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Identifying and Comparing Fields of Competences of VET Teachers and Trainers in Lithuania, Italy and Germany

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Abstract

There are different practices and experiences of VET teachers and trainers training in the EU. Diverging trends concerning the training and competence development of VET teachers and trainers in *Germany, Italy* and *Lithuania*, lead to ERASMUS+Project “TEACH-VET”. This paper points out the findings of our comparative analysis between the above indicated countries regarding training and competence development of VET teachers and trainers. It presents to what extend regulatory frameworks, public bodies and other stakeholders take a leading role in that matter: outlining the main similarities and differences between the countries, identifying tasks and competences needed, leading to a competence profile, which was foundation for the development of an online tool in four languages (German, English, Lithuanian and Italian) where VET teachers / trainers can assess their teaching competences.

Keywords

teaching competence; vet teachers and trainers; competence profiles; fields of competence

1 Introduction

Current changes in vocational education and training, such as responding to the technological and organizational development (the advent of the 4th industrial revolution), internationalization and integration of VET in lifelong learning processes create the need for an adequate development of teaching competence of VET teachers and trainers. As VET teachers and trainers training in the EU countries is differently organized and elaborated, it creates the space for effective policy learning in this field. Furthermore, comparability of the teaching competence of VET teachers and trainers is important from the point of view of internationalization of initial VET and international mobility of VET students and teachers in implementing ECTS measures in teacher education.

Against this background we performed a comparative study on the training of VET teachers (and trainers) in Germany, Italy and Lithuania, examining regulatory framework,



occupational profiles and identifying teaching competences needed on the job. This research was part of Erasmus+ project TEACH-VET, aiming at developing an online instrument for self-assessment, monitoring, guidance and comparability of the teaching competence of VET teachers and trainers, as there is still a lack of modern practical instruments to do so. Our main research questions have been:

1. To what extent and how the issues of VET teachers and trainers training and competence development are regulated by the national laws and legal acts?
2. What are the responsibilities of the state institutions and agencies, social partners and stakeholders like VET providers in the design of VET teachers and trainers training curricula, organization of training, assessment of acquired competences and qualifications of the VET teachers and trainers?
3. What are the main similarities and differences in the countries indicated above? And what are typical tasks of VET teachers and trainers? What competences are required for the job?

During ECER 2019 we presented already our topic, approaches and research questions in a draft version. Now we are very happy that our hypotheses / preliminary results from last year have been confirmed, modified or rejected and that we can present the results of our comparative study and the finished online tool.

2 Theoretical background

Competences of VET teachers and trainers and their development increasingly attract the attention of researchers and policy makers as highly important factors of the quality, accessibility of VET and its acceptance in society. One of the current trends is still the competence-based approach. Day (2017) reminded us that in addition to benefits, such as criteria for teaching quality assurance via a minimal / threshold standards for teacher education, competence-based approaches in teacher training also brings significant drawbacks, such as favouring of atomistic and reductionist learning outcomes, and difficulties in ensuring acquisition of holistic capabilities required by increasingly complex tasks of the teaching profession.

Wuttke and Seifried (2017) noted that competence-based teacher education approaches are heavily influenced by behaviourism and characterised by over-specification and fragmentation of learning. In order to overcome this drawback, current approaches of modelling of teaching competence draw on a more holistic teacher competence model which consists of professional knowledge and beliefs, motivation and self-regulation (Wuttke & Seifried, 2017). The study of Tacconi and Gomez (2013) on the factors of success of the Salesian VET centres in Italy revealed that professional expertise and competence of those VET teachers who really made an impact on successful training and further employment/career of their students were strongly integrated and linked with a wide range of personal skills and values.

Taking this into consideration, to master the task of identifying and comparing teaching competence needed for VET our project applied rather established VET-research methods.

3 Approach and methodology

To answer the questions which main competent bodies regulate the training competence of VET teachers and trainers in *Lithuania*, *Germany*, and *Italy*, to analyse national standards and compare occupational profiles for identifying tasks and competences of VET teachers and trainers, several steps were taken.

The first step was mainly based on desk-research: to collect and to analyse information about framework guidelines, occupational standards, the involvement of public bodies, stakeholders and other relevant parties regarding the training of VET teachers and trainers (and

hereby their acquisition of competences) in the mentioned countries for the national reports on VET teacher and trainer qualification pathways. The main focus hereby lay on features of the legal and institutional framework for VET teachers' and trainers' training and competence development. Literature, existing research data and statistics on the teaching competence of VET teachers and trainers in Germany, Lithuania and Italy were collected. Afterwards research papers, reports, statistical data providing relevant information about the assessment and development of the teaching competence of VET teachers and trainers were analysed. Analysing these documents was of importance in order to draw a picture of the actual occupational / competence profile of VET teachers and trainers in each country. Also any available information about national occupational standards or profiles was analysed like legal acts that stipulate qualifications and competences of VET teachers and trainers, descriptors of qualifications from executed occupational standards; for example "Standards for teacher training in the educational science" a resolution by the German KMK (standing conference of the ministers of education and cultural affairs). The content analysis of these official documents that stipulate the occupations or qualifications of VET teachers and trainers provided the basic reference information for each country to describe a national profile of VET teachers and trainers mentioned in the national reports.

After comparative content analysis of the policy documents and legal acts, research methods included also qualitative, such as interviews with experts from the field and focus groups of VET teachers and trainers. The population of informants per country were 5 (initial) VET teachers and 5 trainers from different sectors and 2-5 experts from VET teacher training institutions to gather important information about performed tasks and competences learned and / or needed. The Interviews were executed with respect to regulations and previous research. In Italy and Lithuania, additional data was gathered by surveys. To develop the occupation profiles for each country the guideline for the Interviews contained following topics, see Figure 1.

Figure 1

Interview topics

Interview topic 1	Status and position of the VET teacher or trainer
Interview topic 2	Overview of the contents of VET teachers work processes by discerning key changes of work contents and context: Daily planning and organization of curriculum and lessons, development of learning contents, organisation of the teaching and learning process, VET didactics, formative assessment of learning
Interview topic 3	Competence requirements
Interview topic 4	Competence development and recognition

We focussed on real-life situations and competences needed from the point of view of VET teachers and trainers themselves. Which tasks are executed and which competences are needed for these tasks? In addition to that, the focus groups were asked: in what respects skills of and the requirements for VET teachers do differ from those of general education teachers. By interviewing insiders like VET teachers, trainers, and experts we got updated first-hand information about the occupational profile and competences needed for the profession as a VET teacher or trainer.

Those two first steps allowed creating 3 occupational profiles for the EU countries Germany, Lithuania and Italy which were later on compared to create a common competence framework. Our comparative research method was led by the traditional descriptive approach – considering that differences of teaching are rather small and cultural values are similar in these three EU countries. The competence framework is defined by 11 "fields of competence" for each group (VET teachers and trainers). On basis of our expert hearings and group

discussions, we extracted 10 crucial statements for each field. These are the basis of the developed electronic on-line tool for self-assessment, monitoring, guidance and comparability of teaching competences of VET teachers and trainers. It was further developed via design-based research with 3 iterations (one in each country). Partners agreed that self-estimation of the competences within the fields should be via rating (Likert-scale) these statements. At <https://teachvet.eu/self-assessment/> it is now possible to self-estimate the professional and pedagogical competences of VET teachers and trainers.

4 Results

Remembering our research question introduced in Chapter 1, our comparison of **institutional roles** of all main competent bodies for VET teacher and trainer education delivered a clear picture: In Lithuania training is regulated by national laws; in Germany the (few) regulations on VET trainer education are as well regulated by a national law, but the exhaustive regulations for VET teachers and all regulations in Italy are governed by regional bodies.

Besides the obvious differences in size and number of inhabitants of the three countries, a root cause of this distribution of responsibilities can be found in a historic comparison. Development of state institutions and statehood in Lithuania in the last century was strongly precluded by the losses of independence causing significant disruptions and derailments – whilst Italy and Germany emerged from former separate entities.

National standards for qualifications of VET teachers and trainers differ largely between the three investigated countries: The state of Italy sets no standards; German national authorities set minimum standards that can be modified or raised by the regions and Lithuania sets norm standards – to be applied by all regions and training institutions. These findings correlate strongly with the conclusions mentioned before on the role of regions compared to national authorities; Centralisation leads to unified standards – and vice versa.

The **standard educational programmes** for VET teachers differ largely in the three countries. For example, in Lithuania and Italy most VET-teachers studied only the subject (e.g. engineering) and had no or only few pedagogical courses, whereas in Germany a master's degree referring to both, subject and pedagogy, is mandatory. Furthermore, the responsibilities regarding VET (government-controlled, legal state or region) as well as the existence of resolutions defining the training/ acquisition of competence, vary. Taking a closer look at the different ways of training, it becomes clear that the different training systems in the 3 counties also lead to different EQF-levels and therefore paygrade. In Germany VET teachers undergo the same training as public school teachers, within a time span of 5 years. With completion of the Master of Education acquiring the first state examination and by finishing preparatory service (practical phase), which concludes with the Second State Examination EQF level is 7. Only after this lengthy qualification pathway is the teaching qualification as a teacher in public VET schools acquired. VET trainers on the other hand, according to the Vocational Training Act (section 3 §28ff.) must provide vocational skills, knowledge and competences (vocational action competence) that are needed for the performance of an occupational activity in a changing work environment and do this as part of an organised training course. They must also grant the acquisition of the necessary vocational experience with is minimum EQF level 4. Most German trainers hold a handicraft or industrial foreman qualification on EQF level 6.

In Lithuania since August 2019 the national occupational standard of the education sector and libraries is approved, which includes descriptors of qualifications of the VET teacher declaring EQF levels 5 and 6, for trainers EQF level 5. These descriptors serve as a basis for the development of unified curricula for the training of VET teachers and trainers.

In Italy however, there is no national regulation and standardization of the qualifications of VET teachers, nor nationally recognized register of trainers or formal recruitment procedures.

Summarising the findings on **VET teacher and trainer training systems** and practice the results are: Minor differences between federal states / providers in Germany, huge differences in Italy and Lithuania. More enlightening is a comparison of findings on training systems and institutional settings because it reveals a high consistency for Italy: Governance on regional level and no national standards correspond to a manifoldness of VET teacher and trainer education sub-systems.

The German approach can be considered somehow consistent, as well: the share of responsibilities, the corporatist beliefs and the minimum qualification standards led to non-identical, but similar education of VET teachers and trainers as well as of practice of VET in all regions; especially when regarding long time-spans.

Situation in Lithuania is strongly differing from these consistent and stable descriptions from the two countries mentioned before: Although governance is central and norm standards had been set; an absence of institutionalized provision of training of VET teachers and trainers in Lithuania was reported – a contradictory finding that depicts the need of serious improvements. One of such future improvements is introduction of the new bachelor study program "Vocational Pedagogy" by Vytautas Magnus University. This study program will provide bachelor degree in education science and qualification of vocational teacher after 3 years of studies and is planned to be launched in 2020-2021.

Regarding trainers and work-place mentors or tutors; the situation within the three countries is rather similar: Although German trainers need a short qualification (trainer aptitude, approx. 2 weeks) most of the colleagues who support Work-Based-Learning (WBL) are unskilled for VET.

Comparing the **competence profiles** on bases of interviews it can be noticed, that VET teacher competence profiles from Germany and, to some extent, from Italy are more focused on the different didactical and methodological competences in the field of curriculum design – and on improving teaching lessons and practical trainings. In Lithuania, however, the focus rather is in the field of management and organisation of the education and training processes. This difference at least partially can be explained by the influence of recent methodological approaches in the field of VET curriculum design.

Notwithstanding these differences, there have been identified **11 transnational common fields of competence** for VET teachers and VET trainers, each. The headings of the following tables briefly describe these fields. They are partly identical for VET-teachers and trainers – but listed separately with respect to further exploitation in self-estimation online-tool. Entries below these bold headings of competence fields *do not claim* to describe these holistic fields as an operationalisation or as a checklist; they are just highlighting some activities within these fields to facilitate development of statements for self-estimation within online-tool. As mentioned in Chapter 3 the statements are based on expert hearings and group discussions contouring the core work processes and competences of VET teachers and trainers. They are assigned to the corresponding fields of VET-teachers as shown below¹, see Table 1.

Table 1

Core work processes of VET teachers

1 Planning of Vocational Educational and Training
comparing self-made learning material with the material produced by colleagues
planning and designing lessons, considering that each student performs differently

¹ For full list of fields of competence and assigned statements and fields of competence of VET -trainers visit www.teachvet.eu

selecting contents and methods, forms of teaching and communication with reference to curricula and, if necessary, individual development plans

testing the prepared learning and training materials and methods in order to evaluate their suitability with learning requirements and learning needs of the students

considering social and cultural diversity while designing the educational content for different groups of learners

training skills that are required in economy considering general technological and social trends (Industry 4.0, demographic changes, social status of students, etc.)

designing and re-designing teaching and learning processes taking findings of research about the acquisition of knowledge and skills into account

preparing long-term, short-term and thematic training plans

collecting and evaluating information about work processes and their changes of the respective apprenticeship

I estimate that my planning competences are sufficient to fulfil my tasks²

2 Implementation of vocational training and learning in VET-schools

being responsible for workplace safety

considering individual needs and possibilities of students

...

3 Implementation of vocational training and learning in enterprises³

searching social partners and mentors for practical training and establishing contacts of cooperation

coordinating practical training in real workplaces

...

4 Diversity: Teaching students with special needs⁴

adjusting the learning environment (infrastructure – working and learning areas, equipment, etc.) referring to the specific conditions and needs of learners and by following instructions and recommendations of specialists

preparing and adjusting learning and training materials for students with special needs* (with visual, audition, movement impairments and disabilities, behaviour and understanding impairments, etc.)

...

5 Assessment and monitoring of student's learning outcomes

foreseeing assessment tasks in long-term and short-term training plans

executing formative assessment of acquired knowledge, practical and key skills

...

6 Advising students and parents on issues of vocational education, employment and career

² The 10th statement always does not represent a task but is of importance for the online tool regarding the self-estimation.

³ In Germany the processing of these tasks would be assigned to the VET trainers. In Lithuania, these tasks can also belong to the core activities of VET teachers.

⁴ The expression “students with special needs” refers to all students with problems that give them a disadvantage compared to their peers (students with difficulties of learning deriving from physical, mental or due to the social / family context of belonging).

searching information for counselling on descriptors and profiles of qualifications and occupations

supporting students in finding appropriate VET programmes

...

7 Project work and involvement in the development of VET provision

collecting information about local, national and international events related to professional activity

preparing students for national and international skills competitions

...

8 Professional development

reflecting executed training activities (strengths, weaknesses and potential for improvement) by using feedback from students and other data

foreseeing the directions of development and advancement of technological, pedagogic-didactic, and key competences

...

9 Managing students' conflicts and emotions

fostering communication and recognition of emotions

usage of classroom-management techniques

...

10 Digital competences development

using cloud services and platforms with students (e.g. google office) in order to foster learning process

knowing various media that can be used for education and being able to apply them

...

11 Co-operation with VET schools, chambers, international partners

cooperating with social partners regularly on issues related to the provision of work-based learning and apprenticeship (curriculum design, organisation and provision of training)

cooperating with social partners in monitoring and assurance of quality of provided vocational education and training

...

These outcomes served as basis for the design of the online tools for self-assessment and competence development (IO2 of project TEACH-VET). On basis of this comparative analysis of teaching competences of VET teachers and trainers in the partner countries, an on-line instrument for assessment and development of teaching competence for VET teachers and trainers was created (see www.teachvet.eu). VET teachers and trainers from Germany, Lithuania, Italy or everyone who wants can visit the page with information⁵ about the project and the partners, the comparative study offering a comprehensive insight into status, strength, opportunities and development needs of educational systems for VET-teachers and trainers in the participating countries Lithuania, Germany and Italy and the potentials for mutual learning, transnational (for Lithuania, Germany, and Italy) common fields of competence for VET teachers resp. VET trainers that sketches skills needed for a modern, work-process oriented VET

⁵ Information is available in English, German, Lithuanian and Italian via choosing your language on the website.

education. In addition to that, the developed tool on basis of the studies from the TEACH-VET project there is the option to self-assess one's own competences in any of the analysed 10 fields via the 11 statements. The self-estimation is free and it is possible rather to take the assessment for only one field or for all. The result is a printable pdf version of the current status and can be updated any time. Moreover, a section was built to provide concrete information on possible courses (online and offline recommendations in mother tongue German, Lithuanian, Italian) in order to improve the competences in any competence field. The recommendations given vary from traditional seminars at a university to the online offers like interactive courses via Moodle.

5 Conclusions

Regarding instruments and mechanisms related to the standardisation of competences and qualifications of VET teachers and trainers, there can be outlined the absence of coherent and systemic standardisation in Lithuania and Italy. The introduction of a national occupational standard of the education sector, which includes qualifications of VET teachers and trainers, should help to solve this problem in Lithuania.

Despite of different orientation of the analysed competence profiles of VET teachers and trainers towards didactical and cultural competences (bigger attention to these competences in Germany and Italy, less attention in Lithuania), the comparison of these profiles permitted to develop common fields of competence as basis for self-estimation and development of pedagogical and professional competences.

Teach-VET project did not only disclose teaching and training competences and strengths respective weaknesses of VET-teacher and trainer educational systems in Lithuania, Germany and Italy, partners expect additionally, that using and exploitation of the developed online tool for assessment of teaching competences of VET teachers and trainers will significantly improve self-estimation of beneficiaries. And, as a consequence, effectiveness of provided services of training and competence development support for VET teachers and trainers should develop – as well as project partners hope that policy makers and stakeholders improve their governance – and treat the relevance of effectiveness of competence development of VET teachers and trainers seriously.

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