

## TeBeVAT Policy Recommendations

Stating the Gap – Bringing Validation of Prior Learning and Micro Credentials in European Contexts to Work



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#### **Executive Summary**

The TeBeVAT Policy recommendation aim to provide all stakeholders, especially from the event technology sector, with accurate, readable, and understandable information about the project. Thus, the TeBeVAT project team gathered information about the project series and background information on the special conditions of the event technician labor market in the EU. Most importantly, the document sets out linkages of the TeBeVAT-process, the proves for competence validation in the vocational field of event technicians, but applicable to a wide range of vocational qualifications. These linkages entail the related work of prior projects, of results worked out so far and prospects of the outputs for future work in the field. Upon a location of the project results in the national landscapes of the participating partner organizations, the document explores prospects of connecting the results to Micro Credentials. From the information collected conclusions and recommendations are being drawn regarding the future of competence recognition in the sector and the European Union, entailing not only a strong need for European recognition systems, but also the urgent provision of digital tools for the collection of learning portfolios and digital badges, as well as a great need to harmonize understanding of competences and qualifications across sectors and borders.





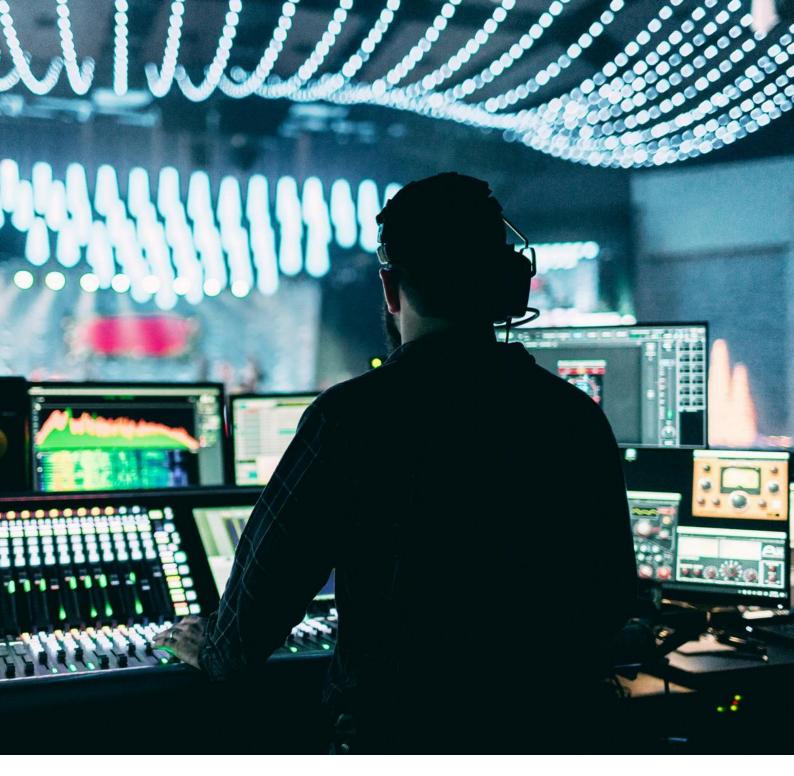
#### Contents

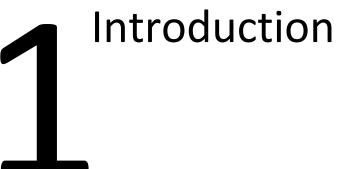
1		Intro	duction
2		Cont	ext and Background of the TeBeVAT Project2
	2.	.1	Foregoing and related projects
		2.1.1	TTT-LPT Theatre Technician Training and Life Performance Technology4
		2.1.2	ETTE – European Theatre Technician Education
		2.1.3	TALQ - Transparency in Art Levels and Qualifications
		2.1.4 appli	LAAR - Principles for effective Learning Analytics in Augmented Reality learning cations for professional education
		2.1.5	TeBeVAT 1&25
3		Valio	lation, Certification and Recognition6
	3.	.1	Results from the TeBeVAT Project Series
		3.1.1	TeBeVAT Process
		3.1.2	Quality Management Guidelines
		3.1.3	Lifelong Learning Document Tool
		3.1.4	A sectoral layer competence description model12
		3.1.5	Sectoral layer glossary
		3.1.6	TeBeVAT Competences
		3.1.7	Assessor and Mentor Profiles
		3.1.8	Glossary14
		3.1.9	Wiki
4		Secto	or Requirements / The European Context
	4.	.1	Implementing the TeBeVAT Process in Flanders/Belgium16
	4.	.2	Implementing the TeBeVAT Process in Austria
	4	.3	Implementing the TeBeVAT Process in Germany
	4	.4	Implementing the TeBeVAT Process in Italy
	4.	.5	Implementing the TeBeVAT Process in the Netherlands
	4.	.6	Summary of National Green Paper
5		New	Perspectives: Recognition of Prior Learning and Micro-Credentials in VET
	5.	.1	Recognition of Prior Learning
	5.	.2	Micro-Credentials
		.3 earnin	Considerations of Micro Credentials in VET: the role of micro-credentials in lifelong 33





5.4	Conclusion: Micro-Credentials and TeBeVAT	34
6 Te	BeVAT Conclusions and Policy Recommendations	36
6.1	Improved utilization of existing tools for competence transparency and mobility	y37
6.2	Two scenarios for future competence recognition systems	38
6.3 citize	Development of digital infrastructures to support lifelong learning of Euro ens39	opean
Literatu	ire	40









The TeBeVAT project series has collected and produced a wide range of outputs and aggregated information. To provide a concise overview about the year-long work within the project series and foregoing undertakings, all output documents of the TeBeVAT projects will be aggregated in the following. The objective of this document is to provide all stakeholders, especially from the event technology sector, with accurate, readable, and understandable information about the project. The TeBeVAT policy recommendation aims to do just that.

The document is tailored to provide information and recommendation to all sector specific decision makers, including national educational awarding bodies (governmental bodies, labour unions and employee organisations). The document is centred around the key objective of the projects carried out: the implementation of a validation and recognition system for prior learning in the event technology sector – the TeBeVAT process. Within the present TeBeVAT recommendations document, the project strives to summarise all contents of the TeBeVAT project and include a mapping of sector specific requirements, in order to cater to country specific needs and their individual institutional configuration of the educational landscape.

To set out the most important ramifications of the usefulness and positive externalities the implementation of the TeBeVAT-process is capable to bring about, the document is structured as follows: chapter two provides context to the project series and background information to the special conditions on the event technician labour market in the EU. Chapter three describes the TeBeVAT-Process in detail and sets out the technical details, merits, and ramifications of the process implementation. Chapter four and five collect information gathered from the project partner countries, including country specific ramifications of the process implementation. Chapter six describes the identified shortfalls in the systems and means of how the TeBeVAT-Process can add and extend the current recognition frameworks. Chapter eight contextualizes recent developments and reflects upon new means available with the upcoming of Micro-Credentials in the VET and HE landscape. Finally, the most important aspects will be summarised in chapter 9.



# Context and Background of the TeBeVAT Project





The event sector is crucial for the celebration of culture, sports, and music. Life performances equally depend on the work of technical employees at trade fairs, expositions, and art shows. Thus, a robust and healthy event sector provides significant contributions to the well-being of the general society. Yet, working in the field of event technology poses manifold requirements on employees. The dedication to deliver great shows, offering the audience new and unique experiences results in a highly performant and innovative work environment. Workers constantly adapt to requirements by actors and producers, to new technological possibilities and to new creative ideas. Finally, the event sector has grown to truly European scale, with an upsurge of inter country events and the evolution towards cross-country firms.

Yet, the life performance and event industries are facing difficult times. Since the outbreak of the COVID-19 pandemic at the beginning of 2020, unprecedented losses in the sector lead to broad attention also in the general public. The outfall of the pandemic, the vast disruption of business models in the event sector across the world, will be noticeable for the years to come and have already produced a footprint on the vocational market. Many professionals working in the sector, those behind the scenes, especially technicians, have decided to leave the sector behind. The perception of an unstable future as spread among the general public, further worsening the drain of talent. In consequence, young people are reluctant to join the sector and training centres see a fallback of fresh students. Poor working conditions, job insecurity, little public recognition, and lack of flexibility across the EU have been present for a long time – COVID-19 only catalyzed these circumstances. To overcome the structural shortfalls on the labor market in the event sector, the TeBeVAT project aims to contribute to increasing transparency and facilitating mobility across sectors and borders in the special field of event technicians.

The sector of event technicians is exposed to three ramifications which demand structural and systemic responds in order to improve the future situation for learners and workers. First, the event industry is a systemically **international** one, with events taking place across borders, like concerts, trade fairs, and theatre tours. The organizer of the event is responsible for the proper preparation and conduct of the event – for which qualified personnel is required. However, how is an organizer supposed to understand whether a foreign worker is qualified to work in complex environments with high risk of work hazards? Operating heavy machinery, working at heights, with electricity or with fly systems? Formal qualifications provide only a first intuition – but the competences conveyed specifically in comparison to the qualification known from the domestic market remain uncertain.

Secondly, the event sector is **heavily depending on technology** – controlling and designing lighting, sound, video automated stage equipment, using pre-show and planning software – the list is long. In the course of a career, staying up to date by means of self-education and learning on the job is therefore key to thrive and stay relevant. In certain domains, the technological change is so fast that learner's knowledge after completion of a qualification needs to be updated immediately. Lifelong learning is, consequently, crucial, and most of the time the





qualifications of a professional don't reflect the current proficiency which is valuable for employment.

Finally, the event sector labor market disposes of a specifically **high percentage of lateral entrants and formally unqualified workers**. Typically, these workers started in the life performance sector in their youth, supporting in the set-up of stages - and simply stayed. Further, additional portion of workers changed into the sector upon working somewhere else. These workers specifically have difficulties to convey their knowledge and skills to a new employer, as they don't even have an outdated qualification to show for. Formally, they are perceived as low-skilled, when quite the opposite is the case.

In the light of these three factors, the TeBeVAT project strives to tackle these shortcomings by means of validation and recognition or prior learning, to increase the formalization of lifelong learning and to provide the possibility of partial certification of competences to the workers in the sector.

#### 2.1 Foregoing and related projects

The TeBeVAT 3 project builds on different European and national projects that have been conducted over the last 15 years. It integrates the gained knowledge and experience of colleagues in the field of theatre and event technicians.

#### 2.1.1 TTT-LPT Theatre Technician Training and Life Performance Technology

The TTT and LPT projects (Leonardo & Lifelong Learning programs, 2005 - 2009) laid the foundation for the principles of the description method for a common, internationally interchangeable set of competences for the theatre and event sector. These descriptions were tested in several local projects and occupational standards. Later they were used as a backbone while developing the ESCO sectoral competences and occupations (2013 - 2015).

Website: <u>https://www.podiumtechnieken.be/en/competentions/ttt-lpt/</u>

#### 2.1.2 ETTE – European Theatre Technician Education

The ETTE project (Erasmus+ 2014 - 2017) developed a European Safety Passport, based on understanding and trust between countries. Starting from a set of 10 ESCO health and safety competences that are essential for each worker in the theatre and event sector, an open-source course was developed, supporting a broader knowledge about safety competences by describing them in great detail. This project also provided standardized procedures to guarantee an equal measurement of the competences.

This result is an assessment procedure based on EN ISO/IEC 17024 quality standards. The candidates that pass the test are awarded the European Safety Passport, recognised by all participants of the project.

Website: http://www.stage-tech-edu.eu/index.html





#### 2.1.3 TALQ - Transparency in Art Levels and Qualifications

The TALQ project (Erasmus+ 2015 – 2017) mapped the training and education in the field of technical theatre in 10 eligible countries, starting from a quick scan of the whole EU. TALQ searched and analyzed contents and structures of existing training and formal education systems, matching them with information on the labor market and qualifications and mapping them against the ESCO competences of the chosen profiles. Based on this, TALQ developed a standard set of quality assurance principles and quality criteria for the description, assessment, validation and awarding of qualifications procedures.

Website: <u>https://talqsite.wordpress.com/</u>

### 2.1.4 LAAR - Principles for effective Learning Analytics in Augmented Reality learning applications for professional education

The LAAR project (Erasmus+ 2017 - 2019) created a framework based on Learning Analytics insights for implementing Augmented Reality learning applications that support learners and trainers in their teaching and learning processes towards a higher efficiency and efficacy. It helps employers ensuring that every employee has been trained in safety & security, has understood the key training elements, and can behave according to the instructions. It provided various tools and concepts to support learning, especially for people who are involved in learning processes (trainer, trainee, evaluator).

Website: <u>https://www.competenceanalytics.eu/index.php/en/</u>

#### 2.1.5 TeBeVAT 1&2

The predeceasing projects TeBeVAT 1&2 laid out the basis for many of the outputs developed in TeBeVA3. With the foundation of establishing competences from different domains, requirement profiles for assessor and mentor, the Lifelong-Learning-Document-Tool, and the initial work on the TeBeVAT process, the cornerstones for the TeBeVAT 3 projects where set into stone.

Website: https://tebevat.eu/tebevat2/



# Solution Certification and Recognition in T<sub>e</sub>B<sub>e</sub>VAT





Recognition and validation of prior learning has been introduced in the discussion of lifelong learning mechanisms for a while now. It became clear that any sort of process to be implemented needs to be reliable, transparent, trustworthy, and cohesive. Sound quality management in this context is a prerequisite for the acceptance by users. The assessment processes must fulfil quality standards that are EQUAL to those found in full qualification programs, and that the contents meet the contents conveyed of a full qualification on a specific EQF level. After all, for every firm or employer it has to be clear what they are recognizing. Ensuring the acceptance amongst employers must therefore be the central element to respect in the development and implementation process.

To this end, the TeBeVAT project group developed a cohesive recognition process, the **TeBeVAT process**. The process is oriented, on a more general level, on the grounds of established validation processes (Figure 1). It describes the entire process in depth and recognizes the importance of requirements centered around individual learning pathways and consistent quality assurance.

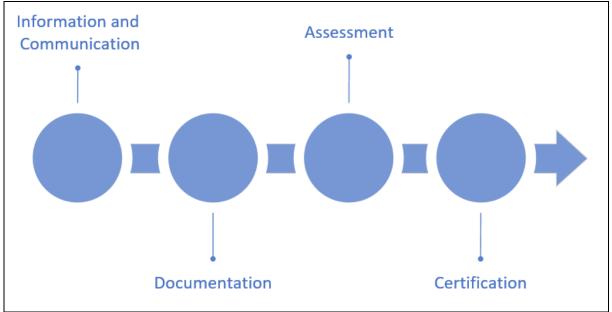


Figure 1: Stylized Certification Process for Non-Formal and Informal Learning

Source: Valikom (2018)

In order to provide for individualized, candidate-centred and quality assured processes, TeBeVAT extended the stylized certification process. With the extensions, additional processes of candidate guidance, quality management and transparency are reflected in every stage. TeBeVAT not only considers the formal process but provides detailed information regarding the roles of the different stakeholders, e.g., the assessors who assess the competences or the mentor who guides the candidate through the process.

Additionally, TeBeVAT aims to provide a holistic mechanism which ensures the purpose of the assessment is being kept in focus: the personal and professional development in the course of lifelong learning. Hence, the TeBeVAT process provides not only a Life-Long-Learning





Document Tool (LLDT), but also considers the ramifications of a digital infrastructure, which ties the entire process together (c.f. Figure 2).

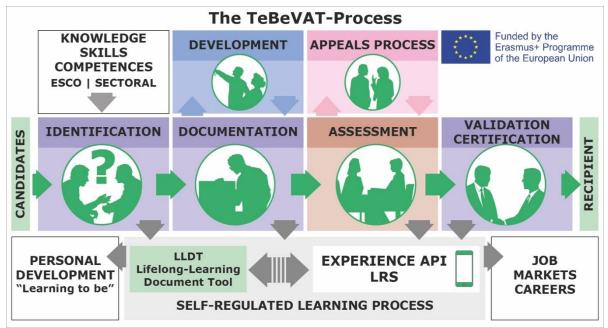


Figure 2: The TeBeVAT-Process - Self-Regulating Lifelong Learning

The TeBeVAT-Process is designed to facilitate learners and developed professionals to collect their learning outcomes, to document and analyse their competences and to use this information to strategically develop a portfolio for assessment or for future applications. The documentation of work, by storing artifacts such as videos, pieces produced or designed etc. improves the self-awareness of one's own capabilities and thereby visualizes also informal and nonformal learning.

#### 3.1 Results from the TeBeVAT Project Series

The central outcome of the TeBeVAT project series is the TeBeVAT-Process, including and respecting all the features and principles mentioned so far. But in order to bring the TeBeVAT process to life, further processes and results needed to be developed. Among other, quality assurance processes have received a very high priority, as it has become evident that the success of validation and certification are not only depending in the candidate. In order for the process to be successful, it needs to find acceptance among the ultimate target group: employing firms. Therefore, the importance of transparent assessment mechanisms, clear guidelines for assessment criteria and, most importantly, certainty about the contents to be assessed, cannot be underestimated and received a vast amount of attention in the project.

Finally, the quality of the body of shared data, representing the baseline for the assessment and reflecting in the competences to be assessed and transferred among the countries, needed to be ensured.





To this end, the TeBeVAT project group specified all information collected for the Event Technician curricula and compiled a database around them. All the following results are available on the TeBeVAT Website: https://tebevat.eu/.

#### 3.1.1 TeBeVAT Process

The TeBeVAT-process respects not only the quality of the assessment, but it attributes to the individual, i.e., unique learning biographies, unique competence sets and unique personalities. The TeBeVAT project group establishes that the ownership of the recognition process lies in the hand of the learner.

The phases of the TeBeVAT process include the intake of the candidate as the beginning of the certification process, and finish with the handout of the final certification. It is therefore holistically planned and individually applicable. The phases entail the following steps<sup>1</sup>: In the **identification phase**, the candidate (the person seeking partial certification) can acquire information about the process and introduce an application. Throughout the registration, administrative documents, data privacy information and folders with information about the proceeding will be delivered. In an initial interview, the candidate gets to know the mentor. The mentor is a key player in the process and supports the candidate. The mentor is responsible for the proper documentation of the TeBeVAT process, starting with the joint orientation of the candidate regarding the purpose of the assessment, and the analysis of existing competences to be assessed.

In the **documentation phase**, the mentor and the trainer propose methods for the assessment, considering the competences to be assessed. In the evaluation and self-evaluation step, information about existing competences is collected in the Lifelong-Learning Document tool. The Lifelong-Learning Document tool is a tool provided by TeBeVAT to take stock of skills and knowledge acquired throughout the working life. Based on a final discussion, a specific set of competences will be identified for assessment.

In the **assessment phase**, the second critical role, the assessor, will be introduced to the process. It is the assessor's responsibility to provide for a fair, just, and unbiased assessment of the candidate's competences, following predefined standards for quality and procedure. Finally, the assessment leads to a validation if the assessor deems the result of the assessment sufficient.

Finally, and crucially, the assessment needs to be validated and certified. Validation and recognition of competences require sensitivity and diligence, as it is mostly authority and responsibility of national warding bodies to provide credentials of any kind. For the TeBeVAT process to work, a uniform solution will be required.

The TeBeVAT project group has consulted a series of practitioners, vocational schools and certifying bodies and worked out a suggestion as can be seen in Figure 3. Generally, the certification needs to respect the frameworks existing in the national education systems of the individual countries and needs to be coordinated with the authorizing body. In practice,

<sup>&</sup>lt;sup>1</sup> Please refer to Annex 1 of this document for the detailed overview of the TeBeVAT process.





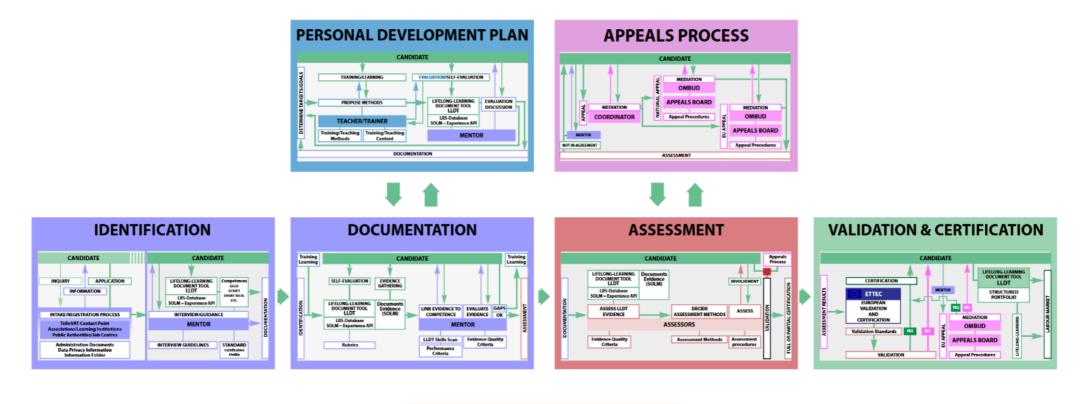
adherence to shared competence frameworks, assessment methods and quality protocols are the baseline for mutual recognition – which will be subject to the recommendations in Chapter 6.

Finally, via the appeals process the candidate receives the opportunity to appeal against the outcome of the assessment if unfair treatment or irregularities are being suspected. Via mediation with the mentor, conflict resolution for national or EU appeal can be achieved.

Crucially, to make the process a supportive instrument, a digital backbone will be required which supports the candidate in the assessment process and allows for the useful and easy documentation of learning outcomes and provides evidence for successful part-certifications. The digital backbone ties all the steps of the process together. A cornerstone is provided by the information stored in the shared database, including information about specific competences, assessment methods and field of usage. In addition to this, individual accounts, i.e., learning wallets, facilitate the user to store own data in the form of digital credentials (diplomas), project results, activities conducted etc., yielding in a collection of artifacts in a self-governed portfolio.







QUALITY MANAGEMENT

Figure 3: The TeBeVAT process of competence validation and recognition





#### **3.1.2 Quality Management Guidelines**

This part of the TeBeVAT process is dedicated to the definition of quality assurance. Among different definitions, only a few international standards define the meaning of quality in an educational setting — TeBeVAT process based on the EN ISO 17024 requirements. Thus, there shall be no differences between the candidates due to ethnicity, financial potential, race, age, etc. During the process, one should also be neutral, fair, independent, and equally judging between the candidates by providing advice for the design of certification bodies and certification processes.

Link: https://tebevat.eu/wp-content/uploads/2019/03/2a\_IO1\_QM\_Guideline\_EN.pdf

#### **3.1.3 Lifelong Learning Document Tool**

At this stage of the project, our team created a form for participants to inventories their backgrounds and competences. After a potential candidate has finished the record, it will provide information about one's education, training, and experience in addition to competences acquired outside of the targeted profile. The tool entails the possibility to specify a list of non-formally and informally acquired competences.

Link: https://tebevat.eu/wp-content/uploads/2019/03/IO1-LLDT\_EN.pdf

#### 3.1.4 A sectoral layer competence description model

TeBeVAT 3 developed a standard competence description model based on the sectoral layer proposed in the TALQ project. This sectoral layer specifies the ESCO competences in the sectoral context and guarantees the profile satisfies the prerequisites of ISO-IEC 17024.

Next to the concretization of the competences in skills (observable actions), knowledge (knowledge units) and autonomy/attitude (observable behavior) the description also includes statements for self-assessment, acceptable assessment methods, proposals for teaching and training, and a set of references.

Link: <u>https://tebevat.eu/wiki/</u>

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#### 3.1.5 Sectoral layer glossary

The description model has an integrated glossary, giving context to the different sections and titles used in the model. This supports the user that is not acquainted with the specific terminology.

Link: <u>See Sectoral Layer Glossary</u>





#### **3.1.6 TeBeVAT Competences**

The TeBeVAT competences comprise a list of assets, the different roles involved in the TeBeVAT process should provide. These assets are represented in competence sets for the Assessor and the Mentor, using the sectoral layer for the specification of needed, general competences.

Link: https://tebevat.eu/wiki/

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#### 3.1.7 Assessor and Mentor Profiles

TeBeVAT 3 developed occupational profiles for the mentor and assessor roles based on the basic "checklist for a guide" created in the previous TeBeVAT2 project. The profiles are based on ESCO competences and send to the ESCO maintenance commission for approval.

In a further step, the project group developed a sectoral layer based on the sectoral layer competence description model developed earlier in the project. The competences are grouped in logical units that can be reused between the assessor and mentor profile and could later also be used for a trainer or verifier profile. The descriptions contain enough detail to be used as a syllabus for training and education.

See <u>Assessor profile</u> and <u>Mentor profile</u>

#### Assessor of Prior Learning

The TeBeVAT consortium developed the profile of an assessor of prior learning.

Assessors of prior learning measure the existing competences, skills and knowledge of a candidate against a given qualification or certificate, according to a pre-defined standard or procedure, and judge objectively if the candidate reaches the corresponding performance criteria.

http://data.europa.eu/esco/occupation/20786 e6d-36f0-4d1e-b033-05101fa71f3c

#### **Mentor of Prior Learning**

The TeBeVAT consortium developed the following

A mentor provides guidance and advice to prepare a candidate for recognition of prior learning. They help candidates set clear objectives for their personal development and advise on further training, learning or job market access.





#### 3.1.8 Glossary

At this stage, a multilingual glossary was developed and published in English, German, Italian and Dutch. It defines 214 key terms used in the TeBeVAT 3 project. Each term is accompanied by a description and information to the source it is based on. The terms mainly come from didactic theory and event technology. The glossary also contains the specific TeBeVAT terminology related to the sectoral layer.

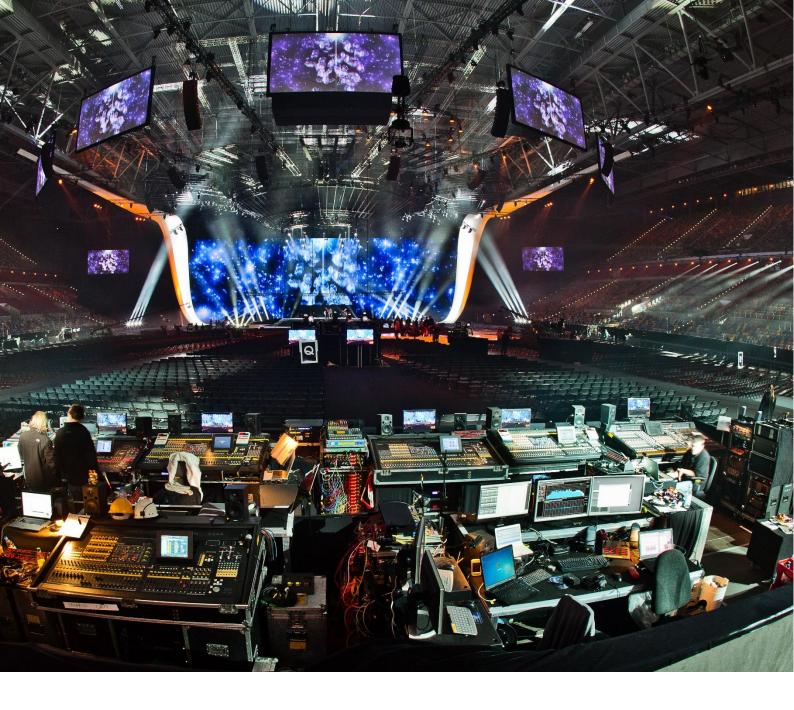
Link: https://tebevat.eu/wiki/

Path: 02 Glossary

#### 3.1.9 Wiki

The TeBeVAT project developed a wiki dedicated to the main ideas and stages of the project. It describes the project itself, its tools, and its different parts. The wiki contains the same information as the printed documents available, but the information is connected interactively and facilitated the usability.

Online Access: TeBeVAT Wiki



# Sector Requirements / The European Context





Improving and building up advanced competence recognition systems, both in the domain of formal and informal competences, is a leading objective of the European Commission. The commission has launched several initiatives and regulation inclining the member states to provide mechanisms and systems to increase labour market mobility among countries and sectors. Yet evidently the collision with theory and practice has led to vastly different success rates and adoption quotas among the member states. Challenges emerge on various different levels, be it in terms of financing, general level of awareness or the missing motivation to accept new certificates. In the following, the most important aspects for the roll-out of the TeBeVAT process in the partner countries (Germany, Netherlands, Belgium, Italy, Austria) will be illustrated and discussed.

Critically, detailed analyses would be necessary regarding the suitability and effectiveness of the systems. Recurrent problems with such systems that the project came across, especially the suitability towards labour market needs, the acceptance and practical use of the certificates provided or the financing schemes in the background and the incurred costs pose limiting factors to participants. The following analysis focuses on the description of provided mechanisms and processes and include a priori assessments of these wherever possible. However, an exhaustive analysis considering the limiting factors will not be carried out.

#### 4.1 Implementing the TeBeVAT Process in Flanders/Belgium

Currently, different types of recognition of prior learning exist in Belgium. As this is a community matter, we need to distinguish between the Flemish, French and German speaking part of Belgium. In all parts of Belgium, the certificates are recognised as Qualifications for employment purposes.

#### Flanders + Flemish speaking Brussels

There is an existing system of "ervaringsbewijzen" or §certificates of experience". The certificates are occupational and not educational. The difference lays in the general education part that is only present in educational certificates.

The assessment is executed by private as well as public partners and (partly) funded by the unemployment office. To get into the system, the procedure must be recognised by the government, has to fit their quality standards, and be supported by the sector. The funding is limited and probably not sufficient for highly technical occupations, but maybe the social fund could support the assessment for their "members" (The social fund is funded by all employers in the performing arts based on a percentage on the social tax, their function is to deal with all educational matters for the sector).

The previous system that was run/paid partly by ESF got into troubled water and is in the process of reform. RITCS used to run assessment for assistant technician (EQF3), Multiskilled technician (EQF4), specialists Lighting, Sound, Video and Stage Mechanics (EQF5) and Stage





Manager (EQF6) until there was no funding anymore. A single test, including mentoring, assessment, and post-care cost around  $1900 \in$ .

There are other systems in place for recognition of prior learning, but mainly for educational purposes. Syntra, the education provider for independent workers (and apprenticeship) and the adult education providers uses this for dispensation of courses, their assessment is mainly through online tests. At universities one can get dispensation of courses or even get a full qualification based on (mainly) portfolio. (At the university one pays a limited fee varying from 55 to  $500 \in$ ).

#### French speaking part of Belgium (Brussels + Wallonia – DG)

There is an existing centre that offers assessment for performing arts and events, but now only a limited set of competences. The certificates are on competence level. The tests are purely based on simulated environment, with exception for some safety theory. The centre is recognised and subsidised by the government, so the tests are free of costs except for transport. It would be interesting to talk to them and see if they could implement and recognise our methodology.

Link: http://www.cvdc.be/centres/t-event-75

#### German speaking community

The concept of recognition of competence does exist in East Belgium, but probably no tests are done in the event or cultural sector (there's only one cultural centre). But they state they will inform you about recognition in the neighbourhood, which would probably mean Germany or the French speaking part of Belgium. All costs are paid by the organisation. It would be interesting to talk to them and see if they would be interested to send people to Germany.

https://www.ostbelgienbildung.be/desktopdefault.aspx/tabid-5978/10185\_read-54628/





#### 4.2 Implementing the TeBeVAT Process in Austria

Currently, there is no system existing in Austria which supports the recognition of non-formal and informal learning.

Austria has a very structured and formalized education system, which consists of welldefined procedures to gain a formal certification. On the one hand this is the "duale System" in vocational education and the general education system. Both systems follow the idea of assessing the gain of competences and knowledge by carrying out exams at the end of a (sub-) period and reward passing the corresponding exams with a specific (sub-) certificate. At the end of an educational period there is (most commonly) a final exam to achieve a degree on finishing the apprenticeship program or school.

In some special cases there exist some alleviations for the accreditation to the final exam, which are defined by law.

In the vocational education field, there is one major option existing to be accredited to the final exam ("Lehrabschlussprüfung"), which is defined in §23/5 BAG (Berufsausbildungsgesetz). It states that the responsible entity must allow the candidate exceptionally to go for the final exam if the candidate is at least 18 years of age and can proof, that he gained the relevant competences and knowledge in a different way.

the candidate carried out at least half of the minimum apprenticeship time and is not able to find a company to employ him for the rest of the regular time.

Those regulations help people to get acknowledged for the final exam, but they still must carry it out anyways.

#### Outlook

To establish processes like the TeBeVAT process in Austria, it would be necessary to change legislation. From the current view no such process is triggered, so there would be lobbying work to be done or European legislation to be changed.

#### 4.3 Implementing the TeBeVAT Process in Germany

#### The role of the VPLT in the process

The VPLT – The German Entertainment Technology Association – is the trade association for entertainment technology in German-speaking Europe. Its members are service providers, distributors, manufacturers, dealers and independent sole proprietors. The aim of the association is an efficient, innovative and sustainable development and modernization of the event industry with a focus on technology. The VPLT operates in the areas of education and training, standards, certification, quality management, politics and international networking. The daily intensive exchange with members is made possible through the headquarters located in Hanover. Members may contribute their own ideas through various project and working groups. The commitment to an ecologically, economically and socially sustainable industry is based on the principle of putting people first. An important field of activity is the participation in creating technical guidelines, laws and standards on a national and international level. This





includes creating industry specific qualifications and standards as a member of the IGVW – "Community of Interests for the Event and Live-Performance Industry". Examples are the "SQQ2 - Qualifications for Entertainment Rigging Experts" and the "SQQ1 – Competences for the Electrically Skilled Person in the Event Industry". These standards are recognized by the German regulatory authorities and the DGUV – German Social Accident Insurance, although they are in no way a part of the framework of the state vocational education program. They also are also recognized as industry standards on an international level.

The association is an integral partner in the vocational education process in Germany through the posting of experts to establish the curriculum and the examination qualifications for industry vocations. The VPLT works together with the social partners, the BiBB – "Bundesinstitut für Berufsbildung" and the DIHK – Association of German Chambers of Commerce and Industry, to ensure that the industry demands, and requirements are reflected in the VET framework. In 1998, the association was a driving force in creating the vocation "Event Technology Specialist", which is a vocation at the EQF-Level 4 and very closely relates to the competence matrix in the TeBeVAT process.

Since 1999, the association operates its own training facility *DEAplus*, which is certified by the AZAV – "Accreditation and Admission Ordinance for Employment Promotion ". The VPLT is registered in the EU Transparency Register: 819880923782-49 and in the "Lobbyregister" representing interests vis-à-vis the German Bundestag and the federal government of the Federal Republic of Germany.

The objective of the TeBeVAT process is to validate competencies of candidates in the field of event technology. Via well-chosen valid methods and assessors, the candidates will be assessed and certified according to an assessment system recognized at a European level that correlates with ESCO – the multilingual classification of European Skills, Competences, Qualifications and Occupations. In Germany the implementation of the TeBeVAT must consider following aspects:

#### a. The dual vocational educational system

This system in Germany has a long tradition and is regarded to be one of the assets that has led to a strong national economy. The dual system is based on a collaboration between mostly private firms and vocational schools. Therefore, the vocational training is divided in two places of learning: The operational-vocational learning situation in the firm and the primarily theoretic learning situation at the vocational schools. The firms significantly influence the vocational training with students applying their acquired knowledge into practice in a high percentage of the training time. In accordance with the framework curriculum, the vocational schools impart vocational qualification with the focus on the theoretical basis for the practical training in the firms. Firms and vocational schools should – in compliance with the "BBiG – Vocational Education Law" – work hand in hand to provide a learning environment for the students to develop the skills and competences required.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> Lord Heseltine of Thenford 2012.





#### **b.** The role of the IHKs (Chambers of Commerce and Industry)

The IHKs are legally responsible for the supervision and guidance of vocational training in noncrafted trades (see BBiG § 71 (2) and § 76). The role of the IHK within public law is regulated by the "Gesetz zur vorläufigen Regelung des Rechts der Industrie- und Handelskammern" (Law on the Provisional Regulation of the Rights of the Chambers of Industry and Commerce). They are entirely private sector funded by compulsory membership (with a few exceptions) for all German businesses in the industry and commerce sectors. They are responsible for monitoring the implementation of the vocational training in the businesses in their particular regions (79 Chambers) by promoting the vocational training and consulting the trainers and trainees. They are also responsible for performing the intermediate and final exams. In the year 2019 (pre-COVID), there were 3.288 apprentices in the "Event Technology Specialist" vocational educational system in Germany. In that same year 1.254 apprentices took the final examinations and 945 received professional qualification certificates (75.36%). <sup>3</sup>

If TeBeVAT should be implemented as a path to acquire an official partial or complete certificate in compliance with the qualification standards of the official title of "Event Technology Specialist", there must be at least some form of cooperation with the DIHK and the chambers offering supervision and guidance in this vocation. Nevertheless, there are different ways to implement TeBeVAT as a certification program.

#### c. Types to certification

TeBeVAT can be implemented as a method for evaluating existing and missing competences in the vocation of event technology. The candidates will be assessed, based on the categorization of competencies according to the European ESCO standards with a sectoral layer. Subsequently candidates can take part in training courses (e.g., DEAplus) to additionally acquire competences. This could be an appropriate preparation for the external exam "Externenprüfung" for certification for the vocation "Event Technology Specialist" without an apprenticeship. Those with at least 4.5 years of professional experience in this field of work can gain certification through this examination. The admission to the examination is regulated by the local IHK. A cooperation with the IHK to offer a partial certification program, based on the results of the European project TeBeVAT could be the starting point for implementing microcredentials or "learning nuggets" in the VET landscape in Germany. This would be congruent with the proposals illustrated in the current Cedefop project 'Microcredentials for labour market education and training' and would be a step towards the European Skills Agenda's goals for lifelong learning.<sup>4</sup> Specialists from abroad could use it to gain a foothold in the job market in EU countries. In this context, the collaboration with the existing validating organization IHK is conceivable. The project "ValiKom", a collaboration by four Chambers of Skilled Crafts and four Chambers of Commerce and Industry and supported by the Federal Ministry of Education and Research, is an organization "with the aim of increasing skill visibility and thus increasing

<sup>&</sup>lt;sup>3</sup> DIHK 2022.

<sup>&</sup>lt;sup>4</sup> Cedefop 2021.





opportunities for applicants on the job market."<sup>5</sup> They do not, however, issue certificates for event technicians. Outside of the regulatory scope of the IHK, TeBeVAT could provide partial certification of the existing skills in the field of work in event technology. If the validation and certification standard is established and accepted, Candidates could use it for applying to jobs in all European Member States.

#### Consideration of skilled labor shortages and economic migration

The shortage of skilled professionals in Germany in the event and live-performance industry can be counteracted by European projects like TeBeVAT.

In a VPLT survey in May of 2021, members attested that they had already lost **43% of their skilled workers** due to the COVID-crisis. This will be the major factor regarding the sector's ability to rebound. One solution to this skilled labour shortage is the activation of German semi- or unskilled workers through training courses. TeBeVAT offers a "fast-track" to a job in the sector. The structure of the TeBeVAT-Units allows candidates to quickly gain specific skills to be able to fill positions in the sector that only require a few specific competences. Workers can then continue their further training by either accepting an apprenticeship or by extending their competences and their job opportunities through further TeBeVAT courses and certification.

Another solution would be to try to recruit workers from other countries and train them as quickly as possible. TeBeVAT provides a validation process where workers from abroad could take advantage of their existing skills and have them validated. They could participate in the well-paid working world in Germany under mostly resilient and good conditions. This economic migration could however be a disadvantage for the countries of origin of the workers. "*Brain drain*" can weaken an already weak economy. A study by the European Committee of the Regions in 2018 showed that 33% of working movers in the EU chose Germany as their destination. The process of a *brain circulation* - the skilled worker goes back to the origin country after certification or some years of work – should be addressed in the post-2020 Cohesion Policy.<sup>6</sup>

Establishing and positioning the TeBeVAT certification at European Level could be very meaningful for the event technology sector. It has always been international in its scope and is currently experiencing an unprecedented situation in the crisis. Production managers on European tours need to have easy access to workers with specialized skills in all the Member States. The Erasmus+ project TALQ concluded that essential competences ideally form about 70% of the qualifications needed in the sector. The remaining 30% are variable. For this reason, the VPLT supports a European solution that respects the specific characteristics of national standards and regulations. TeBeVAT provides a basis for the essential competences needed in the sector.

<sup>&</sup>lt;sup>5</sup> Valikom 2022.

<sup>&</sup>lt;sup>6</sup> European Committee of the regions 2018.





#### 4.4 Implementing the TeBeVAT Process in Italy

#### The work of CDPZ

"Consulenza Direzionale di Paolo Zaramella" (CDPZ in short) is the Italian partner for TEBEVAT projects.

CDPZ is a private consultancy and training firm, based in Vicenza (Northeast part of Italy). In the last years, CDPZ built up a strong local and national network, based on Chambers of Commerce, training centers and trade associations, that could support the project implementation, also in term of (part) certification of professional profiles.

#### **TeBeVAT process**

The objective of the TeBeVAT process is to determine the competencies of the assesses in the field of event technology and, in particular, for sound technicians. Via well-chosen valid methods and assessors, the candidates will be classified according to the assessment system at European level.

In Italy / Veneto Region the implementation of the TeBeVAT has to consider following aspects:

#### a. The dual educational system does not (yet) exist

The dual system, in Italy, is partially implemented. There are some useful cooperation between mostly private firms and vocational schools, also in the field of event managers and sound technicians.

Basically, the vocational schools give vocational qualification with the focus on the theoretical basis for the practical training in the firms, but the dialogue is (still) quite weak. There are some positive examples (as pilot projects) for vocational technical institutes, where students take classes with (paid) internships in companies. But, for the moment, this dual system is focused only in some sector (like mechanics/mechatronics, textile, ICT, etc.).

CDPZ is in contact with some training centres that are dealing with these pilot projects; and we could discuss with them about the TeBeVAT overall process.

#### b. The role of the Labor Department of Veneto Region (and Chambers of Commerce)

In Italy, and in Veneto Region too, Chambers of Commerce faced off a strong reform in the last 3/4 years. They lost some competences, and they got some new activities, also connected with the professional profiles (i.e., through the "Excelsior data base" that is also linked with the national qualification standards).

So, our local Chamber (Vicenza) could support our TeBeVAT implementation process, checking first of all which kind of competences are already listed in this data base.





In parallel, the Labour Department of Veneto Region is running the "Regional Repository for Professional Standards" where, step by step, almost all the professional competences are checked and verified.

In that case, after a final discussion with our Regional Department, we could set up an overall list of competences that a single VET or training centre could offer into the market, as (part) certification process for event managers and sound technicians.

#### c. Types to certification

TeBeVAT can be implemented as a method for evaluating existing and missing competences in the area of event technology (event managers and sound technicians in particular). The trainees will be assessed, based on the categorization of competencies according to a European standard (see ESCO competences). Subsequently the trainee can take part in further trainings to acquire additionally competences.

Regardless of the Chambers and Labour Department of Veneto Region, there could be handed an TeBeVAT own partial certification of the existing skills in work field of event technology and sound technicians. The assesses can use it for applying in European countries, where this standard is established.

Another way is the cooperation with the Labour Department of Veneto Region to offer a partial certification program, which based on the results of the European project TeBeVAT. In practice, we could add some specific set of competences to the existing ones (that are already listed in the Regional Repository). Specialists from abroad can use it to gain a foothold in the working world in other EU countries. In this context, the collaboration with existing validating organizations is fundamental.

#### Consideration of economic situation for the event and cultural sector

Due to Covid19, in Italy (and also in Veneto Region) since March 2020 the overall event and cultural sector strongly suffered. In fact, most of the events have been cancelled in 2020; while in 2021 the sector has done some little progresses, in term of business and employability. Moreover, the national government has given, above all to free lancers, some aids, and funds, just to maintain the businesses alive.

More in details, because of the Coronavirus emergency (COVID-19), from March 2020 the services of opening to the public of institutes and places of culture, as well as performances of any kind, including theatrical and cinematographic performances, had been suspended throughout the country.

Subsequently, the service of opening to the public of museums and other institutes and places of culture was allowed, under certain conditions, from May 2020 and, from June 2020, the holding of shows open to the public in theatres, concert halls, cinemas, and other spaces.





In October 2020, in view of the particularly widespread nature of the epidemic and the increase in cases on the national territory, the same restrictions previously imposed were again introduced, progressively. Some new reopening possibilities were then foreseen between December 2020 and January 2021. Further re-openings, initially scheduled to take effect at the end of March 2021, were then postponed until the end of April 2021. Since that time, the possibility of participation has been progressively expanded, albeit in compliance with safety measures.

#### 4.5 Implementing the TeBeVAT Process in the Netherlands

#### The work of OSAT

The OSAT foundation initiates, directs, and coordinates the 'tuning' between the field of live performance and events and the vocational training in stage- and event technology. In this way OSAT ensures the quality (improvement) of the stage technology training and the coordination between the professional field and educational institutions. In addition, OSAT stands for the further development of the professional profile and the development of a quality structure for training, which is in line with the demands of our industry. The objective of OSAT is therefore not only the pursuit of the best education in stage and event technology, but also a permanent and sustainable development of the workers in the industry. OSAT's basic principle is that all developments at European level should be harmonized and proactively implemented.

OSAT's stakeholders are:

- the vocational educational institutions, that means all trade schools ("vakscholen"), regional training centers ("ROC's") and private institutes that offer courses in stageand event technology at various levels. Also, the Amsterdam University of the Arts, that offers a bachelor course Design and Technology and an associate degree Technical Production, participates in OSAT.
- The stage- and event technology industry (the professional field of live performance) is represented in OSAT directly by businesses/companies, and through the associations of NAPK (Dutch Association for the Performing Arts), VVTP (Association of independent theater producers), VSCD (Dutch Association of Theatres and Concert halls), VVEM (Association of event organizers) and the Koepel Opera (Association Large Opera Houses). These associations do cooperate but are fundamentally separate entities.
- Governmental and semi-governmental institutions that implement rules and legislation in the field of education, such as the Ministry of Education; SBB (Cooperation Organization for Vocational Education, Training and Labor Market); the MBO Raad (Netherlands Council of Vocational Educational Colleges) and stECI (Foundation for Examinations in the Creative Industry).





#### **TeBeVAT process**

The TeBeVAT process is about determining which competences a technician in the industry needs to have to achieve a desired level. This process is backed up by a harmonized assessment system at European level, with European approved assessment centers and assessors.

In the Netherlands, the implementation of the TeBeVAT process could proceed as follows:

#### a. Via employers (organizations)

The individual organizations / companies in the industry (represented in the associations and active as stakeholders of OSAT) are responsible for a Personal Development Plan (PDP) of their employees, in which personal wishes to develop oneself professionally are described and linked to the work tasks, usually in the form of further in or out company training programs.

Employer and employee organizations (unions) have agreed upon how to deal with PDPs in their collective labor agreements (as secondary working conditions). A 'career budget' (loopbaanbudget) is meant to create sustainable employability. An employee has the right and should be provided with the possibility to train oneself on the basis of a development plan, which is usually evaluated on a yearly basis.

The resources for this (lifelong) training in the performing arts should be provided by the individual employer. This employer and sometimes an individual worker can apply for a contribution at the Social Fund for Performing Arts in the costs of a specific training. All the members of the performing art associations, which are held to the collective labor agreement, are obliged to contribute a percentage of their total wage costs into this fund.

Unfortunately, there's no such funding for the event industry. Neither is there a collective labor agreement in which secondary working conditions such as personal development plans are consolidated. However, big companies in the event industry take their responsibility for the development of their employees seriously and voluntarily offer a form of development/education.

#### **b.** Via the ETTEC national assessment centers

The Assessment Centers and Assessors, who have to assess the competences which might lead in the TeBeVAT process to certification, and who will issue a certificate, might be provided by the Assessment Centers that OSAT will already set up for the ETTE Certificate.

There is an association set up on a European basis, ETTEC (see www.ettec.org), which is specially designed in such a way that all certificates from the life performance and event industry that meet the standards can be issued. ETTEC will guard the entire process and already has designed guidelines, procedures, and an appeal process for the implementation of the ETTE certificate. It seems only a matter of small adaptations to design a working process for TeBeVAT as well.





#### c. Via the regular vocational education institutions

Secondary Vocational Education (MBO, level 3 and 4) in the Netherlands has a system where students take central exams, including optional components, which they also conclude with an assessment. Examples are a Rigging Certificate, an Assessment in Leadership, a Certificate Video Technician and many more. These exams and assessments are made under the responsibility of OSAT by stECI, a foundation where all central exams of the creative industry are developed and managed (see also 'stakeholders' above).

The Dutch Ministry of Education has issued the rule that the optional components in the MBO educational system will also be accessible to the professionals already working in the sector. They can register for such a 'keuzedeel' (a subject of one's choice), follow the associated training and take the exam. A pilot to this effect with a limited amount of 'keuzedeeln' was carried out in 2019 and starting the school curriculum in 2021 professionals already working in the sector can register for all optional components. The educational institutes are responsible for the training and the exam.

Certain clusters of lacking competences of technicians participating in the TeBeVAT process might be offered as such a component and therefore be examined / assessed in the standard procedures of the MBO educational system. And/or some of the MBO schools, which already have been specifically set up as ETTE assessment center, might take up certain tasks for TeBeVAT.

Resources for this training within the formal vocational educational system, might on an individual level be the lifelong learning credit of DUO which provides the chance for people older than 30 and younger than 55 to keep on educating themselves. DUO is a governmental organization, which also provides student grants for persons younger than 30. This lifelong learning credit will be granted only for formal (vocational) training and is to be restituted in a time frame of 15 years, in monthly terms. From 2022 on, every employed or unemployed citizen of The Netherlands can apply for a yearly budget of 1000, - euro for further training. The training courses have to be validated by the executive body.

#### 4.6 Summary of National Green Paper

Among all observed countries in this section, only Netherlands has a sufficient recognition and validation system for the event technology industry. Still, other countries experience a lack of such a system for the event technology industry. Even if such a project exists and solves the problem, it does not focus on this industry (as in Germany).

Moreover, all countries except Austria have the potential to establish and develop the TeBeVAT project on already existing platforms and projects (such as IHK in Germany, ETTEC in the Netherlands, or the Labour Department of Veneto Region and Chambers of Commerce in Italy). Thus, the implication of the TeBeVAT process will not require a lot of resources to be spent and benefit those countries.





However, some concerns should be dealt with. For instance, some countries or parts of countries lack for sufficient legislation or educational ground, which would complicate the implementation of the TeBeVAT process. For example, in the German-speaking part of Belgium, there are no programs providing recognition and validation systems. In Austria, the education system is too formalized. The government defines the requirements for VET and other educational systems, so to establish TeBeVAT, a change in the legislation system is needed.

It is also necessary to stress the importance of facilitating "brain circulation" rather than "brain drain". Some countries, such as Germany, are already attracting workers from different European countries, so having the Intereuropean certifications could increase this trend. Hence, it is crucial to develop a solution within the TeBeVAT process to stimulate employers to migrate in different directions, not only to more prosperous countries.



## New Perspectives: Recognition of Prior Learning and Micro-Credentials in VET





This chapter sets out ramifications of the validation and recognition of prior learning. Especially regarding theoretical development, legal frameworks, and education system perspectives.

Currently, a new mega trend in the educational world is extensively discussed among academics and policy experts: Micro-Credentials. Micro-Credentials represent a novelty for HE and VET, as they provide for short learning experiences. The exact definition of what Micro-Credentials are is still hotly debated. For the sake of simplicity, the following text considers the realm of vocational education and training and provides merits of the utility of MC in VET. Meanwhile in the HE sectors, debates are ongoing and policies for future developments are analyzed (including the question whether MCs are here to stay or only represent a current hype or trend), insights into potential for usability in the VET sector are scarce, and the discussion blatantly silent.

#### 5.1 Recognition of Prior Learning

In 2002, the Copenhagen declaration pronounced the universal validation and recognition of non-formal and informal learning within the European context.<sup>7</sup> Further development of the validation of prior learning was stressed in the Osnabruck declaration in 2020 in the context of establishing a new lifelong learning culture.<sup>8</sup> Despite the long history of this topic, we see that there are a lot of questions to be solved in this area. This confirms the 3rd VPL Biennale, whose main issue was "Making Policy Work – Validation of Prior Learning for education and the labour market". According to the report from this Biennale central questions were:

- connection between stakeholders from the worlds of business, volunteering, and education for VPL results to have value;
- potential forms of financing must be in place in order to make VPL accessible to all learners;
- kinds of procedures and instruments that provide valid results and can cater for many candidates;
- support structures needed to be available to reach disadvantaged learners;
- required follow-up measures for validation to facilitate further learning and enhanced career paths;
- issues needed to be addressed by laws and regulations for VPL to be effective (Duvekot et al. 2020).

As we can see, one of the most critical questions is the organisation of the prior learning validation. For example, in Finland, the validation of prior learning is mostly done by non-governmental organisations (NGOs). To enhance comparability, NGOs have linked their skills and competences to various frames of reference like the European key competences for LLL, EQF and ESCO.<sup>9</sup> In certain countries like Australia, New Zealand, South Africa or Norway, validation systems and qualification networks are firmly connected since the acknowledgement

<sup>&</sup>lt;sup>7</sup> Cedefop 2002.

<sup>&</sup>lt;sup>8</sup> Cedefop 2020.

<sup>&</sup>lt;sup>9</sup> Pakanen 2020.





methods for professional instruction and preparing don't separate between learning results accomplished inside or outside conventional learning programs.<sup>10</sup> International organisations such as International Labour Organization (ILO) help the undeveloped countries to establish these validations systems.<sup>11</sup>

The other important question of the validation of the prior learning is financing. European approach regarding this question is not defined well: there are state, company and private forms of financing, as well as mixed forms. For example, in Finland, the Ministry of Education, and the Ministry of Labour shares the costs of validation, supplemented by a small personal contribution for fixed costs. An alternative to public funding would be mixed forms of incomerelated support via BAföG in Germany or education funds. As in the Netherlands and France, it is also conceivable for Germany that companies would participate by releasing employees from work.<sup>12</sup>

It is also essential to consider the process of validation. Given that the recognition system needs efficient procedures that deliver meaningful results, organisations developed numerous ways. The most popular one is certification, which can be further used in the job market.

However, there is still a discussion on how regulators and organisations should perform this certification. Recent research demonstrated the Nordic quality model, which focuses on each individual. The model's broad approach has been helpful in identifying other development areas of all participating educational institutions, regardless of country or organization. The topic of legal foundations of prior learning validation is also important in this context. This problem usually stands alongside with initial creation of the VPL system. In this case, one needs to find out about the situation in different countries to establish a relevant and competitive structure. For example, in the Faroe Islands, this problem was exploited due to the establishment of a special working group with representatives from different market sectors.

The other problem can be when the system already exists but in disintegrated form, and legal foundations prevent it from unification. This was the case from Belgium, where in July 2015, the parliament approved the creation of an integrated legal framework for VPL, which was developed by the ministry of education in cooperation with other stakeholders .<sup>13</sup> Hitherto, the legal foundations are crucial for VPL-systems due to their ability to solve different needs of such systems. Many countries like Switzerland, Belgium, South Korea, or the United Kingdom. already introduced it to facilitate further development of VPL .<sup>14</sup>

Finally, most of the abovementioned issues form a synergy in complicating an international system of mutual recognition. Even though some countries strive to create recognition processes that fit the regional context, there are still issues preventing a prominent variety of countries from building such a system. There is still an ongoing discussion on how regulators and organisations should perform the certification on the national level. Moreover, the legal

<sup>&</sup>lt;sup>10</sup> Bohlinger and Münchhausen 2011.

<sup>&</sup>lt;sup>11</sup> Hofmann and Kirsch 2020.

<sup>&</sup>lt;sup>12</sup> Frick and Strauch 2016.

<sup>&</sup>lt;sup>13</sup> Druine 2020.

<sup>&</sup>lt;sup>14</sup> Duvekot and Halba 2014.





foundations in each country can substantially differ, complicating the mutual recognition process even further. To overcome those problems, one should create a solid theoretical approach and work on this specific topic.

In context of the European perspective of the present project, the uniformity of quality, controls and contents of validation and recognition provides a large opportunity for competence transfer, intercountry and -sector mobility as well as vertical and horizontal upskilling and career growth. The development of partial competences and the provision of courses to cater to the delivery of smaller units has been subject in the debate around micro credentials, which has emerged in the last couple of years. To develop a ground for discussion, some context to the discussion on Micro Credentials will lead to a better understanding on usability and opportunities in the context of this project.

### 5.2 Micro-Credentials

Micro Credentials have become a trendy topic in the last decade. Yet, it remains still unclear what they actually are and represent. Many definitions have emerged, illustrating that a common understanding is still far from being specific and clearly stated. These definitions all highlight a different notion of Micro Credentials. A reason for the opacity of understanding is rooted in the velocity of the Micro Credentials movement growth (Kazin and Clerkin 2018) and the fact that different types of micro-credentials always were the part of education systems and our societies<sup>15</sup>.

Currently, many companies such as Google and IBM use recruitment strategies facilitating nontraditional education and soft skills, indicating the demand for increased employability. Google even wants to recognize short courses credentialed by itself as an equivalent of a full bachelor's degree.<sup>16</sup> These offers are side-lined by platforms and MOOCs, providing courses upon own need or perceived interest.

In recent research conducted by Oliver (2021) definitions were aggregated and compiled into a uniform understanding of what Micro Credentials comprise. Nonetheless, even this definition is "the beginning of a conversation, rather than the last word on this topic".<sup>17</sup> Considering the essentials part of the subject, "credential, stemming from the Latin word "credence" which means "credibility" in one form or another<sup>18</sup>. Thus, different definitions of micro-credentials have one common idea: micro-credentials should credibly verify skills, knowledge and competences. For example, the abovementioned definitions by Oliver (2021) all together state that "credentials "verify, validate, confirm, or corroborate" whether persons' learning achievements or persons' claims about their learning achievements. Micro-credentials in this way of thinking are supposed to focus on a narrow field, and one should be able to obtain them quickly." The urge and need to provide the labor market with short-tracked pathways for requalification is not surprising. As described above, around 50% of all employees will have to

<sup>&</sup>lt;sup>15</sup> Cirlan and Loukkola 2020; Camilleri and Hubak 2021.

<sup>&</sup>lt;sup>16</sup> Bariso 2020.

<sup>&</sup>lt;sup>17</sup> Oliver 2021.

<sup>&</sup>lt;sup>18</sup> Ehlers 2018.





do so by 2025 because of the economic impact of the COVID-19 pandemic and the coming Industry 4.0.

"Micro" thereby highlights the concentration of time and resources on the acquisition of a granular certified learning. In the course of the ensuing discussion about the marketization of education ("gig qualification for the gig economy"<sup>19</sup>), and the transformation of educational institutions into worker factories, advantages and disadvantages of these credentials have been discussed. Arguments were exchanged regarding social equitability and prospects of privatization, portability and individual learning accounts as well as the impact on acquisition on skills for life.<sup>20</sup> Among the works of the European Commission regarding the prospects of MC in the EU<sup>21</sup>, the analysis of the emergence of new credentials by the OECD<sup>22</sup> similarly to the UNESCO<sup>23</sup>. Meanwhile all of these reports acknowledge the importance and potential of Micro Credentials, it becomes apparent that accept little exceptions, they only consider the case of Higher Education. When considering VET or adult education, the reports refrain from more specific further analysis. Thus, the main aspects under consideration like stackability, quality assurance, recognition and provision are being asked for to be extended to the world outside higher education, but plans are yet to be shown for.

Arguably, there are major obstacles to overcome when considering learning and teaching spheres outside HE: First, on a structural level, the issuance of qualifications in VET is circumstantial to each member states – and the authority about what and how competences are conveyed does not rest within the power of a university. Next to the educational institutions, the chambers of commerce and crafts, social partners and governmental bodies play role in the design of curricula standards for vocational training. Second, currently the comparability of qualifications across educational system on the basis of ECVET is less developed in comparison to the principal of ECTS. Third, skills conveyed are less oriented on theoretical knowledge, but centered around action-oriented competences. These require different assessment strategies to reliably prove their mastery. Meanwhile the knowledge about theoretical relations can be tested via different forms of questionnaires, portfolio-based assessment, considering transversal, theoretical and practical competences, need to be underpinned with coherent and standardized assessment and evaluation procedures. Quality assurance is therefore more complicated to provide for than in the context of HE assessments.

Therefore, it does not completely surprise that Micro Credentials in HE develop much more rapidly than in VET. For example, European Advisory Committee for VET(ACVT) commission have started to construct "a *reflection* on a *possible* European approach to micro-credentials (in VET)" only after the COVID-19 pandemic began<sup>24</sup>. In Australia, skills ministers started to increase the support for the research in the field of VET only at the end of 2019.<sup>25</sup> Moreover, experts usually discuss them together even if the paper is dedicated to the micro-

<sup>&</sup>lt;sup>19</sup> Wheelahan and Moodie 2021.

<sup>&</sup>lt;sup>20</sup> Lifelong Learnong Platform 2020.

<sup>&</sup>lt;sup>21</sup> European Commission 2020.

<sup>&</sup>lt;sup>22</sup> Kato et al. 2020.

<sup>&</sup>lt;sup>23</sup> Oliver 2021.

<sup>&</sup>lt;sup>24</sup> ETUCE 2020.

<sup>&</sup>lt;sup>25</sup> Palmer 2021.





credentials in VET alone. The secondary role admitted to Vocational Education and Training in the discussion around Micro Credentials leaves the question of the delivery potential of Micro Credentials in more practical contexts. From the discussions so far, several aspects can be extended and should be kept in mind to advance the discussion:

- VET governance is complex: Micro Credentials need be verified and approved by vocational education and training institutions, inter-departmental and departmental trade unions, and employers.
- VET is less modular: Micro-certificates should be meaningful and of high quality. They should be based on the delivery model, evaluation procedures, and duration criteria and explain how they are linked to complete qualifications.

In support of these circumstances, some studies suggest that micro-credentials should be a part of the European Qualification Framework (EQF).<sup>26</sup> The discussion around the inclusion of competences in level frameworks is a reoccurring one in current debates and can therefore not be commented at this point any further.

## 5.3 Considerations of Micro Credentials in VET: the role of micro-credentials in lifelong learning

According to recent research, micro-credentials are often seen as a solution for various problems. Thus, according to Brown and Nic Giolla Mhichíl (2021), the top five drivers for micro-credentials in the academic literature are:

- Increase employability (64%);
- Support CPD and workplace training (60%);
- Increase flexibility for learning (54%);
- Close skills gaps in response to changing nature of work (50%);
- Promote lifelong learning (48%).

Those topics are related not only to purely academic papers but also to the real world's demand. The survey conducted by CEDEFOP, which contains 66 interviews from different European countries, shows almost the same pattern. The only difference is that instead of increasing flexibility for learning, interviewees indicate the assistance in individuals' skills promotion among top-5 problems that micro-credentials are supposed to solve.<sup>27</sup>

Promote lifelong learning, close skills gaps in response to changing nature of work: Lifelong learning and filling the skills gap is essential due to the rapidly changing environment with new opportunities and instantly changing demands for employees all over the globe.<sup>28 29</sup> Upskilling and reskilling in a ever faster digitalized, international and unbounded world is currently even

<sup>&</sup>lt;sup>26</sup> ETUCE 2020.

<sup>&</sup>lt;sup>27</sup> Cedefop 2021.

<sup>&</sup>lt;sup>28</sup> DeakinCo 2019.

<sup>&</sup>lt;sup>29</sup> OECD 2019.





further accelerated by the COVID-19 pandemic. <sup>30</sup> In addition, the uptake of green skills as promoted by the European Commission in the European Skills Agenda illustrates the increased necessity to establish reactive and individualized skills pathways. The importance to provide pathways to encourage and facilitate learning after the initial education will consequently continuously grow in the future. Offers as mentioned above from private providers including universities are currently mostly addressed at audience seeking new skills in the realm of higher education, and the provision for VET remains very low.

Yet, the question needs to be discussed which purpose a Micro Credential is possible to fulfil: Education? Continuing Education? Validation of Competences? In the realm of VET, the question emerges what systems are capable to fulfil the existing demand to decrease barriers on the labour market, to provide employers with more skilled workers and to facilitate mobility across borders and sectors. Currently, developing individual, formalized learning pathways starting out on vocational competences in the European Union is very complicated. Even more so, starting a recognition process of non-formally and informally acquired competences, despite the good efforts of member states.<sup>31</sup> The solution to some of these questions might become evident within the work of TeBeVAT.

### 5.4 Conclusion: Micro-Credentials and TeBeVAT

In light of the specific challenges for the event sector and the increasing difficulty to combat the shortage of skilled labour since the outbreak of the Covid-19 pandemic, new means need to be found to attract talent and provide sustainable learning and professional development pathways. Within the member states of the partner organisation, the development and implementation not only of VPL processes, but also the delivery of smaller units, so called Micro Credentials, for specific subsets of competences are perceived to entail major benefits to the industry.

The delivery of Micro Credential entails various externalities and provide opportunities for learners and employers alike. The selection of competence sets and the bundling in units as part of training courses provides the opportunity for shorter, targeted learning experiences, complementing the existing educational framework. At the same time, the courses provided need the implementation of assessment methods – which can also be offered to learners who acquired the specific subset of competence outside a formal environment. A major advantage provides the possibility to circumvent a lengthy education and assessment process a required within the regular apprenticeship, providing a more economic mean of participating in such courses to employers, learners, and workers. The validation of prior learning can thereby be implemented along the delivery of assessment of regular course participants. Workers without a formal qualification thus can rely on a framework to recognize their informally and nonformally acquired competences. Within this modular system, a better understanding of relatedness of skills to other occupational areas becomes clearer, allowing for easier mobility

<sup>&</sup>lt;sup>30</sup> WEF 2020.

<sup>&</sup>lt;sup>31</sup> Li and Pilz 2021.





among sectors and borders. As an example, the event technician competence sets are closely related to those of a light or sound designer, and still fairly familiar to electricians or even event management. In times of crisis, having complementary modules allows workers to migrate among sectors, and to provide the respect sectors with a possibility to attract skilled labor.

This being said, it needs to be taken into account that equivalence and comparability to existing qualifications, transferability among sectors and borders as well as acceptance among firms is ensured. Equivalence of value, ensuring the same skills level of a candidate upon participating in the process, is a sensitive topic and needs to take several aspects into account. Meanwhile a regular event technician apprentice has no need to achieve a hundred percent in the final examination, it needs to be discussed where the threshold of passing a targeted examination is located. Transferability needs to be ensured by providing security of understanding regarding the contents, the assessment and the value of the issued certificates among all member states who wish to participate in the framework. Finally, acceptance can only be achieved if high quality is ensured, granting reliable outcomes for firms and participants. The quality will depend on the validity of the assessments, the impartiality of the process and the ultimate objective to certify competences that are being looked for by employees and employers.



# T<sub>e</sub>B<sub>e</sub>VAT Conclusions and Policy Recommendations





Since long before the COVID-19 pandemic, the labour market in the event sector was under pressure. Unsecure work conditions, time pressure and untransparent hiring processes across the EU pose barriers to firms and workers. The TeBeVAT project strives to contribute to improved labour conditions, to self-governed development and a sustainable transformation of the special labour market of event technicians. To this end, means need to be implemented to increase transparency and mobility across sectors and borders.

The special sector of event technology merits aspects valid for many further labour market branches. Its international dimension, the fast-paced technological development, the freelance market structure and the high rates of lateral entrants provide linkages for further application of the policies suggested below. Moreover, such a linkage is also essential for this sector due to freelanced nature of the labour market in this field, where the supply side is presented mainly by single worker independent companies. Those workers have very hybrid individualised job profiles, working within different sectors and performing drastically different tasks. With the suggestions and implications provided, the TeBeVAT consortium would like to encourage policy makers, training providers and educational experts to engage in the exciting endeavour of new pathways to improve the interoperability of the educational systems, to allow for learners and workers to transfer more freely across borders and sectors and to ultimately bring the European Union another step closer together. The realization of a common European Education Area needs active discussions from VET practitioners, employers, learners and from workers.

From the current situation, the TeBeVAT consortium derives several aspects which need to be considered to implement improved policies which cater to the need of a sector in need.

#### 6.1 Improved utilization of existing tools for competence transparency and mobility

The European Union has established several means to support the mobility and permeability across educational systems. The current further development of these systems needs to take larger account for the needs of Vocational Education and Training. With Europass, a big step forward towards more transparency is being undertaken. The introduction of Digital Credentials promises great alleviation for the VET sector. Further, with the ESCO database, a knowledgeable initiative to find a common language for learning across the EU is being developed. Nonetheless, competences from the realm of Vocational Education and Training need to be considered more strongly and the different needs of workers in comparison to higher education graduates respected.

Moreover, stronger involvement of final stakeholders in the development, adaptation, and translation of contents of these tools es required. Decision-makers need to put more emphasize on transparent decision process, in which all stakeholders are simultaneously involved and provided with the opportunity for closer collaboration, with the end to improve the usability and quality of the results represented.





### 6.2 Two scenarios for future competence recognition systems

Recognizing competences in VET requires different frameworks than competence recognition in higher educational institutions awarding academic degrees (such as Universities). Focussing on learning outcomes, the demonstration of being capable to do things is the most suitable way of verifying learning. To this end, processes need to be put into place which respect common standards of quality assurance, regarding the competence assessment itself but also the entire validation process (TeBeVAT process). These processes need to be defined holistically, focussing on learner-oriented validation and including all phases of the recognition process, from the intake and the information collection process and ending with the distribution of the certificate to the candidate. The TeBeVAT project group foresees two feasible scenarios, taking account of different agencies regarding competence recognition and certification among the Union.

### a. National / regional Level (Regions/Länder)

As the education lies within the authority of the regions (i.e., Länder), regional policies must be implemented according to the own interests and needs. However, they should fulfil three TALQ principles: freedom of education, trust by common quality-controlled assessment, and understanding by a common description. The policies for the process implementation also need to respect common quality standards, the objective of the validation and the needs of the learners. The certifications provided need to be recognised among all regions.

### b. Open coordination: transnational institution and mutual recognition on European level

On the European level, policymakers should create transnational institutions and facilitate mutual recognition. Already existing tools for competence transparency and mobility provide some solutions to do so; still, there are some gaps not covered by those tools. The case of the event industry shows that it is essential to adapt such tools to the fields with the unique situation on the labour market with a specific skills demand. The TeBeVAT consortium proposes to entrust the European Council for Qualification and Certification of Stage and Event Technicians (ETTEC), with the responsibility to centrally control and manage the certifications from across the EU. Conducting centrally organized assessments in real world environments, real technique and reality-like settings promises to provide high-quality assessments respecting the need of vocational learners. Organizations within the EU can trust ETTEC to organize fair and just assessments. As many member states are currently not able to provide recognition processes as laid out and suggested in this document themselves, firms, chambers and social partner can opt into recognizing the credential issued by ETTEC, upon ensuring that quality standards according to equivalent apprenticeship requirements are being met.

Currently, a lack of true willingness to establish validation systems with the end to cater to the need of European workers is threatening the sustainable existence of the event industry labour market. The monopolization of skills certification is threatening to lock-out stakeholders with a vital interest from the opportunity to provide solutions which are being asked for by firms,





learners, and ultimately also the European Commission. Therefore, if no cooperation arrangements can be introduced in order to fulfil national legal requirements, the development of industry standards for each of the competence sets is an opportunity which should be looked at in detail in the future.

### 6.3 Development of digital infrastructures to support lifelong learning of European citizens

The inclusion of skilled labour in the formal sector is vital to a sustainable recovery and healthy development of the event technician labour market in the future. Finally, digital tools need to be created which allow not only the storage of self-indicated competences, but also the collection of artefacts proving a skill acquired outside formal environments. Building digital portfolios for lifelong learning, helping learners to understand their own skillset and empowering them to understand their capabilities needs to be a priority in the European unions labour market transformation. Analysing own skills, realizing proximity of work to other sectors in terms of mere competence requirements, and being enabled to participate in structured continuing learning activities to complement existing skills are needed to substantiate the determination and the long-term commitment of sustain systems of competence recognition across the EU. The issue of lacking permeability on the labour market is a European one, and members states are well off investing in European-thought solutions.





### Literature

Bariso, Justin (2020): Google Has a Plan to Disrupt the College Degree. In *Inc*, 8/19/2020. Available online at https://www.inc.com/justin-bariso/google-plan-disrupt-college-degree-university-higher-education-certificate-project-management-data-analyst.html, checked on 2/3/2022.

Bohlinger, Sandra; Münchhausen, Gesa (2011): Recognition and validation of prior learning. In Sandra Bohlinger, Gesa Münchhausen (Eds.): Validierung von Lernergebnissen. Recognition and validation of prior learning. Bielefeld: Bertelsmann, pp. 7–26. Available online at

 $https://www.pedocs.de/volltexte/2012/6575/pdf/Bohlinger_Muenchhausen_2011\_Recognition\_and\_validation\_of\_prior\_learning\_D\_A.pdf.$ 

Brown, Mark; Nic Giolla Mhichíl, Mairéad (2021): Unboxing Micro-credentials: An Inside, Upside and Downside View. In *Culture and Education* 18, 1-29. Available online at https://www.dcu.ie/sites/default/files/inline-files/unboxing-micro-credentials-2021.pdf.

Camilleri, Anthony F.; Hubak, Raimund (2021): The Micro-Credential Users' Guide – MicroHE. Edited by Duale Hochschule Baden-Württemberg, Knowledge Innovation Centre. Available online at https://microcredentials.eu/publication/the-micro-credential-users-guide/, updated on 2/3/2022, checked on 2/3/2022.

Cedefop (2002): Declaration of the European Ministers of Vocational Education and Training, and the European Commission, convened in Copenhagen on 29 and 30 November 2002, on enhanced European cooperation in vocational education and training. Available online at

 $https://www.cedefop.europa.eu/files/copenahagen_declaration\_en.pdf.$ 

Cedefop (2020): Osnabruck declaration 2020: on vocational education and training as an enabler of recovery and just transitions to digital and green economies. Available online at

https://www.cedefop.europa.eu/en/content/osnabruck-declaration-2020-vocational-education-and-training-enabler-recovery-and-just-transitions.

Cedefop (2021): Conference on microcredentials. Greece. Available online at https://www.cedefop.europa.eu/en/events/conference-microcredentials, checked on 12/17/2021.

Cirlan, Elena; Loukkola, Tia (2020): Micro-credentials linked to the Bologna Key Commitments. Available online at https://www.eua.eu/resources/publications/940:micro-credentials-linked-to-the-bologna-key-commitments.html, updated on 2/3/2022, checked on 2/3/2022.

DeakinCo (2019): Premium skills. The wage premium associated with human skills. Deloitte. Docklands. Available online at https://www2.deloitte.com/content/dam/Deloitte/au/Documents/Economics/deloitte-au-economics-premium-skills-deakinco-060120.pdf, checked on 12/13/2021.

DIHK (2022): Zahlen, Daten und Fakten zum Thema Ausbildung. Available online at https://www.dihk.de/de/themen-und-positionen/fachkraefte/aus-und-weiterbildung/ausbildung/zahlen-daten-fakten-ausbildung-2638, updated on 2/7/2022, checked on 2/7/2022.

Druine, Nathalie (2020): Validation of non-formal and informal Learning in Flanders. In Ruud Duvekot, Anni Karttunen, Martin Noack, Lieve van den Brande (Eds.): Making policy work: validation of prior learning for education and the labour market: EC-VPL, pp. 335–342.

Duvekot, Ruud; Halba, Bénédicte (2014): Validation of Prior learning (VPL) in Europe's higher education. A focus on personalizing the VPL-model. Centre for Livelong Learning Services. Available online at http://cl3s.com/wp-content/uploads/2015/01/ALLinHE-synthesis-report-Dec-20141.pdf.

Duvekot, Ruud; Karttunen, Anni; Noack, Martin; van den Brande, Lieve (Eds.) (2020): Making policy work: validation of prior learning for education and the labour market: EC-VPL.





Ehlers, Ulf-Daniel (2018): Higher Creduation – Degree or Education? The Rise of Microcredentials and its Consequences for the University of the Future. In *EDEN Conference Proceedings* 0 (1), pp. 456–465. Available online at https://www.eden-online.org/proc-2485/index.php/PROC/article/view/1645/1353.

ETUCE (2020): Joint ETUC – ETUCE Position on Micro-credentials in VET and tertiary education. European Trade Union Committee for Education. Brussels. Available online at file:///C:/Users/kylte/Desktop/2020\_06\_Joint\_ETUC-ETUCE\_position\_on\_MICRO-CREDENTIALS\_FINAL.pdf, checked on 12/17/2021.

European Commission (2020): Final Report: A European Approach to Micro Credentials. Output of the Microcredentials Higher Education Consultation Group. Available online at https://ec.europa.eu/education/sites/default/files/document-library-docs/european-approach-micro-, checked on 2/11/2022.

European Committee of the regions (2018): Addressing brain drain. The local and regional dimension. Brussels. Available online at https://cor.europa.eu/en/engage/studies/Documents/addressing-brain-drain/addressing-brain-drain.pdf, checked on 2/7/2022.

Frick, Frank; Strauch, Anne (2016): Wie aus Kompetenzen berufliche Chancen werden: Studie der Bertelsmann-Stiftung zur Kompetenzanerkennung im europäischen Vergleich. In *DIE-Zeitschrift für Erwachsenenbildung* (4), pp. 42–43. Available online at 10.3278/DIE1604W042.

Hofmann, Christine; Kirsch, Helen (2020): The Importance of Skills Recognition. An ILO Project Review of India, Sri Lanka, Bangladesh, Tanzania and Jordan. In Ruud Duvekot, Anni Karttunen, Martin Noack, Lieve van den Brande (Eds.): Making policy work: validation of prior learning for education and the labour market: EC-VPL, pp. 79–88.

Kato, S.; Galán-Muros, V.; Weko, T. (2020): The emergence of alternative credentials (OECD Education Working, 16). Available online at https://www.oecd-ilibrary.org/education/the-emergence-of-alternative-credentials\_b741f39e-.

Li, Junmin; Pilz, Matthias (2021): International transfer of vocational education and training: a literature review. In *Journal of Vocational Education & Training*, pp. 1–34. DOI: 10.1080/13636820.2020.1847566.

Lifelong Learnong Platform (2020): European Skills Agenda: a step further to true Lifeling Learning? (LLLP Platform Statement). Available online at http://lllplatform.eu/lll/wp-content/uploads/2020/08/Statement-New-Skills-Agenda.pdf, checked on 2/11/2022.

Lord Heseltine of Thenford (2012): No stone unturned: chamber of commerce - international comparisons. Available online at

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/36223/12-1214-no-stone-unturned-chambers-of-commerce-international-comparisons.pdf, checked on 2/7/2022.

OECD (2019): Trends Shaping Education 2019. OECD Publishing. Paris. Available online at https://doi.org/10.1787/trends\_edu-2019-en, checked on 12/15/2021.

Oliver, Beverley (2021): A conversation starter: towards a common definition of micro-credentials. UNESCO. Paris. Available online at

https://www.edubrief.com.au/uploads/4/5/0/5/45053363/draft\_unesco\_report\_microcredentials\_13\_sept\_21.pdf, checked on 12/15/2021.

Pakanen, Lotta (2020): Filled with Skills. In Ruud Duvekot, Anni Karttunen, Martin Noack, Lieve van den Brande (Eds.): Making policy work: validation of prior learning for education and the labour market: EC-VPL, pp. 67–72.

Palmer, Brian (2021): An analysis of micro- credentials in VET – technical support document. Adelaide: NCVER.

Valikom (2018): Procedure. Available online at https://www.validierungsverfahren.de/inhalt/verfahren/ablauf, checked on 7/29/2021.





Valikom (2022): Assess and Certify Vocational Skills. Available online at https://www.validierungsverfahren.de/en/home, updated on 2/7/2022, checked on 2/7/2022.

WEF (2020): The Future of Jobs Report. World Economic Forum. Geneva. Available online at https://www3.weforum.org/docs/WEF\_Future\_of\_Jobs\_2020.pdf, checked on 12/17/2021.

Wheelahan, Leesa; Moodie, Gavin (2021): Gig qualifications for the gig economy: micro-credentials and the 'hungry mile'. In *Higher education*, pp. 1–17. DOI: 10.1007/s10734-021-00742-3.

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