Ausbilder und Auszubildende, was notwendig ist, um den Ausbildungsweg positiv zu beeinflussen, Herausforderungen zu meistern und Chancen zu nutzen. Darüber hinaus erleben alle Teilnehmer das Gefühl von Zusammenhalt und gegenseitiges Vertrauen. Auch lernen die Teilnehmer den Umgang und die Wichtigkeit von Mentaltraining und Coaching kennen.

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## 2 HINTERGRUND

Unternehmen suchen zunehmend fitte Lehrlinge und Lehrlinge suchen anerkannte Unternehmen, in welchen sie ihren zukünftigen Beruf kennen und lieben lernen.

Doch dass diese Bedürfnisse auch auf beiden Seiten zufriedengestellt sind, ist nicht immer selbstverständlich.

Ivh.apa als Wirtschaftsverband für Handwerk und Dienstleister vertritt die Interessen dieser Branche und stärkt sie. Als Interessensvertretung kämpft Ivh, gemeinsam mit seinen Mitgliedern auf allen Ebenen für akzeptable Rahmenbedingungen für die Wirtschaft. Eine weitere wichtige Aufgabe des Ivh ist es, die Mitglieder laufend zu informieren, beraten und zu unterstützen

Ivh bekommt immer wieder Rückmeldungen von Seiten ihrer Mitglieder, dass die Ausbildung von Lehrlingen nicht reibungslos verläuft und hat sich deshalb zum Ziel gesetzt, sowohl dem Unternehmer als auch dem Lehrling eine Unterstützung anzubieten. Da in Südtirol kein Programm in diese Richtung angeboten wird, hat Ivh zusammen mit zwei erfahrenen Trainern das Konzept „Zukunftsfit“ entwickelt, wo sie Lehrlinge, UnternehmerInnen und AusbilderInnen auf dem gemeinsamen Weg unterstützen.

Der freiberufliche Outdoor- und Mentaltrainer Valentin Piffraeder arbeitet schon seit vielen Jahren mit dem Ivh zusammen, in dem er vor allem die Lehrlinge für die Weltmeisterschaften der Berufe vorbereitet. Seine Fähigkeit, junge Menschen zu einer Mannschaft

zusammenzuschweißen, diese zu begeistern und sie zu motivieren, gemeinsam für ein Ziel zu trainieren haben den Südtiroler Junghandwerkern zu vielen Höchstleistungen und Auszeichnungen verholfen. .

Die Trainerin für Konfliktmanagement und systemische Organisationsentwicklung Vera Nicolussi-Leck begleitet und zu unterstützt Menschen und Organisationen kompetent und wirksam in Konfliktklärungen und Entwicklungen von Zukunftsstrategien.

Lieder konnte das Programm nicht innerhalb der Projektzeit umgesetzt werden, doch ist geplant, die Workshops zu Zukunftsfit im Herbst 2021 zu starten.

Inhalte sind das Kennenlernen von Führungs- und Lerntechniken, Strategien zur Lösung von Konflikten und gegenseitigen Ressourcen. Dies Fähigkeiten gekoppelt mit Reflexion des eigenen Handelns, tragen zur Stärkung von Sozialkompetenzen bei und unterstützen die persönliche Entwicklung. Durch gesteigerte Leistung, Kommunikations- und Teamfähigkeit, wie auch den wertschätzenden gegenseitigen Umgang, verändert sich nachhaltig die Kultur des gesamten Unternehmens.

Automatisch nehmen Unzufriedenheit, Konflikte und Lehrabbrüche ab. Im Gegenzug verbessern sich Motivation, Qualität und Leistungsbereitschaft von AusbilderInnen und Lehrlingen. Ebenso erhöht sich die Verbundenheit der Lehrlinge mit dem Unternehmen.

Gleichzeitig wird die Attraktivität des dualen Bildungssystems für das Handwerk und Gewerbe im Alpenraum gestärkt und die Vernetzung von Wirtschaft, Bildung und Wissenschaft wird erleb und spürbar.

## 3 ZIELE ZUKUNFTSFIT

Die Teilnehmenden

- erkennen, dass Lernen eine Interaktionsform ist, bei der alle durch gemeinsamen und wechselseitigen Austausch neue Kenntnisse und Fertigkeiten erwerben
- verstehen, dass alle gleichberechtigt am Lerngeschehen beteiligt sind und tragen somit gemeinsam dafür Verantwortung
- lernen Schemata, Modelle und Techniken aus der Führungswissenschaft und Lernforschung kennen und anwenden
- entwickeln sich persönlich weiter, stärken ihre Sozial und Lösungskompetenz
- erfahren, dass neue Erkenntnisse durch Lehren entstehen
- verstehen unternehmerische Zusammenhänge und bringen ihre Stärken im Team ein

- lernen Feedback annehmen und geben, sind aktiv und neugierig
- können sich auf jedem Parkett bewegen und werden zu einem Aushängeschild für das Unternehmen
- verändern nachhaltig die Kultur des gesamten Unternehmens.
- bringen einen positiven Spirit in das Unternehmen
- zeichnen sich durch eine wertschätzende und lehrlingsfreundliche Unternehmenskultur aus
- bauen ein nährendes Netzwerk auf
- haben ein klares Bild zum Thema Onboarding und Ausbildungsplan

## 4 BESCHREIBUNG DES ENTWICKELTEN PROGRAMMS

### 4.1 BAUSTEINE ZUKUNFTSFIT



Die Inhalte der einzelnen Bausteine werden im Folgenden im Detail beschrieben.



#### 4.1.1 INFORMATIONSVERANSTALTUNGEN ZUKUNFTSFIT

Die Informationsveranstaltungen finden in den Bezirken Schlanders, Bozen, Brixen und Bruneck statt. Hier wird das Projekt erstmals vorgestellt. Alle Interessierten haben die Möglichkeit Fragen zu stellen, Anregungen zu geben und sich natürlich gleich für die Zusatzqualifikation Zukunftsfit anzumelden.

Die Moderation dieser 30 Minuten gibt einen ersten Einblick über die Arbeitsweise der TrainerInnen und die Wirkung der Zusatzqualifikation.

Dauer: 4 x 30 Min.

#### 4.1.2 KICK-OFF ZUKUNFTSFIT

Das Kick-Off ist die Auftaktveranstaltung zur Zusatzqualifizierung Zukunftsfit für Lehrherren, AusbilderInnen und Lehrlinge.

An diesem Tag stehen gegenseitiges Kennenlernen und das Klären von noch offenen organisatorischen Fragen im Mittelpunkt.

Gemeinsam betrachten Lehrherren, AusbilderInnen und Lehrlinge, was notwendig ist, um positiven Einfluss auf den Ausbildungsweg zu nehmen, Herausforderungen zu meistern und Chancen zu nutzen. Zusätzlich erleben alle TeilnehmerInnen erste Inhalte von Zukunftsfit.

Dauer: 1 Tag

#### 4.1.3 LEHRHERRN UND AUSBILDERINNEN UNTER SICH

Ein klar strukturiertes Ausbildungsprogramm schafft Rahmen, gibt Sicherheit und Orientierung und ermöglicht es so, eigenverantwortlich, einen gemeinsamen, gewinnbringenden Lernweg zu gehen.

Was bedeutet Führen mit Sinn und Blick auf das große Ganze? Wie erkenne und nutze ich Ressourcen und Stärken? Wo liegen meine eigenen Ressourcen und Stärken?

Wie gehe ich mit Feedback oder Fehlern um? Wie fördere ich meinen Lehrling fachlich und sozial? Wie gelingt uns ein wertschätzendes Miteinander?

Diese und ähnliche Fragen beantworten wir gemeinsam in den Modulen.

Die Teilnehmenden:

- haben eine klare Vorstellung über die Onboarding phase und den Ausbildungsplan
- können den Rahmen für eine passende Lernumgebung im Unternehmen schaffen
- reflektieren ihre Haltung als Führungskraft
- erkennen ihre eigenen Persönlichkeitsstruktur
- setzen ihre Rolle in Bezug auf die Organisation und deren Umwelten situationsbewusst ein
- lernen Schemata, Modelle und Techniken aus der Führungswissenschaft und Lernforschung kennen und anwenden
- kennen ihre eigenen Ressourcen, Stärken und Schwächen
- kennen ihr Selbst und Fremdbild
- trainieren ihre Kommunikationsfähigkeit
- erleben sich als selbstwirksam
- lernen durch Lehren
- wissen wie sie sich einen Eindruck über das Können und die Kompetenzen der Lehrlinge verschaffen
- können Feedback geben und nehmen
- erkennen Lernlücken und fangen dies auf
- sprechen kritische Themen konstruktiv an
- erkennen Konflikte rechtzeitig und verfügen über Lösungskompetenz
- wissen wie sie ihre Lehrlinge auf ihrem Lernweg unterstützen können
- nutzen Techniken zur Entschleunigung
- lernen Möglichkeiten zur Verhaltensveränderung kennen
- kennen die Dynamik und die Voraussetzung für Leistungsfähigkeit von Teams
- erkennen den Wert von Teamentwicklung
- können einen wertschätzenden Ausstieg gestalten

Dauer: 2 x 2 Tage

#### 4.1.4 LEHRLINGE UNTER SICH

In diesen zwei Modulen wird eine Lernumgebung für junge Menschen geschaffen, welche ihnen Entwicklung ermöglicht. Sie lernen ihre Fähigkeiten und Talente besser kennen und wissen wie sie diese bestmöglich auf ihrem Ausbildungsweg und im Unternehmen einbringen können.

Die Teilnehmenden:

- reflektieren ihre Haltung als Lehrlinge und dem Unternehmen gegenüber
- erkennen ihre eigenen Persönlichkeitsstruktur
- wissen was ihr Verhalten prägt
- setzen ihre Rolle in Bezug auf die Organisation und deren Umwelten situationsbewusst ein
- kennen ihre eigenen Ressourcen, Stärken und Schwächen
- kennen ihr Selbst und Fremdbild
- trainieren ihre Kommunikationsfähigkeit
- erleben sich als selbstwirksam
- lernen durch Lehren
- kennen die Dynamik von Teams
- lernen Schemata, Modelle und Techniken aus der Lernforschung kennen und anwenden
- wissen wie sie sich einen Eindruck über das eigene Können und die eigenen Kompetenzen verschaffen
- können Feedback geben und nehmen
- erkennen Lernlücken und begegnen diesen aktiv und eigenverantwortlich
- sprechen kritische Themen konstruktiv an
- wissen wie sie sich auf ihrem Lernweg Unterstützung holen können
- nutzen Techniken zur Entschleunigung
- lernen Möglichkeiten zur Verhaltensveränderung kennen
- erkennen den Wert und die Wichtigkeit von Zeitmanagement

Dauer: 2 x 2 Tage

#### 4.1.5 MITEINANDER

Gemeinsam werden nun die erlernten Inhalte vertieft, angewandt, reflektiert und auf ihre Transferwirksamkeit in den Alltag überprüft.

Die Teilnehmenden:

- erkennen und reflektieren gemeinsam ihre Werte, Einstellungen und Glaubenssätze
- erleben ihren eigenen Teambildungsprozess gekoppelt mit theoretischem Hintergrundwissen und Reflexion
- klären ihre Rolle und Rollenerwartungen
- entdecken ihre Verantwortung für den Erfolg des Lernprozesses und des Unternehmens
- trainieren ihre Kommunikationskompetenz

- üben den konstruktiven und lösungsorientierten Umgang mit Konflikten
- erkennen den Wert von Vertrauen und Freude am alltäglichen Wirken
- planen gemeinsam den Transfer

Dauer: 2 Tage

#### 4.1.6 KAMINGESPRÄCHE

Die zweitägigen Module werden durch Kamingsgespräche zu aktuellen und Zukunftsthemen (wie beispielsweise Innovation, Digitalisierung, sinnvolle Arbeitssicherheit) abgerundet. Ein gemütliches Beisammensitzen mit Austausch, Netzwerken, neue Pläne schmieden, lassen die Abende ausklingen.

Dauer: zweistündige Abendveranstaltung samt Abendessen

#### 4.1.7 MENTALTRAINING UND COACHING

Unterstützend nehmen alle TeilnehmerInnen zwischen den Modulen die Möglichkeit eines individuellen Mentaltraining oder Coaching in Anspruch.

Dieses findet sowohl im Einzelsetting als auch im Teamsetting (AusbildnerIn Lehrling) statt.

Fragen wie: „Wie wirke ich auf andere, welches sind meine blinden Flecken und unbewussten Muster, welche Erwartungen werden an mich als LehrherrIn, AusbilderIn oder Lehrling gestellt, wie gestalte ich meine Arbeit, usw.“, werden im persönlichen Coaching oder Mentaltraining reflektiert und ermöglichen so bewussteres Handeln. Gleichzeitig werden Techniken zum besseren Umgang mit Stress und fordernden Situationen eingeübt.

Dauer: Insgesamt 16 Stunden pro TeilnehmerIn, individuell planbar

#### 4.1.8 KICK OUT

Ein gelungenes Projekt braucht einen erfolgreichen Abschluss

Gemeinsam ziehen wir abschließend Transferschleifen:

- tauschen wir erste Erfahrungen aus
- sammeln Gelungenes und Hürden,

- überlegen passende Transferaktionen
- geben Ausblick
- planen weitere Treffen am Stammtisch

und lassen die gemeinsame Zeit mit einem gemeinsamen Abendessen ausklingen.

Dauer: 1 Tag

## 4.2 METHODEN

Die eingesetzten Methoden werden der jeweiligen Problemsituation gerecht und somit sind alle aufgeführten Werkzeuge als mögliche Einsatzmittel zu sehen also flexibel in ihrer situativen Anwendung.

Einen theoretischen Hintergrund liefert das Modell der strategischen, generischen Problemlösung, (Watzlawick, Bateson, u.a.) welches besagt, dass nur durch gemeinsame Klärung der aktuellen Situation umsetzbare und von allen Beteiligten getragene Lösungen entwickelt und implementiert werden können. Weitere Methoden stammen aus der Kommunikationswissenschaft, der systemischen Beratung und der Typenlehre des Enneagramms.

Anlehnend an die Theorie Positive Leadership, gehen wir davon aus, dass jeder Einzelne über einen wertvollen Reichtum an Grundkenntnissen verfügt. Die Umsetzung des Pakets „Zukunftsfit“ war ursprünglich für April 2021 geplant. Durch die Covid19 Pandemie im Frühjahr 2020 wurde die Implementierung auf September 2021 verschoben. Durch den neuen Lockdown aufgrund von Covid19 im Winter 2020 wurde dieser Termin erneut unmöglich und die Umsetzung für September 2021 gesetzt. Da

## 5 IMPLEMENTATION

Die Umsetzung von "Zukunftsfit" war ursprünglich für April 2020 geplant. Aufgrund der Covid19-Pandemie im Frühjahr 2020 wurde die Umsetzung auf September 2020 verschoben. Aufgrund der durch Covid19 im Winter 2020 verursachten neuen Aussperrung wurde dieser Termin wieder unmöglich und die Umsetzung für 2020 wurde abgesagt. Wir werden versuchen, es im September 2021 zu organisieren, obwohl das Datum nicht mehr in der

und mit dieser Methodik können wir eine maximale Anpassung der Workshopverfahren sicherstellen, die zusammen mit konkreten Experimentierergebnissen zu maximalem Lernen führt (mit Kopf, Herz und Hand).

Die zusätzlich verwendete Lehrmethode ist das sog. "action learning".

Im Gegensatz zu einem typischen Traineransatz, bei dem die TeilnehmerInnen dem Trainer/der Trainerin gegenüber sitzen, der/die die goldenen Regeln eines bestimmten Themas beschreibt, erleben die TeilnehmerInnen im konkreten Handeln neue Erfahrungen. Die Erfahrungen und Erfolgserlebnisse werden im Anschluss gemeinsam mit dem Trainer/der Trainerin reflektiert und auf ihre Transferwirksamkeit überprüft. Dadurch werden sie nachhaltig in den Arbeitsalltag übertragen. Das Format ist interaktiv und sehr partizipativ.

Kreativtechniken, Outdoormethoden und Techniken aus dem Mentaltraining erweitern die Gestaltung der einzelnen Module.

Durch die Erstellung von Ad-hoc-Umsetzungsplänen werden schließlich die Bedingungen geschaffen, unter denen die TeilnehmerInnen die Inhalte der einzelnen Bausteine systematisch und proaktiv in den Arbeitsalltag übertragen können.

das außerhalb des Projektzeitraumes ist, wird nun der Schwerpunkt des Workpackage T2 auf die „Lehrlingsmappe“ gelegt.

Projektzeit ist. Stattdessen liegt der Fokus der Aktivität auf der "digitalen Ausbildungsmappe".

## 6 EVALUATION

### 6.1 COVID- KRISE

Das Programm konnte aufgrund der aktuellen Covid 19- Pandemie nicht umgesetzt werden. Zukunftsfit wurde 2-mal (Frühjahr und Herbst 2020) ausgeschrieben, musste allerdings jedes Mal abgesagt werden, da physische Treffen nicht möglich waren.

Für die gewählte Workshop-Art für das Projekt „Zukunftsfit“ ist allerdings eine physische Anwesenheit aus diversen Gründen unabdingbar.

Online – Workshops erschweren und minimieren die Interaktion untereinander. Können sich Lehrlinge und Lehrherr nicht austauschen, stellt vor allem für die Module „AusbilderInnen“, „Lehrling“, „Miteinander“ und „Kickout“ eine Hürde dar.

Darüber hinaus fehlt der informelle Austausch unter den Teilnehmer\*Innen, der normalerweise in den Zeiten zwischen den einzelnen Modulen stattfindet. So werden die Pausen zuhause und nicht vor Ort abgehalten und lassen kaum zufällige Zwischengespräche zu.

Auch bei den Kaminesgesprächen online werden nicht dieselben Ergebnisse erreicht, da bei einer Online-Veranstaltungen die Gespräche von einer Person geleitet werden müssen und somit kein natürlicher Austausch unter den TeilnehmerInnen entstehen kann.

Ein Mentalcoaching und -Training kann online nicht durchgeführt werden, da die Coaches die Mimik und Gestik der TeilnehmerInnen in Bezug auf bestimmte Fragen nicht sehen und somit nicht deuten und coachen können.

Zusätzlich kann eine schlechte Internetverbindung oder fehlende technische Ausrüstung, wie beispielsweise keine Kamera, die Teilnehmenden frustrieren und störend für die gesamte Gruppe sein. Dies beeinflusst negativ die gewünschten Ergebnisse.

Alle genannten Gründe würden den Ablauf und die Ergebnisse des Projektes „Zukunftsfit“ verschlechtern. Aufgrund dessen wird versucht werden, die Umsetzung von Zukunftsfit auf September 2021 zu verlegen. Leider ist dieser Zeitplan nicht mehr innerhalb der Projektphase



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### LE TITRE ENTREPRENEUR PETITE ENTREPRISE

- **PAQUET DE TRAVAIL**

T2 - Innovation et qualité dans la double éducation

- **LIVRABLE**

D2.4.1 Rapports sur les programmes de formation

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# 1 RÉSUMÉ

## INTRODUCTION

La reconnaissance du niveau régional comme échelon pertinent concernant la mise en œuvre des politiques de formations professionnelles est devenue une évidence. Les compétences des Régions dans ce domaine n'ont cessé d'être renforcées au fil des années. Les débats en cours au sein de notre propre réseau dans le cadre de la révision générale des politiques publiques (RGPP) en témoignent encore si besoin était. La formation est désormais une affaire régionale.

La mise en place d'une université des métiers et l'artisanat (URMA) en Rhône-Alpes s'inscrit dans cette logique. Les 11 CMA de Rhône-Alpes travaillent depuis plusieurs années pour assurer la lisibilité et la cohérence de leurs actions conduites sur les différents territoires de la région

Différentes initiatives qui devraient contribuer à faciliter la mise en place et le développement d'une URMA témoignent de cette culture de travail en réseau régional qui structure l'offre de services des CMA de Rhône-Alpes dans les domaines de l'orientation, de la formation et de l'emploi :

- Concernant les centres de formation d'apprentis, les CMA et les CCI de Rhône-Alpes ont initié une coordination formalisée des 10 CFA gérés par le réseau consulaire en Rhône-Alpes. La création depuis 2009 de cette tête de réseau vise à une prise de hauteur pour la définition d'une politique commune en matière de développement de l'apprentissage en lien avec le plan régional de développement des formations (PRDF). Elle vise à mieux coordonner l'offre de formation du réseau concernant l'apprentissage. Elle doit également permettre d'introduire plus de cohérence et de partage entre les initiatives prises par chacun des établissements du réseau.
- Les centres d'aide à la décision (CAD) fonctionnent depuis 1992 sur la base d'un cahier des charges commun pour l'accueil, l'information à l'orientation des jeunes et adultes intéressés par le secteur de l'artisanat,
- Les espaces artisans employeurs (EAE), initiés en 1999, utilisent des outils partagés

pour l'accompagnement des entreprises artisanales dans les domaines de l'emploi et de la gestion des ressources humaines

- Un dispositif de formation à l'installation commun, redéfini en 2008, vise à permettre aux porteurs de projet de bénéficier de modules de formation complémentaires aux Stages préparatoire à l'Installation et de préconisations en terme de formation et de suivi. Il s'agit ainsi de mieux évaluer les forces et faiblesses des projets et de favoriser leur pérennité.

### Les enjeux

Forts de ces acquis, les CMA Auvergne Rhone Aples aont avec la création d'une université des métiers et l'artisanat, pour objectif de répondre à des enjeux plus spécifiques :

- Répondre aux problématiques d'installation, de développement des entreprises et de qualification des personnes.
- Elargir les entrées dans le secteur notamment pour favoriser à moyen terme la création et la reprise d'entreprises de qualité.
- Organiser et consacrer la reconnaissance universitaire de la formation managériale des artisans dont le métier de chef d'entreprise est désormais reconnu pleinement comme requérant un ensemble de fonctions que la tradition n'attribuait pas à l'artisan.
- Promouvoir de façon cohérente et lisible l'offre de formation continue des CMA

## EXPERTS IMPLIQUÉ

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## 2 FOND

Le contrat d'apprentissage a pour but d'obtenir un diplôme d'État (CAP, BAC, BTS, Licence, Master,...) ou un titre à finalité professionnelle inscrit au répertoire national des certifications professionnelles (RNCP), dont les diplômes de l'Éducation Nationale et les titres professionnels relevant du ministère du Travail.

La durée varie en fonction de la formation choisie :

- En principe de deux années pour la période d'apprentissage ; cette durée peut, dans certains cas dérogatoires, être inférieure (6 mois) ou supérieure (3 ans), voire 4 ans pour les travailleurs handicapés.
- La durée de la formation représente au moins 400 heures dans le cadre du contrat d'apprentissage.

L'apprenti bénéficie d'une rémunération variant en fonction de son âge ; en outre, sa rémunération progresse chaque nouvelle année d'exécution de son contrat. Le salaire minimum perçu par l'apprenti correspond à un pourcentage du Smic ou du SMC (salaire minimum conventionnel de l'emploi occupé) pour les 21 ans et plus.

Les centres de formation d'apprentis (CFA) dispensent une formation générale, technologique et pratique. En contact étroit avec le monde professionnel, ils sont le lieu privilégié d'une pédagogie spécifique à l'apprentissage de chaque métier.

Fondé sur le transfert de compétences par les maîtres d'apprentissage, l'apprentissage est un mode d'acquisition concret à la fois de connaissances théoriques et de compétences pour maîtriser un métier, comprendre l'entreprise, acquérir les savoir-faire indispensables et ainsi favoriser l'intégration dans l'entreprise.

Au 31 décembre 2018, sur l'ensemble du territoire français, les centres de formation d'apprentis accueillent 448 100 apprentis dont 49 700 apprentis en Auvergne-Rhône-Alpes ; soit une hausse de 4,2 % par rapport à 2017. Les effectifs d'apprentis dans l'enseignement secondaire sont en hausse (+ 1,8 %) pour la deuxième année consécutive. La croissance de l'apprentissage dans l'enseignement supérieur reste à un niveau élevé (+ 8,1 % après + 9,1 % en 2017).

16,0 % des entrants en apprentissage viennent d'une classe de troisième, les jeunes de ce niveau s'orientant

principalement vers une seconde générale ou technologique (63,7 %).

L'organisation de l'apprentissage en France a connu une évolution majeure avec la réforme liée à la loi de septembre 2018 « Liberté de choisir son avenir professionnel » avec le passage d'un système régulé à une logique de marché.

Le financement est désormais assuré selon des coûts aux contrats définis par les branches professionnelles sous le contrôle de France compétences.

11 opérateurs de compétences ont été mis en place en 2019. Gérés par les branches professionnelles, ces organismes ont pour mission d'assurer :

- Le financement des contrats d'apprentissage et de professionnalisation sur la base des niveaux de prise en charge définis par les branches ;
- L'Appui technique aux branches : définition du coût au contrat, observatoire des compétences et qualifications, ingénierie de certification etc...

Les Régions qui disposaient précédemment d'une compétence majeure dans le financement et la régulation des ouvertures de formation par apprentissage voient désormais leur intervention se limiter à deux missions :

- Le financement des investissements dans les CFA
- La correction des inégalités territoriales

Concernant les Chambres de métiers et de l'artisanat, les missions sont désormais :

1° D'accompagner les entreprises qui le souhaitent, notamment pour la préparation du contrat d'apprentissage, préalablement à son dépôt auprès des opérateurs de compétences ;

2° D'assurer la médiation et la prévention des éventuels conflits entre employeurs et apprentis

3° De participer à la formation des maîtres d'apprentissage ;

4° De participer au service public régional de l'orientation ;

5° De participer à la gouvernance régionale de l'apprentissage

5° De participer à la gouvernance régionale de l'apprentissage

## 3 OBJECTIF

### 3.1 Répondre à des publics et à des besoins diversifiés

- Ouvrir l'apprentissage à des jeunes décrocheurs à l'Université souhaitant réorienter leur projet personnel et professionnel en leur proposant l'accès à une double qualification professionnelle sur les plans technique et managérial.
- Proposer à des demandeurs d'emploi ou à des adultes en reconversion une formation longue au management dans le cadre de l'accompagnement d'un projet de création ou de reprise d'entreprise.

**Consolider la formation des actifs de l'artisanat, artisans, conjoints apprentis en favorisant le développement d'une logique de parcours**

- Développer des partenariats avec les CFA de réseau consulaire pour proposer des qualifications managériales à des jeunes préparant ou déjà titulaires d'un diplôme de niveau IV.
- Favoriser le développement d'une logique de parcours auprès des actifs du secteur notamment en organisant l'offre de perfectionnement de façon modulaire et capitalisable.
- Promouvoir les certifications du secteur (CTM, BTM, BM3, ADEA) en lien avec cette logique de parcours.
- Développer la formation ouverte et à distance FOAD notamment pour les porteurs de projet d'installation.

**Coordonner et dynamiser les partenariats avec l'enseignement supérieur**

- Harmoniser et développer les partenariats avec l'enseignement supérieur en valorisant les initiatives existantes et en organisant la mise en œuvre de la convention signée par l'Assemblée Permanente des Chambres de Métiers et de l'Artisanat avec le Conservatoire National des Arts et Métiers.

- Mettre en place un comité de pilotage régional associant les représentants des établissements universitaires développant des relations avec les CMA Auvergne Rhône-Alpes avec l'objectif de capitaliser les bonnes pratiques, de promouvoir les dispositifs, de faire évoluer les dispositifs pédagogiques.

### 3.2 Organiser et promouvoir l'offre de formation des CMA de la Région.

- Donner une cohérence et une lisibilité à l'offre de formation des Chambres de métiers et l'artisanat de la Région dans le cadre d'une logique de cartographie régionale.
- Réaliser un catalogue régional des actions proposées par les CMA dans le cadre de la formation continue.
- Organiser la communication sur l'URMA et les actions liées à son déploiement, dans le respect de la charte nationale.

Le TEPE est un titre du CNAM (Conservatoire National des Métiers et de l'Artisanat) de niveau III (BAC +2), qui se prépare en une année.

C'est une formation qui s'appuie sur la réalisation d'un projet professionnel dans le secteur artisanal de la petite entreprise pour appliquer les bonnes pratiques en gestion commerciale, financière et organisationnelle.

L'objectif de la formation d'Acquérir les connaissances et les compétences transversales pour mener à bien un projet de :

- Développement de l'activité d'une entreprise,
- Création d'entreprise,
- Reprise d'entreprise.

Ce projet peut être réalisé dans n'importe quel secteur de l'artisanat : bâtiment, alimentaire, beauté, automobile, vente, ...

## 4 DESCRIPTION DU PROGRAMME

L'ensemble du parcours de formation du titre professionnel est articulé autour de quatre problématiques communes. Chacune sera traitée à travers un ou plusieurs modules :

Pour quoi faire ? Pour aider à donner du sens à l'action.

Quoi faire ? pour définir les priorités de l'action.

Comment faire ? Pour faciliter la réalisation de l'action.

Avec qui faire ? Pour savoir partager l'action.

La majorité de nos modules sont consacrés à favoriser et faciliter l'ACTION : comment faire ? Cette orientation pédagogique se décline aussi au niveau du traitement didactique de chacun des modules de façon à ce qu'ils :

puissent être pragmatiques en apportant des réponses concrètes en même temps qu'ils « ouvrent » les esprits à de nouvelles perspectives qui resteront à explorer ultérieurement ;

ne soient pas « rébarbatifs » ;  
permettent aux entrepreneurs de découvrir en rapport avec le sujet des points de repères simples, faibles et essentiels (du type : les 3 ou 4 choses à penser, à faire et les 3 ou 4 choses à éviter) ;

donnent aux entrepreneurs une « compétence » effective et non pas seulement une « connaissance » ;  
tiennent compte des niveaux parfois hétérogènes des entrepreneurs ;

favorisent l'implication de l'entrepreneur dans son projet.

### 4.1 EXIGENCES

Le titre Entrepreneur de la petite entreprise s'intègre dans un dispositif de formation-action d'une durée maximale d'un an.

Durant cette période, l'entrepreneur sera immergé dans sa situation professionnelle et suivra simultanément le parcours formation du titre, d'une durée de 308 heures .

La formation au titre professionnel présente deux facettes distinctes et complémentaires :

une partie pour aborder la gestion des processus et dénommée « les bonnes pratiques pour entreprendre » réservée à l'acquisition et la mise en oeuvre de méthodologies structurantes permettant à

l'entrepreneur de gérer son ACTION et les COMPÉTENCES nécessaires à la conduite de cette action (203 h) ;

et une partie pour aborder des repères disciplinaires, dénommée « les bonnes questions pour entreprendre », offrant à l'entrepreneur la possibilité de se construire un parcours modulaire personnalisé (105 h).

### 4.2 CONTENU ET STRUCTURE

Le stagiaire suit le parcours pédagogique suivant, en fonction de l'option choisie :

- \_ AGIR : Formation au pilotage opérationnel de projet de création, de développement d'activité ou de reprise (161 h) ;
- \_ Module 11 : « Comment piloter mon projet ? » (21 h) ;
- \_ Module 9 : « Comment évaluer les compétences nécessaires à mon projet ? » (21 h) ;
- \_ Les bonnes questions pour entreprendre : 5 modules de 21 heures (105 h).

Soit 44 jours de formation sur une durée à convenir (d'un maximum de 1 an).

#### 1 • « Les bonnes pratiques pour entreprendre »

Ces formations guident le stagiaire dans la réalisation du projet et l'aident à organiser son cheminement. Basées sur AGIR (161h), une méthode simple et opérationnelle de conduite de projet et des compétences, elles se déclinent selon trois profils : créateur, développeur d'activité, repreneur. Elles sont organisées en 2 chapitres :

- \_ AGIR Projet : une boîte à outils pour structurer et baliser le parcours par des points d'étape (cf. annexe). AGIR Projet est rythmé par 5 séquences thématiques qui constituent autant de points d'étapes dans la réalisation du projet. Chacune de ces séquences alterne des sessions collectives ou individuelles de face-à-face pédagogique (3 jours au total) et des périodes de travail personnel encadré d'application pratique.
- \_ AGIR Compétences : une méthode simple d'évaluation des compétences d'un poste de travail appliquée au et par le stagiaire lui

permettant de construire son plan d'amélioration des compétences. AGIR Compétences est rythmé en différentes séquences qui aident progressivement le stagiaire dans sa réflexion sur les compétences nécessaires au projet.

Les supports dédiés à AGIR sont fournis sur un seul et même outil, mis à disposition du stagiaire (document excel). Les formations sont facilitées par l'utilisation éventuelle d'@ppui®, une plate-forme informatique dédiée. Elles permettent ainsi à chaque participant d'avancer de façon concrète sur son projet sur la base des consignes de travail précisées lors des séances de face-à-face pédagogique.

UAEN90	Management de projet	AGIR Créateur : comment construire et mener mon projet de créateur d'entreprise ?
UAEN91	Management de projet	AGIR Développeur d'activité : comment construire et mener mon projet de développeur d'activité ?
UAEN92	Management de projet	AGIR Repreneur : comment construire et mener mon projet de repreneur d'entreprise ?

### AGIR Développeur d'activité (UAEN91)

#### OBJECTIFS

En relation directe avec le projet de développement d'activité, ce module permet d'utiliser la méthode et les outils de gestion de projet AGIR pour favoriser :  
l'identification du périmètre du projet ;  
le repérage du chemin à parcourir ;  
la conduite professionnelle et maîtrisée du projet.

#### CONTENU

- 1 - Connaître les enjeux du projet pour l'entreprise et le positionner dans la stratégie globale.
- 2 - Formaliser l'idée en projet :
  - Définir les objectifs et les livrables,
  - Décrire les contraintes,
  - Identifier les critères de réussite.
- 3 - Définir l'organisation projet :
  - Identifier les différents acteurs concernés et préciser leurs rôles, droits, devoirs,
  - Construire l'équipe projet.
- 4 - Construire la communication projet :
  - Rendre compte de l'avancement du projet aux différents niveaux de décision,
  - Valoriser les atouts du projet et développer l'adhésion en interne.
- 5 - Maîtriser la conduite du projet (qualité – coût – délai) :
  - Maîtriser les actions à réaliser,
  - Construire et gérer le budget projet,
  - Construire le planning et gérer l'avancement du projet.
- 6 | Dresser le bilan en termes de réalisation, de perspectives et de compétences acquises.

### AGIR Repreneur (UAEN92)

#### OBJECTIFS

En relation directe avec le projet de reprise, ce module permet d'utiliser la méthode et les outils de gestion de projet AGIR pour favoriser :  
l'identification du périmètre du projet ;  
le repérage du chemin à parcourir ;  
la conduite professionnelle et maîtrisée du projet.

#### CONTENU

- 1 Vérifier l'adéquation individu-projet.
- 2 Réaliser un diagnostic approfondi de l'entreprise :
  - Vérifier la faisabilité du projet de reprise,
  - Construire la stratégie de reprise.
- 3 | Identifier les compétences à détenir pour mener à bien le projet
- 4 | Bâtir le montage juridique, financier et fiscal :
  - Etudier les scénarii possibles et décider,
  - Rendre le projet crédible vis-à-vis de ses interlocuteurs.
- 5 | Finaliser le plan de reprise :
  - Parcours professionnel du repreneur ;
  - Diagnostic de l'entreprise,
  - Approche stratégique à court et moyen terme,
  - Structuration de l'approche commerciale,
  - Obtention des financements,
  - Maîtrise des actions à réaliser.
- 6 | Intégrer l'entreprise et manager le changement :
  - Se faire accepter comme futur dirigeant,
  - Réussir la prise en main effective de l'entreprise,
  - Construire les pistes de développement.
- 7 | Dresser le bilan en termes de réalisation, de perspectives et de compétences acquises.  
CNE

### DEROULEMENT DES ETAPES DU MODULE AGIR

Cette formation est dispensée au fur et à mesure de l'avancée du projet. Elle se répartit sur quatre séquences de travail.

#### Séquence 1 : formalisation du projet (4 jrs)

- Formuler les attendus et contenus du projet
- Définir le contexte de l'entreprise ;
- Formuler le contexte du projet ;
- Identifier les acteurs du projet ;
- Définir les compétences requises pour le projet ;
- Feuille de route pour la séquence suivante.

#### Séquence 2 : gestion du projet (6 jrs)

- Se fixer des objectifs atteignables ;
- Identifier les principales tâches à réaliser ;
- Évaluer les moyens nécessaires ;
- Définir des indicateurs de mesure ;



- Planifier les réalisations ;
- Elaborer le plan d'amélioration des compétences ;
- Feuille de route pour la séquence suivante.

#### Séquence 3 : suivi du projet (9 jours)

- Suivre la réalisation du plan d'action prévisionnel à travers des tableaux de bord ;
- Opérer des réajustements nécessaires ;
- Réaliser une situation intermédiaire de progression du PAC ;
- Feuille de route pour la séquence suivante.

#### Séquence 4 : évaluation du projet (4 jrs)

- Évaluer les résultats du projet : niveau atteint, facteurs de réussite, principales difficultés ;
- Définir de nouveaux axes stratégiques, techniques, organisationnels ou commerciaux induits par les résultats obtenus et les nouveaux objectifs fixés ;
- Réaliser le bilan des acquis en termes de compétences ;
- Pour AGIR Créateur et Repreneur : faire la synthèse du projet sur la base des plans d'affaires ou de reprise.

### 2 • « Les bonnes questions pour entreprendre »

Ces modules, d'une durée de 21 h chacun, offrent des réponses aux principales questions liées à la réalisation des projets. Ils ont été conçus pour apporter, dans un minimum de temps, des réponses pragmatiques, utiles et directement transférables sur le projet.

Ces modules sont proposés en présentiel. Dans l'hypothèse d'une mise en oeuvre pour un territoire et pour un groupe donné, nous pouvons déterminer à priori les modules proposés (cf paragraphe « Préconisation sur le choix des modules »).

Chaque module d'une durée de 21 heures est composé de trois phases distinctes et complémentaires étalées sur 3 semaines environ :

- phase 1 pour acquérir des connaissances (J1),
- phase 2 pour transformer ses connaissances en compétences (J2),
- phase 3 pour enrichir le groupe de son expérience, s'enrichir de l'expression du groupe et de l'intervenant (J3).

### J1 : PHASE D'ACQUISITION DE CONNAISSANCES

#### Objectifs :

- apporter des éléments de méthode et de contenu théoriques essentiels en relation avec la QUESTION posée.

- préparer le travail d'application à réaliser pour la phase 3.

**Contenus :** voir contenu des modules ci-après et/ou le référentiel détaillé du module au CNE.

**Déroulement :** variable selon la formule choisie :

- si formule en présentiel : séminaire de formation,
- si formule hybride : découpage du « cours » en 4 séquences de 2 heures (1h30 + 15 minutes d'exercices d'application induits par la séquence).

**Acteur principal** variable selon la formule choisie :

- si formule en présentiel : l'intervenant,
- si formule hybride : l'apprenant en liaison avec un tuteur via la plateforme Plei@d sur laquelle seront déposées les séquences.

**Durée :** 1 jour ou équivalent 7 heures

### J2 : PHASE DE TRANSFERT DES ACQUISITIONS

**Objectif :** mettre en application les éléments appréhendés dans la phase d'acquisition (en J1) au regard du projet mené (création / développement d'activité / reprise).

**Contenus :** variable selon la nature du sujet que l'apprenant aura décidé de développer dans ce travail de transfert

**Acteur principal :** l'apprenant

**Durée :** estimée et valorisée à hauteur de 7 heures de travail personnel

### J3 : PHASE DE RESTITUTION- EVALUATION

#### Objectifs :

- évaluer le travail de transfert réalisé par chacun des apprenants,
- permettre à chaque participant de s'enrichir du traitement du transfert réalisé par chacun des autres participants et de la synthèse de l'intervenant.

**Contenus :**

- présentation par chacun de son travail au groupe,
- complément de formation / approfondissement,
- synthèse du module à partir des 3 phases, devant aboutir à la production des « principaux



facteurs clés de succès » induits par la question et la liste « des choses à éviter »,

- remise au stagiaire :
  - o d'un mémo récapitulatif des éléments essentiels à retenir sur la « question »,
  - o d'une bibliographie sommaire mais essentielle lui permettant de pouvoir approfondir seul le sujet.

**Acteurs principaux :** l'intervenant et un groupe d'apprenants

**Durée :** une journée en présentiel de 7 heures

## 5 APPLICATION

### 5.1 ACTEURS

Une convention de partenariat sera mise en place entre la CMRA AUVERGNE RHONE ALPES et le CNAM .

Le cours de deuleron au sein de l'EFMA ? cfa gere par la CMRA AUVERGNE Rhone alpes.

### 5.2 CONDITIONS

Recrutement de jeunes disposant d'une certification professionnelle de niveau IV en lien avec un métiers.

Ces jeunes doivent également s'inscrire dans la logique de mise en oeuvre d'un projet de creation, de reprise ou développement d'entreprise.

### 5.3 PROCESSUS DE MISE EN ŒUVRE

La mise en œuvre du titre s'opérera selon un logigramme du système de formation completé et dédié à ce site précisant la répartition des responsabilités.

Plus particulièrement :

Les campagnes promotionnelles seront élaborées et validées en concertation entre les signataires de la convention,

Le CNAM – CNE et la CMAR ARA s'engagent à apposer sur tous les documents et publications inhérents à l'action de formation les logos des partenaires signataires de la convention. Cela concerne la publicité faite en amont du recrutement, l'information des stagiaires, tout communiqué ou article de presse relatif à l'action concernée, ou tous

support de communication (affiche, dépliant, etc..) concernant l'opération.

Dans le cadre des réglementations en vigueur, les formations mises en oeuvre doivent respecter les règles d'agrément des enseignements et des enseignants. Celles-ci sont définies par le CNAM -CNE et établies sur la base des divers référentiels d'activités, de compétences et de formation liés à la préparation du Titre Entrepreneur de la Petite Entreprise. Les référentiels sont fournis par le CNAM -CNE.

La planification des formations et la mise en place des procédures d'évaluation sont élaborées en concertation dans le respect des réglementations en vigueur, notamment dans le cadre de l'apprentissage.

Dans le cadre de la tutelle de la tutelle pédagogique exercée par le CNAM-CNE , le directeur De EFMA est nommée référent pédagogique.

Le référent pédagogique a en charge la coordination pédagogique de la préparation du TEPE. Dans ce cadre, il est garant de l'application des règles et des modalités de préparation du titre.

Pour ce faire il travaille en étroite collaboration et avec les validations nécessaires opérées par le Professeur responsable nationale du Titre, ou par délégation le responsable pédagogique national, du CNAM-CNE

La sélection des candidats est assurée par la CMAR ARA, via l'EFMA

Un bilan d'exécution sera établi par le CRMA ARA via EFMA dans les deux mois qui suivent la fin de la formation



## 6 ÉVALUATION

### 6.1 PROCESSUS D'ÉVALUATION

#### EVALUATION DES MODULES

L'évaluation de chaque module s'opérera par l'intervenant, lors de la phase de Restitution-Evaluation (J3) à partir d'une présentation, devant le groupe constitué, du travail réalisé.

Une appréciation sera donnée à chaque module par l'intervenant selon trois niveaux : INSUFFISANT – PASSABLE – SATISFAISANT.

#### DELIVRANCE DU TITRE PROFESSIONNEL

Le Professeur responsable du titre professionnel considérera le candidat « ADMIS » ou « NON ADMIS » au vu de l'ensemble des appréciations obtenues :

- Au rapport méthodologique AGIR :

le niveau INSUFFISANT constitue une appréciation éliminatoire.

- A la présentation du rapport méthodologique AGIR devant le jury d'exposé oral :

le niveau INSUFFISANT constitue une appréciation éliminatoire.

- A la partie repères disciplinaires (les modules) :

pour valider cette partie, l'évaluation portée à chacun des 7 modules par l'apprenant ne devra pas comporter plus d'une appréciation de niveau INSUFFISANT.

On conviendra que le niveau INSUFFISANT correspond à une note inférieure à 8/20 ; le niveau PASSABLE à une note comprise entre 8/20 et 12/20; le niveau SATISFAISANT à une note supérieure à 12/20.

Les auditeurs assidus qui ne satisferaient pas à ces obligations recevront une attestation de stage.

Pour mémoire : les intervenants sont agréés pour enseigner les modules selon la procédure en vigueur au Cnam (GAGE).

### 6.2 RÉSULTATS

#### 6.2.1 LES PARTICIPANTS

Profil des participants : 9 apprentis (pas de formation continue) âgés de 19 à 24 ans : 5 femmes et 4 hommes.

#### Projets menés par les apprenants :

- 4 projets de reprises d'entreprises : 2 dans le secteur boucherie-traiteur, 1 dans le secteur de la boulangerie-pâtisserie, 1 dans le secteur de la coiffure.
- 1 projet de création d'entreprise dans le secteur de la coiffure.
- 4 projets de développement d'activité : 2 dans le secteur de la coiffure,
- 1 dans le secteur de l'esthétique, 1 dans le secteur de l'automobile.

#### 6.2.2 ATTENTES DU MODÈLE PILOTE

(= Attentes du CNAM vis-à-vis de l'expert projet et des formateurs.)

- Respecter l'organisation et les objectifs des référentiels.
- Adapter le contenu selon le public.
- Développer les compétences plus que les connaissances. Le projet est la priorité de la formation, les intervenants donnent des repères théoriques et des méthodes de conduite du projet. L'expert projet a pour objectif d'accompagner les apprenants dans l'appropriation de la méthode par rapport à son projet.

#### 6.2.3 OBJECTIFS AVANT LE DÉBUT DU MODÈLE PILOTE

(= objectif du CNAM vis-à-vis des apprenants)

Un entrepreneur intervenant dans 4 grands domaines d'activité, il se doit pour chacun de ces domaines de maîtriser les activités clés :

- Construire la décision :  
Animer une veille sur les plans juridiques, technologiques et concurrentiel.

Définir, mettre en œuvre et contrôler la stratégie du projet de création en lien avec sa production, ses services et son environnement.

Construire la structure contractuelle et juridique adaptée au projet, à l'activité et à sa pérennité.

Repérer, analyser et traiter les dysfonctionnements en liens avec la stratégie du projet.

- Conduire le projet :

Concevoir la mise en œuvre opérationnelle à partir de la stratégie et des objectifs définis en amont.

Arrêter les choix techniques, économiques et budgétaires.

Mettre en œuvre, stimuler, coordonner et contrôler

Assurer son développement, pérenniser.

- Manager des ressources et contrôler l'activité :

Définir la communication stratégique du projet et assurer sa présentation aux partenaires et financeurs.

Gérer les ressources humaines.

Contrôler et gérer les flux financiers.

Animer l'équipe autour du projet.

Être force de proposition pour positionner un nouveau projet en cohérence avec la stratégie globale de l'entreprise.

- Animer des réseaux de partenaires internes et externes :

Respecter et faire respecter la réglementation en vigueur.

Construire et entretenir des réseaux pertinents pour le projet et sa pérennité.

Animer le développement commercial du projet.

Contrôler la qualité des fournisseurs, sous-traitants et experts.

#### 6.2.4 SATISFACTION À L'ÉGARD DU MODÈLE PILOTE

(= satisfaction de l'expert projet par rapport à la formation)

En proposant à l'entrepreneur un parcours qui lui permet à la fois de conjuguer apports de connaissances et mise en application effective et un travail sur son projet et sur lui-même, représentent la Valeur Ajoutée de cette formation.

La mise en application immédiate des modules à travers les exercices, permet à chacun de se poser les questions essentielles pour conduire son projet.

Le parcours génère l'apprentissage, la communication, la prise de conscience et le questionnement, l'action et l'introspection nécessaires à un projet entrepreneurial.

Un petit groupe hétérogène mais avec un même objectif, la conduite d'un projet, crée une proximité propice aux échanges, à l'esprit entrepreneurial.

#### 6.2.5 OBJECTIFS ATTEINTS

Avoir permis à des porteurs de projet, dans le cadre de développement, création ou reprise d'entreprise, de conduire leur projet et de pouvoir assurer une fonction structurante dans l'entreprise (dirigeant ou manager),

Avoir transmis des méthodes de management de projet et de management des ressources nécessaires au quotidien de l'entrepreneur.

Avoir partagé les connaissances incontournables que requiert la réalisation concrète du projet.

#### 6.2.6 PERSPECTIVES D'AVENIR DES PARTICIPANTS

2 participants ont un projet de reprise de fonds de commerce artisanal dont 1 avec un développement d'activité.

3 participants ont pour projet de créer leur propre entreprise à moyen terme. 2 d'entre elles poursuivent leurs études en Brevet de Maîtrise.

1 participant a créé et développe la fonction commerciale au sein de l'entreprise familiale.

1 participante a abandonné son projet de développement et quitté le domaine professionnel dans lequel elle travaillait.

1 participante n'envisage pas d'entreprendre.

#### 6.2.7 EXAMEN D'APPRENTISSAGE FINAL

Sur les 9 participants, 8 ont validé l'intégralité des modules et ont obtenu le titre.

1 apprenant a abandonné en cours de formation

Notes :

7 des 8 participants ont obtenu une évaluation finale satisfaisante. 1 participant a validé le TEPE avec la mention passable.

## 7 LEÇONS APPRISES

L'outil méthodologique AGIR est structurant. Il permet à chaque candidat d'avancer pas à pas, de susciter les bons questionnements liés au projet. La pratique de l'outil a permis de souligner une de ses faiblesses : il est plus adapté au projet de développement d'entreprise.

Les entrepreneurs sont majoritairement des jeunes titulaires de diplômes professionnels. Ce jeune public peut rencontrer des difficultés dans la conceptualisation du projet, la maturité et la vision globale que doit avoir le chef d'entreprise.

En tant que formateur, l'expérience et les connaissances des différents secteurs d'activité, fondent sa crédibilité. Elle est essentielle à la conduite de la formation.

L'expert projet se doit donc d'être curieux et en veille permanente sur les secteurs d'activités des entrepreneurs. Les échanges avec les apprenants, les commanditaires et les différents animateurs de la formation permettent d'enrichir ce domaine. L'animation est une juste notion d'équilibre :

l'intervenant doit être constant dans sa neutralité, sa souplesse, sa disponibilité et en même temps insuffler une dynamique pour garder le cap. Il doit rester neutre, équitable (temps accordé à chacun).

Une nouvelle session a débuté en septembre 2020, avec un nombre de participants restreint.

En raison du contexte sanitaire, il a fallu adapter les moyens de formation en développant des outils permettant la formation à distance.

Malgré les ressources pédagogiques mises à disposition des apprentis, la démarche limite la dynamique d'échanges indispensable à la pédagogie de projet que porte le TEPE.

[www.alpine-space.eu/dualplus](http://www.alpine-space.eu/dualplus)



## IMPRINT

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