LEENA KAIKKONEN & IRMELI MAUNONEN-ESKELINEN (EDS.)

Does the tandem approach work?

Research on the experimentation testing the professional development model for tutors in work-based learning in the Baltic countries

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EDITED BY LEENA KAIKKONEN & IRMELI MAUNONEN-ESKELINEN

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RESEARCH ON THE EXPERIMENTATION TESTING THE PROFESSIONAL DEVELOPMENT MODEL FOR TUTORS IN WORK-BASED LEARNING IN THE BALTIC COUNTRIES

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ABSTRACT

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Research on the experimentation testing the professional development model for tutors in work-based learning in the Baltic countries
(Publications of JAMK University of Applied Sciences, 277)

Work-based learning (WBL) is a key development area in Vocational Education and Training in (VET) in Europe. The European policy objectives in ET2020 raise work-based learning in all its forms as one of the focus areas. Related to this objective, the opportunities needed for professional development of VET teachers, trainers and mentors in school and work-based settings are brought up.

The recent research has evidenced, that the arrangements of WBL occur differently in different countries in Europe, that there seems to be a willingness to increase WBL within European employment policies besides a willingness to standardise the approaches in WBL. However, the idea of harmonisation and standardisation is a challenge because the education systems in different countries follow such diverse national and cultural logics based on different historical developments in the national socio-political, economic and educational contexts. Based on the European policy objectives, the Baltic countries have intended to promote and expand work-based learning in their VET and to execute closer mutual collaboration. In this development, the training for WBL tutors has been recognised as one of the key elements.

This research is an integral part of an experimentation which purpose was to develop and test a professional development model for WBL tutors in the Baltic countries. In this model the tutors from VET, called VET tutors or teachers, and the tutors from enterprises or workplaces, called workplace tutors, were trained jointly in so-called tandem training. The purpose of the research within the experimentation was to find evidence of the impact of the joint WBL tutor training: how the tutors participating in joint training develop their skills related to WBL. Furthermore, the research sought to answer the question of how the joint trainings support the development of cooperation between VET schools and enterprises or any type of workplace.

The experimentation methodology was developed according to panel design based on the ”before and after” approach in order to collect information on the trained WBL tutors in the beginning and six months after their training. This was complemented with the Participatory Action Research concept of the cyclic process. The training cycles were repeated three times in a row in the form of planning (defining and reformulating the tandem training approach and tools), implementation (the WBL tutor tandem trainings) and evaluation of the impacts (through data collection and analysis from WBL tutors in addition to informants of other parties), accompanied with participatory self-reflections by the project partners for further development.

The main direct informants were the VET school tutors and workplace tutors, who participated in the WBL tutor training. The indirect informants were VET students in addition to VET school principals and company managers. Data was collected with online questionnaires which included multiple choice questions but also open questions. These questionnaires were used to collect data from WBL tutors, students and VET school and company managers. Furthermore, group interviews were used to collect data from the Lead Trainers and also some randomly chosen WBL tutors.

The research showed that the tandem training generated learning experiences concerning the individuals’ knowledge, skills and attitudes, and that the training was considered useful overall. However, the research did not demonstrate the significant impact of the participants’ competence.

Keywords: work-based learning, vocational education and training, tutor training, tandem approach

PREFACE

This research welled from long-term educational cooperation in vocational education and training between Estonia, Latvia and Lithuania and Finland. In all these countries, work-based learning has been focused upon in the development of vocational education and training. This research is a part of the policy experimentation project implemented by the nine project partners and co-funded by the European Union Erasmus+ Key Action 3 programme, which aims to support policy reforms and initiatives for policy innovation within the EU.

According to EU guidelines, the policy experimentations are perceived as action-research projects in which researchers, decision-makers and stakeholders are engaged in cooperation. Through multifaceted cooperation, ”the aim is to apply concrete measures that have the potential to be concretely converted into policy or practice in education and training systems in the short or medium term”. The measure in this case was the joint work-based learning tutor training, called the WBL tutor tandem training, which was tested in the Baltic countries. As a consequence of their aims and nature, policy experimentations need to depend on the collection and evaluation of evidence through large-scale field trials relying on robust and widely recognised methodologies. For this reason, it is also recommended that the related reports should consist of more descriptive findings than observations or conceptual analysis. This is also the case with the report described here. It involves a lot of points of view of the diverse informants in the Baltic countries. That means the main informants, i.e. the WBL tutors from vocational schools and workplaces, but also opinions of the final beneficiaries of the WBL development, the vocational education students, as well as the managers of vocational schools and companies. It is hoped that a kind of cross-reflection of these diverse points of view could support further development of the tandem training itself as well as wider development of WBL processes. We would like to express our most heartfelt acknowledgements to all the respondents for their valuable input for the success of the research.

The findings of the field trials described here have been analysed in order to measure the impact of the tested tandem training approach. The intention is for all the experimentations and the subsequent results to be described so that it would be possible for others to learn of them. The idea of peer learning and

sharing experiences, expertise and materials has been manifesting through the collaboration of the project partners.

The consortium of the project TTT4WBL – Testing New Approaches to Training VET and Workplace Tutors for Work-Based Learning consisted of the nine partner institutions:

- National Centre for Education (Latvia),
- The Ministry of Education and Science of Latvia,
- The Latvian Chamber of Commerce and Industry,
- Baltic Bright (Latvia),
- Qualifications and Vocational Education and Training Development Centre (Lithuania),
- Vilnius Car Mechanics and Business School (Lithuania),
- Kaunas Chamber of Commerce, Industry and Crafts (Lithuania),
- Tartu Vocational Education Centre (Estonia) and
- JAMK University of Applied Sciences (Finland).

The wide range of experts from these institutions have contributed to the project and enabled the implementation of the research. Their devoted involvement overall for accomplishing all the project activities was of the uttermost importance in executing the research activities. We would like to warmly thank all the partners involved for their great contribution. Last but definitely not least, we would like to cordially acknowledge the JAMK research team members, Dr Arja Pakkala and M.Sc Tommi Veistämö, for their appreciated contribution to the implementation of the research.

In Jyväskylä, 31st of January, 2020

Leena Kaikkonen and Irmeli Maunonen-Eskelinen

THE CONTRIBUTIONS OF THE MEMBERS OF THE RESEARCH TEAM

Dr Kaikkonen, L. was responsible for writing the research protocol and revising the final version. Concerning the data collection tools, she was responsible for developing the student questionnaire and setting the themes/questions for the lead trainer interviews. In addition, she produced video material and instructions for using the questionnaires. With regard to the collection of data, she was responsible for monitoring the online data collection and contacts with the Baltic country representatives and conducting the lead trainer interviews in Estonia, Latvia and Lithuania. In the analyses of the data, she contributed to the quantitative data analysis of the tutor questionnaire, the qualitative data analysis of the tutor group interviews and the quantitative and qualitative data analysis of the student questionnaire. With regard to writing the report, she was responsible for the following chapters: 1. Background, 2. Implementation of the research, 3. Data analysis, 4. Interweaved research and experimentation, 6. WBL tutors' competence improvement, 7. The tutor group interviews – validating the individually provided data on the tandem training, 8. Students' experiences about work-based learning, 9. Comparing experiences of students and tutors, and Discussion. Furthermore, she contributed to the other chapters by providing comments and developing the text. She was responsible for editing the whole publication.

Maunonen-Eskelinen, I. was responsible for writing the research protocol. Concerning the data collection tools, she was responsible for developing the VET school manager and company manager questionnaires and setting the themes/questions for the lead trainer interviews. Regarding the collection of data, she was responsible for conducting the lead trainer interviews in Estonia, Latvia and Lithuania. In the analyses of the data, she contributed mainly to the qualitative data analysis of the VET school manager and company manager questionnaires and the lead trainer interviews. With regard to writing the report, she was responsible for writing the following chapters: Preface, 1. Background, 2. Implementation of the research, 10. The VET school managers' perceptions, 11. The company managers' perceptions, 12. Comparing VET school managers' and company managers' perceptions, 13. The lead trainers' experiences and Discussion. Furthermore, she contributed

to the other chapters by providing comments and developing the text. She contributed to editing the whole publication.

Dr Pakkala, A. was responsible for writing the research protocol. Concerning the data collection tools, she was responsible for developing the tutor questionnaires (in the beginning and 6 months after the training). In addition, she was responsible for developing the themes/questions for the tutor group interviews. Regarding the collection of data, she conducted the lead trainers' interviews in Lithuania. In the analyses of the data, she was responsible for the qualitative data analysis of the tutor questionnaires (in the beginning and 6 months after the training). With regard to writing the report, her main responsibility was chapter 5. WBL tutors' expectations and experienced benefits of the tutor training.

Veistämö, T. was the main person responsible for the quantitative part of the research. He was responsible for reorganising the online questionnaires into the Webropol system. He conducted the quantitative data collection, monitored the responses of WBL tutors, students, VET school managers and company managers and sent the reminders to the WBL tutors. Concerning the quantitative data analysis, he was responsible for the statistical analysis. He contributed to writing chapter 3. Data Analysis, 6. WBL tutors' competence improvement, and, by providing the statistical analyses, also contributed to the following chapters: 4. Results on the WBL tutors, 7. Students' experiences about work-based learning, 8. Comparing experiences of students and tutors, 9. The VET school managers' perceptions, 10. The company managers' perceptions and 11. Comparing VET school managers' and company managers' perceptions.

PART
I

The research in the experimentation

1 BACKGROUND

Leena Kaikkonen & Irmeli Maunonen-Eskelinen

Research on vocational education and training (VET) is important in order to develop it and the education system further. Comparative research can provide new perspectives and increase information for development. For example, in the Baltic countires, a comparative analysis on reforms in VET and its applications was conducted by Bünning (2006). The research examined VET and VET teacher training in the Baltic states. An example of the recent research is the report of French, Diettric, Rose & Eichenmüller (2016). They analysed the trends, innovations and projects in VET in the Baltic Sea Region. In their report, they brought up the importance of further development of the cooperation between the ”world of theoretical education” and the ”world of real work,” in which work-based learning (WBL) has a crucial role.

Teräs and Virolainen (2018) analysed the research on vocational education conducted in Finland, Sweden and Norway in 2007–2017. The analysis showed that the research themes varied between the countries despite the existence of common themes. In Norway, the focus of the research has been on vocational pedagogy and vocational didactics. When comparing the research themes in Finland and Norway, topics like learning and training at work and in working life, teacher education, cultural, gender and identity issues and special education were common in both countries. In Sweden, different aspects of vocational didactics were also emphasised. In particular, there has been interest on the integration of subject teaching to vocational teaching, vocational education and assessment, and the identification and recognition of prior learning. In Finland, there has recently been interest towards entrepreneurship education and the use of ICT in education. However, research themes such as professional identity and professional growth and vocational education and the world of work are common to all these aforementioned Nordic countries.

This chapter presents, through a literature review, firstly the concept of work-based learning as discussed within European Union and especially its use in the Baltic countries. Secondly, it brings in the relevant points of view to this research: about how WBL has been organised and what its meaning is, and also about guidance in WBL. These are reflected through current research conducted in these areas.

1.1 THE CONCEPT OF WORK-BASED LEARNING

The European Centre for the Development of Vocational Training (Cedefop) defines work-based learning (WBL) as an intended and structured learning or training that has direct relevance to the current or future tasks of the learner. Moreover, WBL is considered as training taking place in a work-based context like in the workplace, in settings simulating the workplace or outside the workplace, but with specific learning tasks that must be directly applied in the workplace and reflected upon afterwards (Cedefop 2015b). There are three main models of work-based learning in initial Vocational Education and Training (VET) in Europe (EC 2013). In the report of the European Commission, the models are described as follows:

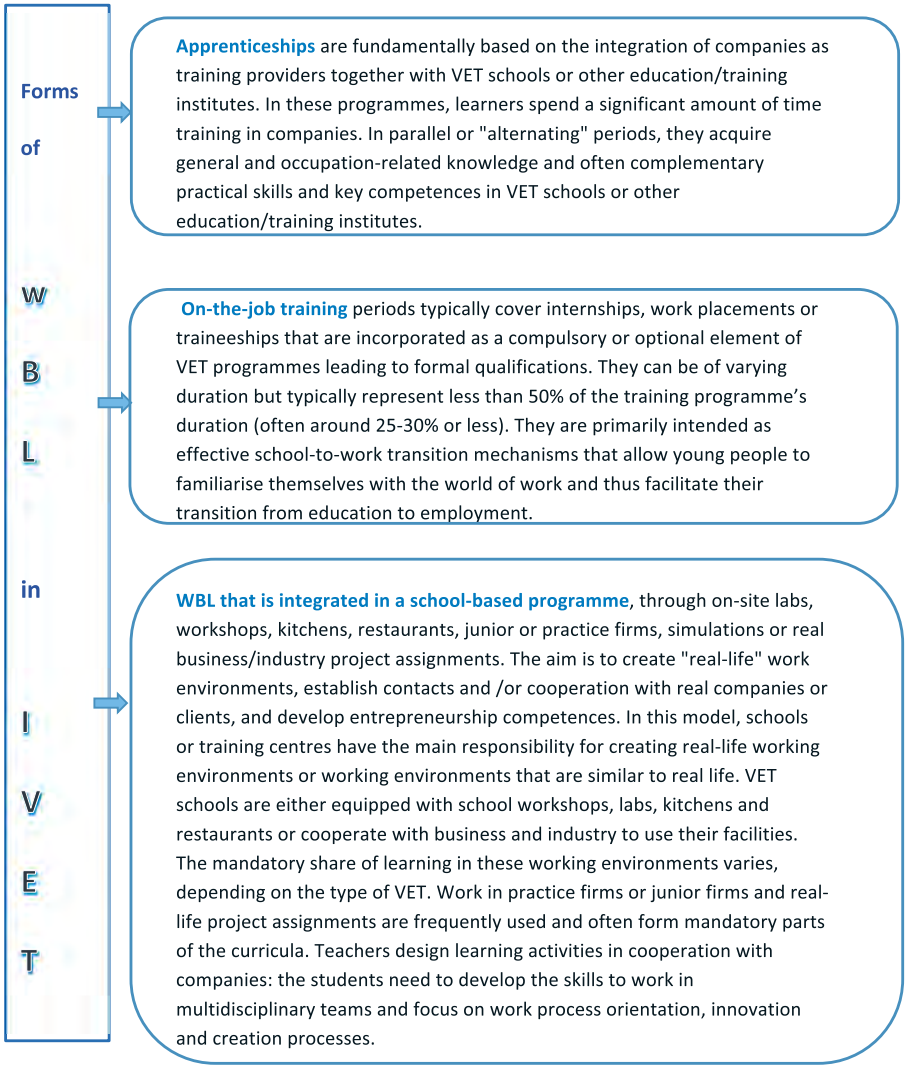

Figure 1. The three main models of work-based learning in Initial Vocational Education and Training (IVET) in Europe (EC 2013)

1.2 WORK-BASED LEARNING IN THE BALTIC COUNTRIES

The concept of work-based learning is not yet fully established in all the Baltic countries. In Estonia, the concept of work-based learning has been situated in the description of the learning options in VET (Cedefop 2017a). The figure 2 introduces the concept of work-based learning and its different forms in Estonia.

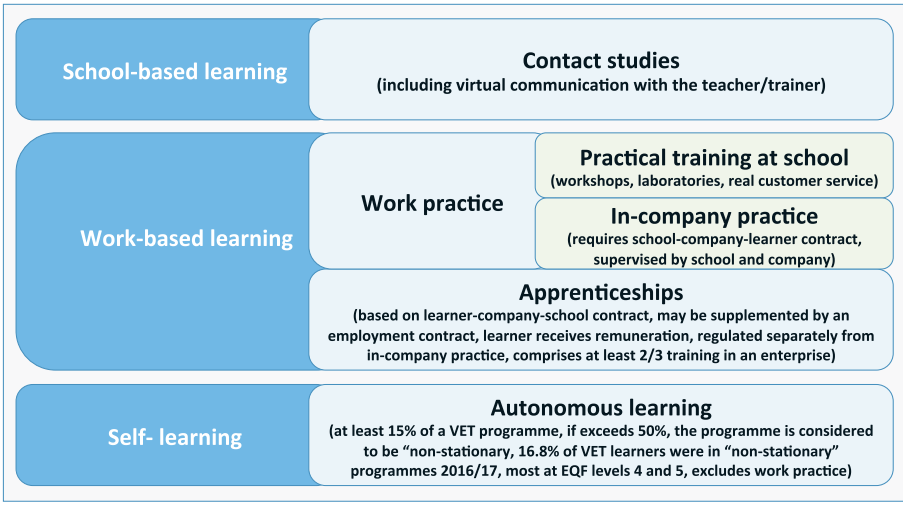

Figure 2. Learning options in VET in Estonia (Cedefop 2017a; Musset 2019)

The possibility to gain qualifications through apprenticeships was presented in Estonia in 2006. The apprenticeships concern all VET levels, qualifications at EQF levels 2 to 5, and both initial and continuing forms. Apprenticeships follow the same curricula as school-based programmes (Cedefop 2017c). Figure 2 shows that work-based learning in Estonia is an umbrella concept that consists of different forms of learning at work.

The share of work-based learning (WBL) forms at least half of the VET part of the curriculum. Depending on the type of training, WBL can vary between 35% and 70%. WBL is usually equally divided between workshops at school and learning at a workplace (Cedefop 2016a). Overall, the number of students in WBL is rather low in Estonia; e.g. 2.4% of all VET students are in apprenticeship training, and 1.4% of Initial Vocational Education and Training (IVET) students are in combined work- and school-based programmes (Cedefop Refernet 2014; Cedefop 2017a).

In Latvia, the concept of work-based learning was introduced in 2013 when a pilot project began in several vocational programmes. In the work-based learning process, after admission to the vocational education institution, learning in a company is discussed and negotiated. The students get an allowance or salary from the company during learning at work. Overall, the percentage of upper secondary students enrolled in IVET in Latvia (39.8% in 2015) is lower than the EU average (47.3%), but *all* the VET students were reported to be enrolled in combined work- and school-based programmes

compared with 28.4% in EU (Cedefop 2017b). However, apprenticeships in crafts have already existed since 1992. A 'craft apprentice' gains an admission to a crafts company or an education institution and signs a training contract. Apprenticeship programmes include both learning at school and training in enterprises. However, they are implemented separately from programmes in other education sectors and are not included in the national education classification (no relevant ISCED or EQF level) (Daija and Kinta 2016).

In Lithuania, the concept of work-based learning has not yet taken root and instead the term "practical training" has been used. Most IVET in Lithuania is school-based, including practical training and training in enterprises. Practical training is a major part of vocational subjects (60% to 70%), of which eight to 15 weeks is held in a company or school-based workshop simulating working conditions (Cedefop 2014b, 2016b). The legislation basis for apprenticeship was already set at the end of 1990 (Cedefop 2012). However, apprenticeship is still implemented on a small scale and only some schools have programmes for some qualifications such as carpenters, roofers, confectioners, cooks, locomotive drivers and java (Cedefop 2015a, 2016b). According to Cedefop's report (2017d), there are no IVET work-based students.

1.3 WORK-BASED LEARNING IN EDUCATION SYSTEMS

The arrangements of WBL occur differently in different countries, and it is also evidenced with research from diverse perspectives. For example, Rintala et al. (2017) analyse WBL from the point of view of apprenticeship and how it exists as an institution in Germany, England and Finland. In their review, they perceive that, in addition to a willingness to increase WBL within European employment policies, there seems to be a willingness to standardise the approaches in WBL. They state, however, that it is almost impossible to transfer the good practices from one country to another because the education systems in different countries follow such diverse national and cultural logics based on different historical developments in the national socio-political, economic and educational contexts. In their review, they contend that comparing VET systems – and e.g. WBL as part of it – requires observing the relations, responsibilities and societal structures between the state, labour market and economy. Furthermore, it is important to recognise how the roles of educational organisations, enterprises, interest groups and social partners are seen in responding to the supply and demand of qualifications in the educational markets (Rintala, Nokelainen and Pylväs 2017).

When Mazenod (2017) made a dual comparison between the contexts in Finland and England, she found out that the status of and expectations for apprenticeship training from the societal point of view differ between these countries. In England, expectations and goals for apprenticeship training are connected with youth unemployment, social exclusion and lack of skilled work force, whereas in Finland, the apprenticeship training of youth is considered as only one part of wider measures to prevent social exclusion. In addition to providing the apprenticeship training place, emphasis is put on minimising the other social factors that cause exclusion. However, when Irjala (2017) for her part compared the Finnish apprenticeship system with the German one, especially from the point of view of students with special educational needs and the factors that promote or hinder apprenticeship training for them, she found out a notable difference between the two countries. In Germany, the students have thousands of optional professions to choose from, whereas in Finland, in practice, apprenticeships for students with special educational needs are available in only a limited number of professions and levels of education (Irjala 2017).

Consequently, Mazenod (2017) underlines that, instead of plainly comparing the points of separate parts in different education systems, it is important to acknowledge the position of apprenticeships training as a part of the national education system. This is similarly identified by Rintala et al (2017). In their review, they analysed their three exemplary countries, England, Germany and Finland, according to the relationships, responsibilities and cooperation structures of the state, labour market organisations and the economy, in addition to discussing their impact on the vocational education system. In England, education is strongly regulated by the markets, which also put pressure on people to quickly employ themselves. The purpose of the vocational education is to support flexible labour markets by providing people with general competences. In the German dual system, enterprises and their interest groups strongly direct education, but other stakeholders such as the third sector also have an influence. Vocational education is overall perceived as being an important collective capacity building system in which enterprises produce human capital, whereas the social and employment security system enables employees to invest in their professional capacity. In Finland, vocational education, like education in general, is understood as something to which everyone has an equal right. As such, it is considered as being within the purview of social security and a responsibility of the state. Concerning education, Finland is a typically state-driven country and strongly committed to school-based vocational education (Rintala et al. 2017).

With the broad socio-political, economic and educational contexts affecting the implementation of VET as described above in mind, the meaning of work-based learning for students can also be pondered in many ways. It is perceived as not only benefitting individual students' learning but also improving more widely the employability of young people through national VET systems. Furthermore, it is recognised as a precondition for developing a competitive labour force (Cedefop 2016c). Therefore, for the students WBL may well be considered as a mechanism for smoothing the transition from school to work and easing their employability. As for the employers, WBL provides a possibility to recruit potential workers. Through WBL, the students can, in an authentic work context, learn skills that are difficult to develop in a school environment. Thus, WBL increases the relevance of the learnt skills of students and supports the students' professional identity and self-esteem. This can be interpreted from the many reports describing the implementation of WBL in different countries (e.g. EC 2013; EC 2015; Cedefop 2015c).

There are also diverse ways of seeing WBL in regards to organising it and the responsibilities of its arrangements. On the one hand, WBL is considered as a way to engage young people into being in enterprises where they can learn what is relevant, and the arrangement of it is considered to be under the responsibility and control of enterprises. On the other hand, it is considered that young people should first learn the skills needed in working life in educational institutions in order to be professionally competent when entering working life. In practice, diverse approaches occur where these two lines are mixed differently. Work-based learning can be seen as a powerful driver for workplace skills and productivity, engaging both the learner and the companies (Kis 2016).

As Musset (29, 2019) summarises, the main benefit of WBL can simply be described as emphasising the strong role of workplaces as learning environments, which provide benefits to everyone involved: learners, employers, VET schools and teachers, and society as a whole (see Figure 3 below).

Figure 3. Possible benefits of work-based learning for diverse parties (EC 2013; Musset 2019)

Yet, irrespective of the emphasis on who benefits from WBL, there seems to be a commonly shared agreement that young learners need competent guidance in their professional learning.

At the European level, this shared agreement on the necessity of good guidance in WBL was raised in 2015 as the medium-term policy document on VET, called the Riga Conclusions (2015) and further in European ET2020 policy objectives (EC2015). They emphasise the promotion of WBL in all its forms and furthermore promote the introduction of systemic approaches for the training of VET teachers and trainers in both school and work-based settings. As the crucial element for the successful implementation of work-based learning approaches is considered the existence of competent WBL tutors/trainers in VET institutions and companies. Though WBL has been promoted in the Vocational Education and Training systems across Europe and as a part of the European youth and employment policies (EC 2013), the issue of learners' guidance in WBL is still a challenge that also requires focused research to support the policy developments. This is due to seeing work itself as changing in addition to recognising workplaces as learning

environments besides VET institutions, and which together can provide the learner with diverse opportunities for learning (Mikkonen, Pylväs, Rintala, Nokelainen & Postareff 2017).

1.4 THE ROLE OF TUTORS IN WORK-BASED LEARNING

It is important to recognise that VET student learning takes place in two different learning environments, the workplace and educational institutions, and is challenging to them both. This sets demands on how learning at workplaces is pedagogically led but also challenges the connection between these two learning contexts, the school and the workplace. Griffiths and Guile raised this issue already two decades ago as the potential of the connective model of learning, considering it as a way of reformulating and addressing questions of learning and knowledge development in and between different contexts. They describe diverse ways of organising learning at workplaces, which also provide different possibilities for learners as they rely on different approaches on learning and accordingly also on pedagogy, teacher's role and guidance provided for students. (Guile and Griffiths 2001; Griffiths and Guile 2003; see also Tynjälä 2008; Lehtonen, Rintala, Pylväs & Nokelainen 2018). According to Mikkonen et al. (2017), pedagogical practices in workplaces vary and the concepts when discussed in relation to them are even incoherent. Furthermore, at workplaces the actual guidance is quite often disrupted by weakly defined responsibilities and lack of time available for guidance (Mikkonen et al. 2017). Irjala (2017) continues by saying that the role and competence of WBL tutors overall is seen and organised differently in different countries. It is also emphasised that, instead of seeing it as a process of the learner, WBL could be constituted as a learning process of the entire work community, if enabled through good leadership and management in the company (Irjala 2017; Kis 2016; Mikkonen et al. 2017; Norontaus 2016).

According to the EC (2015) report, however, WBL tutor positions in companies lack recognition and WBL tutors' professional development opportunities are limited. The learning opportunities do not attract the in-company WBL tutors because of the lack of incentives (financial incentives, improved career prospects, higher professional status), though on the other hand the WBL tutors in companies are recognised as having a crucial role in terms of quality of work-based learning (Cedefop 2015b).

When looking at WBL from the VET teachers' point of view, they also need training regarding WBL all in all and companies as learning environments despite being pedagogically qualified. Tutoring and guiding students during

in-company learning brings new challenges and requires new approaches and tools for facilitating learning. The exchange and cooperation between VET teachers and in-company tutors are prerequisites for the implementation of WBL. Lehtonen et al. (2018) examined vocational teachers' views on the required professional competence and experiences of cooperation with working life. The respondents of the research were vocational teachers who work in both apprenticeship training and school-based VET in the social and health, construction work and business sectors. The vocational teachers (N=13) were interviewed and, based on the thematic analysis, their competence consisted of cognitive, operational, social and meta-competence.

The necessity of supportive guidance in WBL seems evident. Yet Mikkonen et al. (2017) found out in their recent international literature review that there is quite much empirical research done in WBL as such but, more focused research on how WBL is guided at workplaces is almost non-existent. Their wide literature search consisted of electronic databases in addition to manually searched archives of journals, which focused on workplace learning and vocational education. These sources were found by using the search terms *guidance, counselling, supervision, mentoring, coaching, instruction, scaffolding, modelling, explanation, reflection* and *explorations* in combination with the *terms apprenticeship, workplace learning, on-the-job learning, work-based, vocational training* and *vocational education.* With this search, they ended up with a quite impressive number of 2,275 articles. However, when focusing their search further by taking in only full articles available in English and being published between the years 1995 -2015, the search narrowed down to 489 articles, and when finally taking in only the articles that really talk about *guidance* of learning at the workplace, the number decreased to eighteen (18) articles only. They state their result, supporting previous findings, that research on guidance of VET students at workplaces is limited indeed. When examining the 18 research articles they found on guidance in WBL, they discovered that the articles focused on practices, providers and supporting and hindering factors related to guidance and learning at the workplace. These findings suggest that workplace guidance is collective in nature and thus the entire work community actually provides learners with guidance and assistance (Mikkonen et al. 2017).

Related to the guidance of the students in the companies, Cedefop reported on a research on in-company trainers in small and medium-sized enterprises conducted in eight European countries, Belgium Flanders, Bulgaria, Denmark, Germany, Lithuania, Poland, Portugal and Spain (Cedefop, 2015b). The report discussed the in-company trainers' main tasks and activities, how

employees become in-company trainers, what skills and formal qualifications they need and have, and how in-company trainers develop their competence. Regarding the competence development, most of the in-company trainers in the sample had participated in training courses extensively in their working life. However, only one third of the trainers participated in training aimed at improving training-related competence.

Airila, Kurki, Mattila-Holappa & Nykänen (2019) also examined work-based learning, guidance and collaboration with VET schools from the companies' point of view. The survey was conducted in 2018 (n=501). Their findings suggest that guidance skills in companies need development. Forty percentage of the respondents were of the opinion that the company lacks resources to guide students. A third of the respondents stated that in-company tutors do not have adequate and up-to-date competence for guidance. Accordingly, the findings brought up the concern of the workplaces related to sufficient time, pedagogical and guidance resources as well as guidance skills. Concerning the collaboration with VET schools, 40% of the respondents were satisfied. However, only one third thought that they get sufficient support from the VET schools for guiding the students.

The relations between working life and education were examined by Hytönen and Kovalainen (2018) in the context where a company is organising the vocational education. The research focused on how the interaction between working life and education is constructed and what kind of field-specific and general skills are supported and developed in the company-led education process. The key findings showed that, in order to get good learning outcomes, the guidance of the students should be of good quality, the in-company tutors should be chosen from those who are interested in and committed to the guidance responsibilities, and sufficient resources for guiding the students should be made available (Hytönen and Kovalainen 2018).

Furthermore, the perceptions of the stakeholders have been surveyed in Finland. Pylväs, Nokelainen & Rintala (2017) conducted the research on the Finnish apprenticeship training stakeholders' perceptions of vocational expertise and experiences of workplace learning and guidance. The data was collected by semi-structured interviews in the healthcare services and technology sectors from altogether 40 informants, consisting of workplace trainers (n=10), employers (n=10), apprentices (n=10) and co-workers (n=10), who were interviewed. The findings showed positive learning outcomes and professional development of the apprentices due to the access to authentic work tasks and collective support by experienced workers. However, hindrances such as the lack of time, resources and pedagogical approaches

were found in guidance and reciprocal workplace learning between apprentices and experienced workers.

In sum, it can be said that despite the widely shared willingness to promote WBL in VET, very little of the research focuses on the question of guiding VET students' learning at workplaces, e.g. what kind of practices are used in guidance of WBL and who provides the guidance. Consequently, this is also followed with a question regarding the competence of tutors and their training. It was hoped that the experimentation examined through the research described in this report would contribute to these deficiencies.

According to Lehtonen et al. (2018), competence is a many-sided concept, and it has been analysed from diverse points of view due to linguistic differences as well as cultural differences in defining competence in different countries. It can be defined individually or more holistically. It can also be defined as part of a person's professionality when a competence consists of a combination of skills, knowledge, attitudes and behaviours required for effective performance in a real-world task or activity (figure 4). A competence is defined as the holistic synthesis of these components. Competence is the ability of a person to show a particular behaviour in a particular context with a particular quality. (Lehtonen et al. 2018; Mulder 2014.)

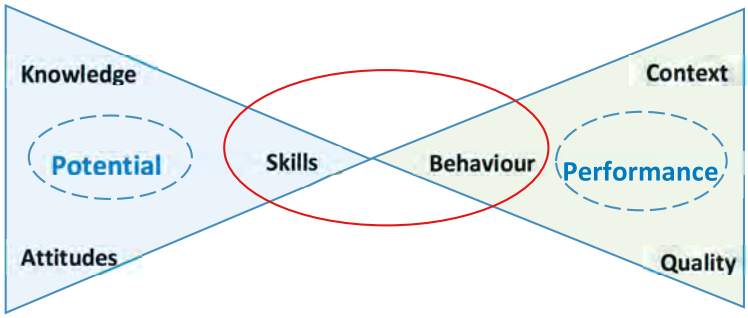

Figure 4. The components of competence (Competence oriented education and learning, 2010)

1.5 THE BALTIC CONTEXT – THE NEED FOR THE EXPERIMENTATION

Work-based learning in all its forms and introduced systemic approaches, along with the opportunities needed for professional development of vocational education teachers, trainers and mentors in school and work-based settings,

are raised as European policy objectives in ET2020 and yet further reinforced in the Riga Conclusions (2015). The ET2020 working group on Vocational Education and Training linked these objectives with four guiding principles as follows:

i. attractiveness of apprenticeships by raising the quality of VET teachers,
ii. supporting the continuous professional development of in-company trainers,
iii. systematic cooperation between VET schools and companies, and
iv. support for small and medium-sized companies (SMEs). (EC 2015)

The Baltic countries have intended to promote and expand work-based learning in their vocational education. In doing this, the need for developing systems of training for WBL tutors has been recognised as one of the key elements.

DEVELOPMENT OF THE WBL TUTOR TRAININGS BEFORE THE EXPERIMENTATION

Previously, the training of VET and workplace tutors has not been coordinated among the three Baltic states and not even fully coordinated within each country. Trainings have been done in separate initiatives in each country, many of which had been financed by short-term EU projects, such as the Leonardo da Vinci and Erasmus projects. However, the national training systems for WBL tutors were yet to take shape.

In Latvia, trainings for VET tutors supervising work-based learning had taken place with the support of EU-funded projects. The focus had been on supporting the entrepreneurship skills of VET students, but also on developing cooperation with enterprises, for example in the Leonardo da Vinci HansaVET project in 2011–2013 (HansaVET 2012). This had led further to a training programme for VET and workplace tutors, which was tested in the Q-Placements project (2013–2015) covering 50 school tutors and 40 in-company tutors in Latvia (Q-Placements 2015). Furthermore, in 2015 a joint WBL tutor training initiative was developed and implemented in cooperation with Latvian and German partners. *In Estonia,* Tallinn University and the

University of Tartu had organised training courses for VET tutors in autumn 2016. VET schools had been responsible for supporting in-company tutors. *In Lithuania*, some trainings for WBL tutors had been offered in the European Social Funds project ”Practical Training of VET School Students to Work with Modern Technologies” (2004–2008), implemented by the Lithuanian Chambers of Commerce. In this project the training of trainers had been implemented and methodological materials developed.

In addition, several organisations from Lithuania, as well as Latvia and Estonia, were involved in the Erasmus+ project ”Developing Apprenticeship: In-Company Trainer Training and Apprenticeship Promotion”, implemented by the Employers’ Confederation of Latvia in 2015–2017 and contributing to the development of apprenticeships. Within the project, around 90 companies were interviewed about their in-company trainer training needs. However, piloting was foreseen for only a few WBL tutors in Lithuania, Latvia and Estonia.

MOVING TOWARDS A JOINT WBL-TUTOR TRAINING APPROACH

The *idea of joint training* was first proposed in the Latvian-led Q-Placements project with the aim of strengthening communication and cooperation between WBL tutors in VET schools and enterprises as regards to organising apprenticeships. The training programme developed in that project was tested in four EU countries: Latvia, the Netherlands, Spain and Slovenia, and ten lead trainers were prepared in each country. The reflections of the participants (VET and workplace tutors), trainers, partner organisations and stakeholders showed a positive effect of this training. Furthermore, VET tutors and enterprise tutors considered themselves empowered to pay more attention to communication with VET apprentices, match apprentices with enterprises and communicate more with each other. The experience in the Netherlands showed that joint training could be used in specific sectors to address specific issues (by adjusting the content of the programme accordingly).

In 2012, the Latvian Ministry of Education signed an agreement with the German Federal Ministry of Education on supporting WBL in Latvia. As a result, a shared programme by the German-Baltic Chamber of Commerce and Baltic Bright for in-company tutors was planned for WBL tutors in Latvia in 2015. This programme was offered on a commercial basis to enterprises involved in WBL, and there were several joint training activities in Latvia focused on the pedagogical and communication skills of WBL tutors. The feedback showed that WBL tutors were enthusiastic about training.

The joint training programme and activities had also shown *the limitations of this approach*. For enterprises, especially SMEs, it seemed to be very difficult to send a person for training for longer than one day. However, in most cases it seemed evident that one-day training is not sufficient. In the case of joint training, there was even less flexibility in time, since both sides, VET and enterprise tutors, should have been together.

Another limitation, in some cases, had been the difference in the level of education and mode used in the training. VET tutors mostly had higher education and felt more at ease at training activities. Workplace tutors had lower education, being e.g. welders, carpenters and textile industry workers, and were occasionally not so comfortable with the academic and pedagogical concepts and felt shy in the presence of their counterparts, who had more education in these matters. At the same time, it was very valuable for both sides to meet and learn from each other and work together. These issues experienced in the former projects and initiatives set high demands for the training methodology: it should be practically oriented, interactive and in small groups in order to involve all participants. These limitations were considered to be overcome if the training programme had some modules, which were to be delivered to each group separately, and other modules were to be taught jointly.

Estonian, Lithuanian and Latvian stakeholders had expressed support for the concept of joint training and readiness to integrate this approach into existing (or evolving) training schemes. They all foresaw that schools would acquire the capacity to support the training needs of workplace tutors. So far, only Estonian schools had borne the responsibility for supporting the pedagogical competences of workplace tutors. In Latvia, the recent VET reform and consolidation of the school network had resulted in several large VET schools, called competence centres, which were also supposed to act as methodological centres. Thus, it would have been natural that the competence centres were to be prepared to train the workplace tutors from local companies. As most of the companies involved in WBL are SMEs or even micro-enterprises, it would be important for them to be able to be trained for WBL locally, and to develop close personal relationships with schools.

Based on country-specific and joint experiences, the Baltic states embraced the idea of testing the joint training of VET and enterprise tutors. It was considered that these joint trainings would strengthen cooperation between VET and enterprises and support the involvement of SMEs. It was hoped that this would lead to better alignment between VET curricula and labour market needs and overcome the mismatch of skills. The proposed

joint training approach represented a new type of curriculum for professional development of WBL tutors and aimed at improving the pedagogical skills of WBL-tutors. The quality of tutors is essential for the quality of WBL.

The implementation of the experimentation was to be done in the project ”Testing New Approaches to Training VET and Workplace Tutors for Work-Based Learning” – TTT4WBL project. The more precise objective of the project *was to test a professional development model for WBL tutors* in which tutors from VET schools and working-life would be jointly trained in all three Baltic countries – Latvia, Estonia and Lithuania.

2 IMPLEMENTATION OF THE RESEARCH

Leena Kaikkonen & Irmeli Maunonen-Eskelinen

2.1 THE PURPOSE OF THE EXPERIMENTATION AND THE RESEARCH

The purpose of the experimentation implemented in the TTT4WBL project was *to develop and test a professional development model for Work-Based Learning (WBL) tutors* in which tutors from Vocational Education and Training, called VET tutors or teachers, and tutors from enterprises or workplaces, called workplace tutors, were trained jointly in so-called tandem training (Annex 1). The experimentation aimed to test this joint training model in order to develop it further for implementation in all three Baltic states.

The experimentation was based on a **hypothesis** that stated that the joint training of VET and workplace tutors has many benefits in comparison to separate trainings for VET or workplace tutors. The hypothesis was based on the **assumption** that the joint training of VET and workplace tutors strengthens cooperation between VET education and companies at many levels, such as the local level and that of individual actors. Joint training was seen as a mechanism for maintaining dialogue between involved partners; it was assumed to lead to better understanding of common goals and better communication between partners during work-based learning periods or apprenticeships.

Furthermore, as the WBL tutor trainings were to take place in VET centres, it was expected that these trainings would enable the VET centres to develop their capacity to deliver WBL tutor trainings themselves. Consequently, the VET schools would be able to address the training needs of local small and medium-sized enterprises (SMEs) on a case-by-case basis (e.g. if they were new to the WBL or the apprenticeship schemes, or they were too small to send employees to the training) and support the clustering of SMEs for delivery of WBL tutor trainings. Furthermore, the vocational schools were to build their capacity to provide guidance for SMEs in regard to pedagogical approaches, while the SMEs for their part would strengthen their capacity for apprenticeships. This, in turn, should open up more WBL or apprenticeship places at the local level and provide the SMEs with a more strategic approach for engaging in apprenticeships.

Finally, the Baltic states were to build the institutional framework for governance of WBL and apprenticeships. For instance, in Latvia the recently adopted amendments to the VET law proposed to establish the so-called *conventions* at each school involving local and national stakeholders to ensure direct dialogue among partners and coordinated work towards improving VET and WBL.

In sum, the hypothesis on the superiority of the tandem training rested on the assumptions that the joint training of VET and workplace tutors can:

- Improve competences of WBL tutors for supervising work-based learning (WBL);
- Ensure pedagogical skills of workplace tutors and VET tutors to guide VET students or apprentices;
- Ensure pedagogical skills of VET teachers to guide workplace tutors;
- Improve cooperation and communication between VET and enterprises and support the involvement of SMEs;
- Improve the quality of the WBL tutor tandem training;

  and as a result of everything above:

- Provide a higher quality of apprenticeship for VET students.

The purpose of the research within the experimentation in the TTT4WBL project was to find evidence of the impact of the joint WBL tutor training: how the Work-Based Learning tutors participating in joint training develop their skills related to WBL. Furthermore, the research sought to answer the question of how the joint trainings support the development of cooperation between VET schools and enterprises or any type of workplace.

The attached figure 5 displays the research design, including the purpose and the process through which the impact of the joint WBL tutor training was investigated.

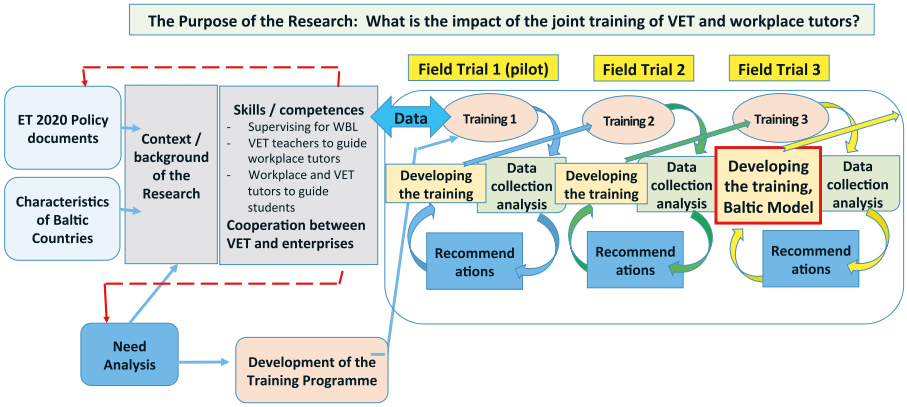

Figure 5. The research design

2.2 THE RESEARCH METHODOLOGY

The starting point taken from the project design and the hypothesis posited would have easily led one to consider the classic research design with test and control groups. However, the project was planned to include the joint trainings only, instead of having *both* joint trainings for some WBL tutors as the test groups *and* trainings on their own for VET tutors and workpalce tutors as the control groups.

Consequently, the research design was formulated as so-called panel design. Like the classic design, the panel design provides repeated observations on a set of variables but it does not require the set of a control group. A panel study is defined as a study that collects information on the same individuals or sample of persons (i.e. *the panel*) at different points in time. The various data collections are often called waves. This data collection from a sample aims at studying change over time. That being so, the first data collection is most often implemented before the intervention. The following data collection is done after the intervention, which is further followed with an analysis of what kind of a change happened in the variable in question. Panels quite often have a national scope and deal with life events or special topics such as employment and income. There are also special types of panels, like in the case of the experimentation described here, that are sometimes called citizen panels, which are designed to provide input to policymakers (Laurie 2013; KvantiMOTV).

The challenge with panel design is that, because of the lack of control groups, the researchers cannot be sure if the change happened because

of the intervention or due to some other factor. Most panel studies, like the experimentation described here, are designed for quantitative analysis and use of structured survey data in order to find support from the statistical analyses for drawing conclusions. Furthermore, the panel studies may also use qualitative methods for the data collection and analysis in order to find additional tools for the analysis, like was done here. When planning the research methodology for this experimentation, the panel method brought in was accompanied with methods of the action research, which are described as a research process with an intention towards a change. This is aimed at with a systematic collection and anlysis of data and where, as defined by MacDonald (2012), the participants involved in the research are ”active in making informed decisions throughout all aspects of the research process for the primary purpose of imparting social change” (MacDonald 2012, 34).

In the experimentation here, there existed a defined problem in the practice: does the tandem training model work so that it has the expected impact in the hypotheses and assumptions laid behind it? For example, would it raise the competences and pedagogical skills of WBL tutors in work-based learning and increase collaboration between VET schools and workplaces? It was desired that this problem be worked on through collaborative seeking of the solutions, i.e. the idea being conducting research *with* people rather than *on* them. Such a posture is typical for Participatory Action Research where a starting point is that academic researchers are not outside the system but rather an elemental part of the composition of the system involved in the study, here implementation of the experimentation. And besides in which, like Cranton (2015) points the other way round, the participants, in this case the project partners, were actively engaged in the research as co-researchers. Accordingly, it can be considered that the process was based on the ideas of Participatory Action Research.

The process of participatory action research, as described by Kemmis and McTaggart (2008), is generally thought to involve a spiral of self-reflective cycles. In these cycles, planning a change, acting and observing the process and consequences of the change and, reflecting on these processes and consequences appear in a sequential round, which is again followed with re-planning, acting and observing and reflecting, and so forth. Participatory action research is oriented towards building mutual understanding, interaction and collaborative learning, and it seeks to understand and improve the system by changing it. At its heart is a collective, self-reflective inquiry that researchers and participants embark on, so that they could understand and improve upon the practices in which they participate in. The reflective process is directly

linked to action, influenced by understanding of the context and embedded in social relationships of the phenomena (Kemmis & McTaggart 2008, 276–279).

In order to build mutual understanding, a qualitative dimension is needed. Qualitative data can be collected in writing through e.g. open questions or orally through different types of interviews, like was done in this experimentation. The qualitative methods are supposed to give the informants an opportunity to get their voices heard, and thus ”to provide a ’deeper’ understanding of social phenomena than would be obtained from purely quantitative methods, such as questionnaires” (Gill et al. 2008). Group interviews are a research technique that takes advantage of group dynamics in producing data (Frey et al. 1991; Rabiee 2004). According to Rabiee (2004), the ”the type and range of data generated through the social interaction of the group are often deeper and richer than those obtained from one-to-one interviews.” Green et al. (2003) suggest that the uniqueness of a group interview is its ability to generate data based on the synergy of the group interaction. The interaction and relations among the group members can stimulate each other’s insights and expressions (Frey et al. 1991).

The group interview as a method is appropriate when detailed insights are required from participants and something is already known about the phenomenon being studied (Gill et al., 2008). Like in this case, the WBL-tutor group interviews were used after collecting some data with questionnaires. In the implementation of the group interview, the group size is rather small. According to Krueger & Case (2000), smaller groups show greater potential, and therefore they suggest a group of six to eight participants.

The experimentation methodology in the project was designed so that it would enable the development of the training approach and content to take place during the project life span based on a collaborative learning process and evidential reasoning. Accordingly, the methodological approach implied

- The joint training of VET and workplace tutors as the experimentation to be implemented in three phases so that the content and pedagogical approach of the course would be adjusted as needed after the 1st and 2nd phases based on the research evidence gathered from previous training phases as well as the Lead Trainers’ self-reflection and learning process.

- The training modules’ content and pedagogical approach to be progressively developed via critical reflection and analysis as the Lead Trainers are able to accumulate their conceptual understanding and evidential experience during the training phases.

- Partners from all Baltic states to be able to reach an authentic shared agreement on the policy recommendations based on common evidence, shared conceptual understanding and the participatory evaluation process.
- Evidential data to be gathered via surveys and questionnaires from the main target groups (the WBL tutors and the Lead Trainers), as well as in-direct informants (students, and working life and educational managers) in order to understand the wider implications and impact to education, working life and society; and furthermore, to complement this data with the Lead Trainer and tutor group interviews in order to gain more in-depth understanding of the learning outcomes and needs of the target groups.
- The process of consolidating the details of the research plan and data collection as well as evaluating the outcomes and delivering policy recommendations, all of which to be handled in a participatory manner to involve all the partners – education authorities, trainer institutes, researchers and working life representatives.
- The researchers to be willing to be prepared for surprise in results and responsive to opportunities arising from the collected data and peer learning processes.
- The researchers to take part in the planning of the joint training modules in an expert capacity as well as in an expertise exchange between the researchers and Lead Trainers, and for this to be facilitated in the planning phase via a peer learning visit to Jyväskylä as well as throughout the project in partner meetings.

In sum, the **experimentation methodology** in the project was developed according to panel design based on the ”before and after” approach in order to collect information on the WBL tutors to be trained as the panel at different points, i.e. in the beginning and six months after their training. This was complemented with the Participatory Action Research concept of the cyclic process. The cycles were repeated three times in a row in the form of planning (defining and reformulating the tandem training approach and tools), implementation (the WBL tutor tandem trainings) and evaluation of the impacts (through data collection and analysis from WBL tutors in addition to

informants of other parties), accompanied with participatory self-reflections by the project partners for further development. The active players in the experimentation process were the Baltic project partners and especially the Lead Trainers who, in each of the three Baltic countries, were responsible for training the expected 800 WBL tutors.

The idea of the project design was to promote the development of the WBL tutor tandem training processes and practices. The aim of the research was to ensure that the views of the 'actors' within these systems would be placed at the forefront of discussions concerning the development of WBL tutors' practices. Having said this, however, it is important to emphasise that with regard to the research there remained primarily the task of examining the hypotheses as expressed above and validating it with evidence-based data.

2.3 DATA COLLECTION

The data collection started with a design of the data collection tools and planning all the procedures regarding gathering the data.

INFORMANTS

The research data concerning the experimentation was collected from informants who were directly or indirectly in touch with the joint trainings as described in Table 1.

TABLE 1. Informants in the research

Directly in touch with the joint trainings:	**Indirectly in touch with the joint trainings:**
• VET school tutors • Workplace tutors • Lead Trainers	• Students • VET school principals • Company managers

The main *direct informants* were the VET school tutors and workplace tutors, i.e. WBL tutors, who participated in the WBL tutor training organised as the experimentation. Together, the WBL tutors were considered as the panel from whom the data was collected twice during the experimentation process. The first data collection took place in the beginning of their WBL tutor training, hence before the intervention. The other data collection was organised approximately six months after their training. The data was collected in the form of a questionnaire where the tutors assessed themselves in four

competence areas that are expected from WBL tutors. These were: developing work-based learning, planning work-based learning for students, guidance of students in their work-based learning periods, and assessment of students' learning and competences in work-based learning. The other direct informant group was the Lead Trainers, who were involved as trainers of the WBL tutor trainings in the three Baltic states.

The indirect informants were VET students in addition to VET school principals and company managers. The data collection process from the viewpoint of diverse informants and data collectors is described later in this chapter in Table 2 and in line with the schedules of the entire experimentation process in Table 3.

DATA COLLECTION TOOLS

In the experimentation, data was collected with surveys (online questionnaire) which included multiple choice questions but also open questions. These online questionnaires were used to collect data from WBL tutors, students and VET school and company managers. Furthermore, group interviews were used to collect data from the Lead Trainers and also some randomly chosen WBL tutors. All the used tools and diverse informants were as follows:

In order to analyse the impact and experiences of the *WBL tutors* about the WBL tutor tandem training, data was collected from the trained WBL tutors with the following questionnaires:

i. **Pre-questionnaire** completed in the beginning of the WBL tutor trainings to collect data about their competences (Appendix 3)

ii. **Feedback questionnaires** completed in the trainings to assess the relevance of the training. This was used only in the pilot phase.

iii. **Post-training surveys** were sent approximately 6 months after training via e-mail to all those trained WBL tutors who had responded to the pre-questionnaire. The questionnaire was in e-form in all three national languages. It asked the tutors to again self-assess their competences related to Work-Based Learning. It was expected that comparing their assessment in the beginning and some time after the training would show the impact of the training on their competences. (Appendix 4)

In order to analyse the opinions and experiences of the other informant groups about Work-Based Learning, data was in each country further collected

iv with **a student survey** from the VET students related to their experiences of work-based learning (Appendix 5)

v with **a VET school manager survey** from the VET school managers related to their experiences about the practices and governance of work-based learning and apprenticeship (Appendix 6)

vi with **a company survey** from workplace/company managers related to their expereinces of work-based learning and apprenticeship (Appnedix 7)

Furthermore, to get some more in depth data on the experimentation of the field trials some qualitative data was gathered from the trained tutors and the Lead Trainers.

vii in Latvia and Lithuania, some randomly chosen tutor groups undergoing the joint training were selected on the first year and the second year for the **tutor group interview** after the joint training. The group interview was conducted at the end of the final training day. The Lead Trainers conducted the group interviews based on a framework provided by the researchers. (Appendix 8)

viii And finally, in order to analyse the experiences of the *Lead Trainers* about the tandem training process and practises, data was collected from Lead Trainers by the researchers.
At the end of each implementation phase, the trainers (3–5) of each country took part in a **national trainer group interview** with the researchers to discuss their experiences during the implementation of the joint training.

All the questionnaires were made using the Webropol 3.0 system. As the data collection was implemented in three countries, the process of collecting the information had to be localised and the tools to be translated into the three Baltic languages. In the pilot phase, the questionnaires were distributed using an open internet link provided by the Lead Trainers to the WBL tutor trainees

during their WBL training days. In the second and the third phase, WBL tutor trainees received the link from the research partner to their own email in the beginning of the WBL training. That change was made in order to pair each tutor's two responses, the one in the beginning and the second done six months after the tutor training.

DATA COLLECTORS

Concerning the data collections from the WBL tutors, their first data collection was accompanied with the WBL tutor training sessions and conducted by the Baltic Lead Trainers. The second data collection was done through an online questionnaire by the Finnish researchers. In addition to the quantitative data, qualitative data was also collected through open questions in the questionnaires and post-training surveys, and in tutor group interviews organised for selected tutor groups in Latvia and Lithuania by the Lead Trainers at the end of the tutor training session.

The Lead Trainers had a double role in the data collection process. On the one hand, when being directly involved with the VET and workplace tutors in the tandem training, they collected data from other people. On the other hand, they themselves were informants. From the Lead Trainers the data was collected three times in the national trainer group meetings after each implemenation phase of the fied trials of the experiementation. It happened through group discussions, which focused mostly on their experiences of the trainings and was also based on these experiences from their viewpoint for developing the joint training contents and methods.

Concerning the data collections from students in addition to VET and company managers, it was initially considered a task for trained tutors. Later, however, it was agreed that it would be implemented by the Baltic project partners in order to guarantee a more uniform process.

Those who collected the data were asked to take care of briefing the informants about the overall research. The informants were provided with general information about the research, such as the length of the research process, its focus and goal, and the amount of time and effort that would be needed from the respondents. Furthermore, such knowledge included methods of data collection (online survey, interview, and group discussion) in addition to emphasising that the participation in the research was on a voluntary basis and that the data would be used anonymously and published in the format of a report where they would be able to get information about the results and findings of the research. The information to be provided was

discussed and provided in writing for the Lead Trainers. The researchers also made three videos where they told this information themselves in English, and each was subtitled with one of the three Baltic languages.

The informants, data collectors, data collection tools and the data collection process are summarised in Table 2.

TABLE 2. The data collection process

Informants ⇩		**Who collected the data**	**How**	**When**	**After data collection**	**Analysis of the data**
VET school and workplace tutors = WBL tutors	⇦	The Lead Trainers	Online questionnaires, surveys	1. Before the training 2. On the last day of the training (done only in the pilot phase) 3. After 6 months	Translating responses of the open questions into English	Quantitative and qualitative
			Tutor Group interviews	1. In autumn 2017 for one group 2. In 2018 for two groups in Latvia and Lithuania	Lead Trainers sent the responses to researchers	Qualitative
Students	⇦	The project partners in charge of the WBL trainings	Online questionnaire, survey	During the three phases of the experimentation	Translating responses of the open questions into English	Quantitative and qualitative
VET schools' principals	⇦	The project partners in charge of the WBL trainings	Online questionnaire, survey	During the three phases of the experimentation	Translating responses of the open questions into English	Quantitative and qualitative

TABLE 2 continues						
Informants ⇩		**Who collected the data**	**How**	**When**	**After data collection**	**Analysis of the data**
Company managers	⇦	The project partners in charge of the WBL trainings	Online questionnaire, survey	During the three phases of the experimentation	Translating responses of the open questions into English	Quantitative and qualitative
Lead Trainers / National	⇦	The researchers	Group interview	December 2017, Spring 2018, Autumn 2018	The researchers wrote summaries in English	Qualitative

In all cases the data collection tools and the instructions for using them were planned by the Finnish researchers.

2.4 THE RESEARCH CYCLES IN THE EXPERIMENTATION

As displayed in figure 5 (the research design), the experimentation proceeded in *cyclical phases of planning, implementation and evaluation*. The field trials (tutor trainings) of the experimentation process was accompanied with the data collection process conducted by the research partner along with the other activities done in collaboration by all project partners. They proceeded according to a timeline and in a detailed fashion, as follows:

TABLE 3. The research cycles in the experimentation process			
THE EXPERIMENTATION PROCESS			
Schedule	**Participatory Planning and Evaluation process**	**The Field Trials (WBL-tutor tandem trainings)**	**The research process**
January –August 2017	**Phase 1: Planning and Preparation** • Definition of concepts used and role of participants • Information and arrangements with target groups and stakeholders about their involvement • VET tutors pairing up with working life based tutors and promotion of the training in working life • Baseline data collection (current situation, competences, training needs) • Needs analysis related to the structure and preparation of the training programme (country-specific concerns) • Study visit to Jyväskylä organised for the Lead Trainers • Planning the Field Trials (set of the WBL tutor trainings), preparation of the training programme and materials • partner meetings		Detailed experimentation protocol/research plan and timetable with responsibilities consolidated jointly

TABLE 3 continues

THE EXPERIMENTATION PROCESS			
Schedule	**Participatory Planning and Evaluation process**	**The Field Trials (WBL-tutor tandem trainings)**	**The research process**
October 2017 – January 2018		**Phase 2: Implementation of the 1st phase of joint training** of VET and workplace tutors implemented for 180 tutors in 3 countries (90 VET tutors and 90 WBL tutors in total)	Data collection via tutor questionnaires; Trainer and tutor group interviews (random sample) begun Student, VET & company manager surveys started
January – March 2018	**Phase 3: Evaluation & Participatory planning** • Partner meetings – Joint evaluation of training results – Agreeing on the adjustments to the field trials (training content and/ or pedagogical approaches) • Communication and dissemination (All partners)		Analysis of the data gathered during the 1st cycle of field trials Recommendations on the field trials Six-months-after questionnaires sent to the tutors trained in the pilot phase, in March-May 2018
April – July 2018		**Phase 4: Implementation of the 2nd phase of joint training** of VET and workplace tutors implemented for 360 tutors in 3 countries (180 VET tutors and 180 WBL tutors)	Data collection via tutor questionnaires; Trainer and tutor group interviews (random sample) Student, VET & company manager surveys continued

TABLE 3 continues

THE EXPERIMENTATION PROCESS			
Schedule	**Participatory Planning and Evaluation process**	**The Field Trials (WBL-tutor tandem trainings)**	**The research process**
August – October 2018	**Phase 5: Evaluation & Participatory Planning** • Partner meetings: – Joint evaluation of training results – Agreeing on the adjustments to trials (training content or pedagogical approaches) • Communication and dissemination (All partners)		Analysis of the data gathered during the 2nd cycle of field trials Recommendations on the field trials Trainer and tutor group interviews (random sample) continued and ended in October 2018
September 2018 – July 2019 Trainings September 2018 – Jan 2019 Data collections (6 months after and data collection from other informants) January – July 2019		**Phase 6: Implementation of the 3rd phase of joint training** of VET and workplace tutors implemented for 270 tutors in 3 countries (135 VET tutors and 135 WBL tutors)	Data collection via tutor surveys and questionnaires ended by January 2019 6-months-after questionnaires were sent to the tutors trained in the 2nd phase, by October 2018 6-months-after questionnaires were sent to the tutors trained in the 3rd phase, by May 2019 Student surveys continued and ended in April 2019 Company and VET manager surveys continued and ended in May 2019

TABLE 3 continues

THE EXPERIMENTATION PROCESS			
Schedule	**Participatory Planning and Evaluation process**	**The Field Trials (WBL-tutor tandem trainings)**	**The research process**
August 2019 – January 2020 February 2020	**Phase 7:** **Final evaluation and dissemination** • Partner meetings – Agreeing on the policy recommendations – Evaluation of multiplication and mainstreaming potential • Dissemination events, incl. the closing seminar • Research outcomes and policy recommendations published – Feedback to ET2020 Working group on VET		Final analysis and reporting of all the collected data Report on Experimentation compiled

The research partner had the lead in the planning, coordination and implementation of the research process in the experimentation and also had the responsibility for compiling the research report to describe the results of the research. This meant, reporting whether the joint WBL tutor training approach had an impact on competences for supervising WBL, on the pedagogical skills of workplace tutors and VET tutors to guide students in WBL, on cooperation and communication between VET and enterprises and thus, on the quality of apprenticeships. In the experimentation the project partners were also interested in the pedagogical skills of VET teachers to guide workplace tutors, better involvement of SMEs, the quality of WBL curricula, and furthermore, the potential for integrating or linking this training scheme with regional and national WBL governance frameworks.

Accrodingly, in line with the methodological choices, the process of consolidating the details of the research plan and data collection as well as evaluating the outcomes and delivering policy recommendations, all these elements were handled in a participatory manner to involve all the partners – authorities, trainers, educational organisations, researchers and working life representatives. The partner meetings played a key role in reaching an authentic shared interpretation of the research results and eventually an agreement on the policy recommendations in the context of the Baltic countries.

3 DATA ANALYSIS

Tommi Veistämö & Leena Kaikkonen

3.1 AMOUNT OF RESPONSES

The data was collected with six different questionnaires using the Webropol 3.0 system. Most questionnaires were distributed using an open internet link, but in the second and third phase, WBL tutors received the link to their emails. That change was made in order for the tutors' beginning and 6-months-after questionnaires to be paired. In the pilot phase, the data with the first questionnaires was collected between October 2017 and January 2018. The first tutor questionnaires on the second phase were sent in March 2018, while the last were sent in the end of January 2019. The 6-months-after tutor questionnaires were sent to pilot-phase respondents in mid-May 2018, while the first ones to second-phase respondents were sent in the end of October 2018. The last questionnaires to the third phase respondents were sent in mid-May 2019.

When the data collection in the pilot phase from the other respondents started, it was first done to test the questionnaire and procedures. For that reason the amount of data collection was kept at a low level (10 students, 14 VET managers, 11 company managers). The main data collection from these groups was implemented in spring 2019, and it was finished in May 2019.

Altogether 1,294 separate questionnaire responses were received from diverse respondents. The questionnaires and equivalent amount of responses were:

The questionnaires	Number of responses
1. the WBL tutor questionnaire in the beginning of their WBL tutor training	
a. in the first field trial, the pilot phase	169
b. in the second field trial	162
c. in the third field trial	252
2. the WBL tutor questionnaire in the end of their WBL tutor training This was done in the pilot phase and was, as noted, irrelevant not repeated in the 2nd and 3rd phases	137
3. the WBL tutor questionnaire 6 months after their training	
a. in the first field trial, the pilot phase	59
b. in the second and third field trials	235
4. the VET students	100
5. the VET managers	90
6. the company managers	90

Furthermore, qualitative data was collected from randomly chosen WBL-tutor groups. This was received from altogether 22 groups involving 88 WBL-tutors in Latvia and Lithuania in spring and autumn 2018. Furthermore, the Lead Trainers (N=16) were interviewed in all the Baltic States three times after each of the three field trial phases had been finished.

The data collected was both quantitative (surveys) and qualitative (open questions in the questionnaires, interviews). Accordingly, the data was analysed using both quantitative and qualitative methods.

3.2 THE QUANTITATIVE ANALYSIS

The quantitative methods in the research were used with all the data collected through questionnaires. The data analysis of all informant groups (WBL-tutors, students, VET and company managers) started with transferring the data collected from the Webropol system into SPSS system for more detailed analyses. Descriptive statistics and graphs yielded information about the respondents. The frequency tables of the data are displayed within the texts in later chapters.

ORGANISING THE DATA FOR ANALYSES

In order to work further with the data in line with the targets set for the research, numerous changes were made to the datasets.

Some of the variables (e.g. professional field) were recoded for the needs of the statistical analyses. Sums of variables were formed in all the questionnaires. They were made of the following questions:

Questionnaire	Recoded questions
1. the WBL tutor questionnaire in the beginning	questions 11, 12, 13, 14
2. the tutor questionnaire 6 months after,	questions 11, 12, 13, 14, 17, 18 question 17 for VET tutors only/ question 18 for WP tutors only
3. the WBL tutor combined (beginning and 6 months after)	questions 11, 12, 13, 14, 17, 18
4. the VET student questionnaire	questions 8, 9, 10, 11, 13, 14, 15, 16, 17
5. the VET school manager questionnaire	questions 9, 10, 13, 14, 17
6. The company manager questionnaire	questions 11, 12, 16, 18, 21

The sum of variable in each case meant one question. For example, four sums of variables were formed from the first tutor questionnaire's data: "planning skills," "guidance skills," "assessment skills" and "developing skills." In the 6-months-after tutor data, four of the five sums of variables were the same, with "improvement after training" being the fifth. Except for the last sum of variables, the sums of variables in both the pre-training and 6-months-after training data were the same. An exception was also made concerning the sum of variables made of students questionnaire, where sum variables included five questions ("before WBL") or 2 questions ("during WBL" and "after WBL").

In each of the questions listed above, the responses were recoded as follows: I don't know/not at all =0, satisfactorily/a little =1, well/quite much=2, excellently/a lot=3. The respondent's result of the sum of variable was formed by summing up the points of those choices (0–3) that a respondent in each sub-question had chosen. As an example, in the first WBL tutor questionnaire, question 11 included eight sub-questions, a-h. If the respondent would have chosen the alternative 'well' (equal to 2 points) in each of them, the result of that sum of variable in this would have been 8 x 2 points =16 points.

In addition, in the manager questionnaires there were questions in which the respondents had to choose from a given list, e.g. three alternatives that they considered as the most important. Of these questions, the importance was concluded based on the frequency of responses in each alternative.

Furthermore, amendments were made in cases where the respondent had answered to a question in a way that they were not expected to answer (e.g. a VET tutor responding to a question directed at workplace tutors). These responses were deleted.

RESPONSE RATES

In the pilot phase of this research, data collection from the WBL tutors was the main topic. The response rate of the WBL-tutor beginning questionnaire reached as high as 89%, but the response rate of the second one, the 6-months-after questionnaire, went no more than 35%. The research group reacted to this in two ways, firstly with regard to data collection and secondly regarding data analysis. In data collection, it was changed after the pilot phase to be based on individual links to the tutor questionnaires instead of the common link for all. In addition, the trainers paid more attention to the process of informing the trainees of the research. The researchers supported this by providing video materials for the use of the trainers in the trainings and visited some of the training sessions themselves to raise awareness. Secondly, in data analysis, some basic imputation methods were used to emphasise the low response rates (see chapter 4.2.3).

	DATA COLLECTED	1st phase/Pilot phase Oct 2017 – Jan 2018				2nd+3rd phase March 2018-Jan 2019				1+2+3 Phase
		Estonia	Latvia	Lithuania	Total	Estonia	Latvia	Lithuania	Total	Total
How many	Number of tutors trained	67	70	54	**191**	141	230	258	**629**	**820**
Responded persons to the surveys	WBL-tutor Beginning	50	65	54	**169/ 89%**	101	188	125	**414/ 65,8%**	**583/ 71,1**
	WBL-tutor End (only in the pilot phase)	36	54	47	**137**					**137**
	WBL-tutor 6 months;	14	29	16	**59/ 35 %**	67	102	66	**235/ 56,8%**	**294/ 50,4%**
	Students	1	1	10	**12**	27	43	18	**88**	**100**
	VET School managers	1	1	14	**16**	13	23	38	**74**	**90**
	Company managers	4	1	11	**16**	11	39	24	**74**	**90**
	Informants all together	**107**	**151**	**152**	**410**	**219**	**395**	**271**	**885**	**1294**

Figure 6. The amount of questionnaire responses by different informant groups and the response rates of the WBL-tutors

Non-response was usually resulting of technical difficulties or person simply did not want to participate in the research. In June 2019, the Lithuanian project partner conducted a telephone interview for the tutors who had participated in the WBL tutor training organised by them. They searched for participants who had not responded to the 6-months-after questionnaire, hoping to find out why they had not. The 20 non-respondents interviewed gave the following responses as the main reasons:

1. The questionnaire itself. It was found to be too long or confusing. The first impression was that the structure was too complicated and time-consuming to fill properly, as it had too many options. It was also felt that any responses would be unreliable and not relevant, considering that half a year had passed since the training.
2. The respondent postponed responsing to the questionnaire and forgot to do it later.
3. Not receiving the questionnaire. The trained participant did not work in the company and the questionnaire did not reach said person. The questionnaire went to the spam folder instead.

Response rate seemed to be higher on the pilot phase, which is however, misleading. When inspecting better the responses, it turned out that despite the seemingly high response rate (89%) in the pilot phase, only about 58 per cent of the pilot phase tutors answered so thoroughly that their responses could be used in all the analyses made. Of the second and the third phase, the respective percentage was 62%. Therefore, it seems that the made correction in delivery of the questionnaires worked. Though first feared that using personal emails to send in the link for WBL-tutors for data collection instead of providing a general open link for everyone would weaken the response rate but it did not have such an effect for the results. However, of all the 294 answers to the second questionnaires, 258 (88%) were complete enough to be used in all statistical analysis. Half of the incomplete answers included only person's country or gender, while the actual content-based questions had remained unanswered.

It was important to assess which reasons affected the non-response. Response rate was lowest at youngest and oldest age groups. According to Kruskal-Wallis test implemented, the age group did not have an effect on

the results, but the youngest age group scored systemically lowest point in every sum of variable. No other background variable had any effect on response rate.

Nevertheless, the competence of the tutors possibly affected the response rates. Median values were mostly same with those who answered second questionnaire and those who did not. Mean values had differences: commonly mean value were 16 with those who answered and 15 with those who did not. These results are explained by the fact that those who received close to maximum points were more likely to answer second questionnaire than those who received minimum or very close to it. This will make competence seem a little too positive in second questionnaire. However this did not cause major problems when analysing training's effect in competence, since testing took into account change only in competence within respondent.

IMPUTATIONS

According to the meta-analysis of multiple sources, survey response rates usually remain below 40%. Cook, Heath & Thompson (2000) noticed that only about one fourth of all surveys achieved a better response rate than 50%. This has even worsened during the last few years, and the overall response rate seems to continue to decrease despite efforts to raise it. Accordingly, methods such as imputation methods have been developed to emphasise the low response rates.

Imputation according to Rubin (1976; 2004) means estimating the most likely value for the question that a person has failed to answer. Imputations were used only on questions which were used in sums of variables, and only if the amount of unanswered questions was smaller than 25% regarding the specific person and specific sum of variable. Imputations were made using regression imputation. That means that researchers evaluate what a person would have answered if they had done so. In this method, the researcher is estimating the most likely answer to an unanswered question based on the person's answers to other questions. The evaluation is based on the person's background, their other answers and the answers of all other respondents. (Rubin 1976; Rubin 2004.)

If, within one sum variable, the respondent had not responded to all of the questions but nonetheless to a minimum of 75% of them, the responses were consequently imputed even on these questions they had not responded. Let us imagine that under a sum variable a person has responded to questions a, b and c but not d. In that case, it is first examined how the person had

responded to questions a-c. Secondly, it is examined how all the respondents had responded not only to questions a-c but also d in order to find out the so-called ordinary response to question d. If the person had been on a higher level in their answers when compared to the answers of all other respondents, they would have also received a higher value in point d, which is the average response. On the contrary, if their responses all in all had been on a lower level, they would have been given a lower value in point d.

Even though adding values to a person who has not answered certain questions may seem like guesswork, there is a solid scientific structure in imputation methods. In a certain way, imputation is like a weather forecast: we evaluate multiple scenarios and aggregate the most likely ones for the best results possible. The regression coefficients for the model have been estimated from the answers of those people who have answered every question. Of course, even without imputations the results can be analysed despite the bad response rate. For example, Guo & Yuan (2015) tested several methods for before-after surveys and noticed that the optimal pooled t-test is accurate even when data is missing. Combining imputation with powerful methods enables a solid statistical result even with problematic data.

Regarding this research, the response rates in the later parts of the research improved. The high response rate to the first questionnaire (89%) in the pilot phase dropped to 66% in the second and third phase. In contrast, however, the response rate to the 6-months-after questionnaire simultaneously increased from the pilot phase's 35% to 57% in the second and third phase. Furthermore, despite the high 89% response rate on the first questionnaire in the pilot phase, more in-depth examination on the responses pointed out that only roughly 58% of the pilot phase tutors answered so thoroughly that the responses could be used in all the analyses. Of the second and third phase, the respective percentage was 62. Therefore, it seems that – in addition to the efforts by the trainers to motivate the trainees to respond – using emails to gather answers increased the amount of overall responses as well as those that were answered well enough. In sum, concerning the amount of data gathered from WBL tutors in all three phases, of those who answered the first tutor questionnaire, 50.4% also answered the 6-months-after questionnaire. Therefore, when referring to Cook's et al. (2000) notion based on their meta-analysis that only about one fourth of all surveys achieved a better response rate than 50%, the response rate in the research described here can be considered to be on a respectable level.

STATISTICAL ANALYSES

In SPSS, a wide range of statistical methods was used to analyse the data. One of the main focuses of the research was finding whether any difference is found between 'before' and 'after,' meaning whether the WBL tutor training had any impact on the skills of the WBL tutors. For this purpose, the paired sample t-test was considered to be the best method. It compares the respondents' 'before' and 'after' responses and calculates whether the difference is statistically significant. In order to conduct this test, 'before' and 'after' answers had to be paired.

This meant that it was needed to be able to identify what a person had answered in the 'before' and 'after' questionnaires. Therefore questionnaires had to be sent via personal email in order for the answers to be paired. For this purpose, a separate file was shaped by putting together the WBL-tutor questionnaires used in the beginning and 6-months-after phase in both the second and third phase of the field trials. As the questionnaires were sent to the trainees via personal emails, it was possible to use the email address as the identifier for the pairing of answers. However, it has to be said that as soon as the pairing had been done, the data was anonymized. As the process of delivering the questionnaires in the pilot phase was different, this file did not include responses from there.

In addition to examining the impact of the WBL-tutor training, i.e. the differences between individual respondents (before-after), differences between respondent groups were investigated. Analysis of variance (ANOVA) was used to find differences between groups, e.g. differences between different age groups and gender groups, or based on diverse work experience. Some clustering was also used to determine certain latent groups among the respondents. Some other analysis methods were used on a smaller scale to support the other results.

Although analysis of variance (ANOVA and 2-ANOVA) was used, the assumptions were violated at certain points. Therefore Mann-Whitney and Kruskal-Wallis tests were also used. Though simple linear regression models were tested, the information obtained was mostly insufficient for decision-making. Since the aim of the experimentation was to improve the WBL tutor trainings, the predictions made by the regression model were mostly irrelevant. Canonical discriminant analyses were used to study the connections between sums of variables and background variables, but no significant discriminating variable was found. Other connections and dependences were studied by correlations and chi-squared tests. (Moore, McCabe & Craig 2012)

The quantitative methods were also used to a small extent with the data analysis gathered from other informants (students, VET managers, company managers). Descriptive statistics and graphs yielded information of the respondents. The frequency tables of the data of these groups are found in corresponding texts describing the results. The other data received was gathered using similar analysis methods as those with the WBL tutors' responses. The analysis methods are described later in this report in connection with presenting the results of each informant group.

In addition, some boxplots are used to visualise the responses of discussed groups. A boxplot is a way to show the spread and centers of a data set. Measures of center include the mean or average and median (the middle of a data set). The box and whiskers chart shows how the data spreads out.

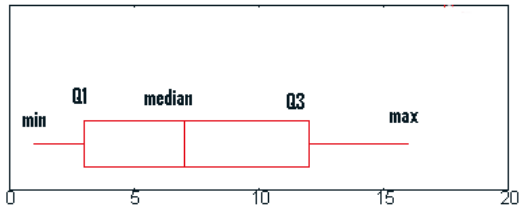

Figure 7. Boxplot

The minimum (the smallest number in the data set) is shown at the far left of the chart, at the end of the left *whisker.* The maximum (the largest number in the data set) is shown at the far right of the box. *Inter-quartile range* is the middle "box" which represents the middle 50% of scores for the group. The median marks the mid-point of the data and is shown by the line that divides the box into two parts. Half the scores are *greater than* or *equal to* this value and half are less.

The *upper and lower whiskers* in their part, represent scores outside the middle 50%. The lower quartile shows the twenty-five percent of scores that fall below the *lower quartile*, and in the other end, the upper quartile show the seventy-five percent of the scores that fall below the *upper quartile*.

3.3 THE QUALITATIVE ANALYSIS

In addition to the quantitative data collected through the questionnaires' multiple choice questions, all the used questionnaires contained open questions aimed at receiving the participants' wider insights. Furthermore, interviews were made for the Lead Trainers as well for some randomly chosen WBL-tutor groups in Latvia and Lithuania. All the open responses from the questionnaires and interview materials were analysed with qualitative analysis methods.

Much of the qualitative research nowadays originates, according to Merriam (2015), from the work of Glaser and Strauss in the 1960s regarding the case for inductively building a theory from observing social phenomena, interviewing people and examining written documents, known as grounded theory. Since then there has been an extensive growth of qualitative research and development of methods, and even the basic approach, grounded theory, is nowadays interpreted in somewhat different ways even by its pioneering developers (Engward 2013). Nevertheless, grounded theory is quite commonly described as a research method or data analysis method used especially in qualitative research. In the latter meaning, grounded theory equals almost to an analysis of qualitative data in general. According to Charmaz (2003, 2008), grounded theory refers both to a method of inquiry and to the product of inquiry. It therefore has two meanings, that of the methods consisting of several methodological strategies on the one hand, and products of this type of research on the other hand. However, researchers use the term to mean the methods of inquiry for collecting and analysing data, with the latter definition in particular being increasingly emphasised (Charmaz 2003; 2008).

In the grounded theory method, the analysis is often considered to proceed from the original observations in the material to conceptual constructions. For example, Bernard (2000) states that the grounded theory process can be defined with the following steps:

1. to produce transcripts of interviews and read through the sample of texts
2. to identify potential analytic categories (i.e. potential themes) that arise
3. as the categories emerge, to pull together all the data from those categories and compare them

4. to consider how categories are linked together
5. to use the relations among categories to build theoretical models, constantly checking the models against data, especially against negative cases
6. to present the results of the analysis using quotes from the interviews that illuminate the theory (exemplars). (Bernard 2000, 443–444)

However, Charmaz (2008) states that the approaches on grounded theory methods have richened and there are no such precise rules to follow anymore. Following the constructivist view on grounded theory, she states that researchers are part of the research situation, and their positions, privileges, perspectives and interactions affect it. Reality is socially constructed, and accordingly, participants' views and voices are integral to the analysis, as are those of the researchers. Instead of following a certain recipe on qualitative research, grounded theory strategies mean responding to emergent questions, new insights and further information and abilities simultaneously to construct the method of analysis as well as the analysis itself. In order to do this, the researchers cannot stand outside the process but are instead part of it and able to creatively make changes in their methods and analytical strategies. Furthermore, Charmaz (2008) states that in order to understand how research participants construct their world, researchers need to know that world from their participants' standpoints (Charmaz 2003; 2008).

In this research, the researchers followed in main features the process as described above by Bernard, and relying on the thoughts of Charmaz.

PART
II

Results on the WBL-tutors

4 INTERWEAVED RESEARCH AND EXPERIMENTATION

Leena Kaikkonen

The experimentation taken in the Baltic countries was testing the relevance of the WBL-tutor training organised as a joint training for tutors from VET schools and workplaces. The experimentation was based on the hypothesis that the joint training of VET and workplace tutors is beneficial and it can

1. ensure pedagogical skills of workplace tutors and VET tutors to guide VET students or apprentices; – The evidence found for this is discussed in chapters 5, 6, 7, 9 and 13
2. improve cooperation and communication between VET and enterprises and support the involvement of SMEs; – The evidence found for this is discussed in chapters 5, 6 and 7
3. improve competences of WBL tutors for supervising work-based learning – The evidence found for this is discussed chapters 5, 6 and 7
4. Ensure pedagogical skills of VET teachers to guide workplace tutors; – This issue will be referred in chapter 13

and as a consequence of all of these

5. Improve the quality of the WBL tutor tandem training; – The evidence found for this is discussed in chapters 13 and in Discussion.

In this chapter, information about the data collection results is provided for the basis for all the other chapters mentioned above. Furthermore, it is described in brief how the project partners made amendments on the process of the experimentations within the three phases of it.

4.1 THE NUMBER OF WBL-TUTORS INVOLVED IN THE EXPERIMENTATION

Altogether 820 WBL tutors were involved in the experimentation. The participating WBL tutors were trained in three phases and divided into 49 groups. The first phase of the experimentation, called the pilot phase, included 11 groups, the second phase 14 groups and the third phase 24 groups. The size of the groups varied between 9 and 32 persons. Estonian tutors were typically trained in slightly smaller groups of 9–15 participants, with one exception of a group involving 30 persons, while Lithuania used slightly bigger groups involving 16–32 participants, with one exception of a group involving 14 participants. In Latvia, the size of the groups was between 11 and 25 participants. As initially planned, the number of trained Estonian WBL tutors was a bit smaller (208) than those of Latvians (300) and Lithuanians (312).

The initial plan was to train an equal amount of VET and workplace tutors. However, the end result turned out to be in favour of the workplace tutors, as they numbered 466 (57%), while the VET tutors' share was 354 (43%). The balance between VET and workplace tutors varied even more within the three countries. In Latvia, the groups were represented most evenly (44% of VET / 56% of WP tutors). Lithuania swayed a bit towards the direction of the VET tutors (60% of VET, 40% of WP tutors), whereas in Estonia the share of VET tutors remained much lower (17%) in comparison to trained WP tutors (83%). The numbers of all trained VET and workplace tutors in each country are displayed in Table 4.

TABLE 4. Number of trained VET and workplace tutors in the Baltic countries during the experimentation

country	**trained VET tutors**	**%**	**trained WP tutors**	**%**	**Total number of trained WBL tutors**	**%**
Lithuania	187	60%	125	40%	312	38%
Estonia	36	17%	172	83%	208	25%
Latvia	131	44%	169	56%	300	37%
total	**354**	**43%**	**466**	**57%**	**820**	**100%**

4.2 THE THREE PHASES OF THE FIELD TRIALS

THE PILOT PHASE

The research within the experimentation began along with the first field trials considered as the pilot phase of the expermentation in autumn 2018. During the pilot phase, altogether 191 WBL tutors were trained: four groups with 67 tutors in Estonia, four groups in Latvia with 70 tutors, and three groups with 54 tutors in Lithuania.

The actions and improvements on the experimentation process after the first field trials, the pilot phase

The project partners gathered to discuss their experiences of the pilot phase and the analysis by the researchers at the partner meeting in February 2018. The researchers raised as the main point that TTT4WBL–project is not only a training project but a policy development project and in implementing the experimentaton it would be important to remember to take follow this kind of targets set for the project. Aside from this focal question, the researchers raised other issues for the partners' reflection concerning the development of the tandem training and implementation of the trainings, such as participant recruiting, training contents and methods, and considerations of the Baltic model.

The researchers used the data analyses of the pilot phase to check the usability of the research tools and to test the relevance of the approach and procedures. In addition, and according to the experimentation plan, the data gathered was analysed in order to get user experiences and to give recommendations for the project's training partners to develop the tandem training methods and contents. The research results were reflected with the training partners and they served as a basis for subsequent analysis when the results of the second field trials of the experimentation and research were to be obtained. This enabled the research team to observe and analyse the dynamics of the opinions of the involved stakeholders in a timeline – as proposed by the panel design of the research described before in Chapter 3.

Based on the pilot phase experiences, two amendments were made before second field trials. Firstly, it was decided that the data in the beginning of the training would be collected from WBL tutors with one questionnaire only. The partners considered using two questionnaires during the short training to be excessively complicated, and it was also pointed out by the researchers that the additional value of the data gathered with two questionnaires was not so relevant. It was further decided that the data gathered with this questionnaire now to be excluded, would not be used in the data analysis. The second amendment concerned the distribution of the questionnaire online link. From this point on it was decided to be delivered to the WBL tutors via personal email instead of providing it to the trainees as an open link by the trainer during the training in order to be able to match the respondent's in the beginning and 6-months after responses, besides enabling the online system to send reminders to those who had not responded.

THE SECOND FIELD TRIALS

After the pilot phase, the second and third field trials were considered as a one entity. However, a checkpoint was made in the middle of implementing them, so in that sense it is possible to talk about second and third phase of field trials. However, most of the data analysis, especially that of statistical analyses were done as one entity.

The second round of the field trials was carried out along with data collections from March to June 2018 – so the timeline was postponed a bit from the initial project plan. The change made with the questionnaire link, occurred to raise quite a few challenges because the Baltic participants apparently did not have email addresses of their own, or at least they were not using them. This challenge might be visibly seen in the number of the responses received: Of the 232 tutors trained during the second phase, 162 responded to the questionnaire in the beginning of the training, which is 70% of the amount and a smaller share than in the pilot phase, where 89% responded.

The research group was following the progress of the second round of field trials via the data collection gathered through the online application known as the Webropol online survey tool. Data was analysed using SPSS quantitative statistical methods like in the pilot phase.

Actions and improvements on the experimentation process after the second field trials

After the second phase of field trial implementation and data analysis in spring 2018, the project partners again gathered to discuss the research results and the partners' training experiences in an online meeting in June 2018.

Within these discussions it showed up that the Lead Trainers and project partners had also reflected the experiences and had ideas how to develop the actual WBL tutor trainings content-wise and methodologically, which brought up a fruitful situation for the reflection. The WBL tutor training contents and methods were slightly amended.

The researchers raised two main questions as their main concern. Firstly, how to find and recruit the trainees for the WBL tutor trainings in such a way that the selection would fulfil the idea of the tandem approach as laid out for the project? And secondly, as one of the most crucial issues in regard to the success of the research, how could the project partners and Lead Trainers encourage the trained WBL tutors to response to the second questionnaire after six months of their training? Without receiving these second responses from the trained WBL-tutors, there would not be a possibility to validate the assumed impacts of the tandem training.

Besides these two points, questions similar to the pilot phase were discussed. The project partners again discussed about the nature of the policy experimentation project to make sure that the project fulfils what was planned and promised. In addition, issues with regard to schedules, contents and methods were discussed. Furthermore, it was discussed that the situation in the three Baltic states varied as did the use of concepts (such as apprenticeship and work-based learning), how should these be taken into account when developing WBL training in general and especially the Baltic model of the WBL training. The project had a set goal to develop the Baltic model but what was actually meant with it in each of the three states and accordingly, how should it be developed during the project.

THE THIRD FIELD TRIALS

The third round of field trials was started in October 2018 and was carried out until January 2019. In the third phase as well, data was collected from the trained WBL tutors with the online questionnaires, including some open questions following the processes defined for the second phase.

In the second and third phase, altogether 629 tutors passed the tutor training, hence the expected 820 tutors were then trained.

SIX MONTHS AFTER

The trained WBL tutors were sent another questionnaire approximately six months after they had participated in the training. So collections of this data started in spring 2018 and lasted until summer 2019.

Of all the 583 WBL-tutors who responded to the first questionnaire, 294, i.e. 50.4%, also answered the 6-months-after questionnaire. There were some differences between response rates concerning the trainees in the pilot phase and the participants in the second and third phase. In the pilot phase, only 34.9% responded to the 6-months-after questionnaire, while in the second and third phase 56.8% of those who responded to the first questionnaire likewise responded to the second questionnaire. The difference might probably be explained by the fact that those who gave an incomplete answer during the pilot phase failed to answer the 6-months-after questionnaire. A summary of all the received tutor responses can be seen in Table 5.

TABLE 5. Summary of the WBL tutor responses received in the experimentation

Country	Number of all trained tutors	Number of all the tutors responding to the first questionnaire		Number of the tutors responding further also to the 6-months-after questionnaire		Percentage of all the trained tutors responding to the first and the 6-months-after questionnaire
Estonia	208	151	71%	80	53%	38%
Latvia	300	253	84%	132	52%	44%
Lithuania	312	179	57%	82	46%	26%
In total	820	583	71.1%	294	50.4%	36%

THE TUTOR GROUP INTERVIEWS

The quantitative and qualitative data collected from the trained WBL-tutors with the two questionnaires focused mostly on evaluating their competences and skills related to WBL. In addition to these two questionnaires, the research included WBL-tutor group interviews at the end of the trainings. These were done in order to receive information that is produced in a dialogue between the VET school and company representatives. Through taking advantage of the group dynamics of the diverse respondents, the tutor group interviews aimed to produce new and additional data on the tutors' experiences of the WBL tutor tandem training. The tutor group interviews and their results are described in chapter 7.

5 WBL-TUTORS EXPECTATIONS AND EXPERIENCED BENEFITS OF THE TUTOR TRAINING

Arja Pakkala

In addition to quantitative analysis and results, the tutor questionnaires contained open questions in order to obtain more detailed information about their insights at different stages of the field trials.

In the beginning of their training, the participants were asked open questions about the expectations they had of the training and development. They were also asked if they had anything else they wanted to mention. Six months after the training, the participants were asked about the benefits of tandem training. They were also asked to provide development suggestions for the joint WBL tutor training contents and methods, or for organising the training.

The tutors' open responses were analysed using the grounded theory method (Strauss and Corbin, 1990; Glaser and Strauss, 1967), in which the analysis proceeds from the observations of the material to conceptual constructions. In this process, the WBL tutors' perspectives on tandem training implementation were examined in order to complement the quantitative materials.

After categorizing the open data material, it was organised using a content analysis method. It was examined from the viewpoint of how the pilot phase expectations were related to the perceived benefits of tandem training, and what new ideas for further development were presented by the participants.

5.1 WBL-TUTORS EXPECTATIONS ON THE TUTOR TRAINING IN THE BEGINNING OF THE PILOT PHASE

In the first questionnaire, the WBL tutors were asked about the expectations on the WBL-tutor training. Approximately two thirds of the pilot phase participants provided answers to the open questions (Table 6). Of these 48% were from Latvians, 33% from Lithuanians and only 19% from Estonians.

TABLE 6. WBL-tutors' responses in the pilot phase to the open questions of the tutor questionnaire in the beginning of their training

Open questions	**Estonia (n=50)**			**Latvia (n=65)**			**Lithuania (n=54)**			**TOTAL (N=169)**	
	VET	WP	Missing	VET	WP	Missing	VET	WP	Missing	Responses	Missing
Q15. What are your expectations for the WBL tutor training you are about to start?	5	21	24	35	23	7	20	16	18	120	49
	26 15%			58 34%			36 21%			**71%**	**29%**
Q16. Anything else you would like to add	1	4	45	4	6	55	9	4	41	28	141
	5 /3%			10 /6%			13 /8%			**17%**	**83%**
Sum f f%	31 9%			68 20%			49 14%			149 44%	190 56%

Most of the answers were short, however, in question 15 quite informative. On its part question 16 on, "Any other comments you would hope to tell us", did not provide any relevant answers apart from expressing satisfaction that the training had been organised or having "nothing to say." It seemed, therefore, that in this initial phase of the training the participants are in a wait-and-see mode and generally do not comment or have anything particular to say about the training. A few comments dealt positively with the project or expressed gratitude that the training was organised.

Concerning their expectations, the WBL tutors described what they wanted to learn and achieve during the training. Their answers can be categorised into three main categories, with subcategories as follows:

- Learning and development (53)
  - Acquiring new knowledge
  - Work skills improvement
  - Assessment and guidance improvement
  - Training

- Work environment and the VET viewpoint (25)
  - Workplace-based approach
  - Understanding the system of VET and WBL
  - Improvement of competences

- Cooperation and Interaction (21)
  - Building networks
  - Sharing experiences
  - Collaboration between VET schools and workplaces
  - Developing cooperation

Most of the tutors' comments focused on Learning and development (53 comments). It seemed that workplace tutors look forward to gaining more knowledge about school practices in particular, but they also said that they generally wanted new information needed in the future without being able to specify what it was. Another clear entity that emerged here was skills improvement. More specifically, the improvement of working skills on assessment and guidance skills. The comments reflected an understanding of the need to learn the necessary things for actors in the education system, such as assessment according to the curriculum, skills for giving and receiving feedback, knowledge of different types of guidance styles, and simply getting the requisite skills to start as a practice supervisor. Some of the participants also wanted to understand what was going on in the project.

Secondly, the tutors emphasised on work environment and its VET viewpoint (25 comments). They wanted to know about the work-based learning system, i.e. how it should be organised and what kind of documents are needed. They wanted to raise their professional competence in organising work-based learning and learn more about apprenticeship and its guidelines in one's own country. They also wanted to understand the link between the curriculum and the concrete tasks of work, the educational process and how it should be implemented at the workplace. The aforementioned answers dealt mostly with the interests of workplace tutors. The VET tutors, on the other hand, were more interested in businesses and a structured approach to the work environment.

Cooperation and interaction was the third issue that emerged in tutors' expectations in the beginning of the training (21 comments). The tutors wanted to develop workplace-school cooperation, build networks, share experiences with others and collaborate between VET schools and workplaces during the training. They expected cooperation, interest and regular visits, making

contacts and sharing knowledge with colleagues. Some also wanted to have students in practical training. These themes are intertwined and related rather than completely separate. They include learning, collaboration, the VET system, the learning process and student leadership skills. In other words, the participants expected to develop the skills needed for a tutor role and to develop collaboration between the workplace and VET school.

5.2 THE WBL TUTORS' OPINIONS OF THE BENEFITS OF THE TRAINING

Answers to the open questions was received from less than half of the respondents (Table 7). Most answers to the open questions were short but quite informative. 21% of all the answers to the two open questions in the 6-months-after questionnaire were from Latvians.

TABLE 7. WBL-tutors responding to the open questions in the 6-months-after questionnaire

Open questions	**Estonia (n=75)**			**Latvia (n=129)**			**Lithuania (n=82)**			**TOTAL (N=294)**	
	VET	WP	Missing	VET	WP	Missing	VET	WP	Missing	Responses	Missing
Q15. The benefits of the joint WBL training are…	8	23	44	34	42	53	16	14	52	137	157
	31 / 11%			76 / 26%			30 /10%			**47%**	**53%**
Q19. Please give your suggestions for developing the joint WBL tutor training contents and methods, or the organisation of the training	3	17	55	22	28	79	17	17	48	104	190
	20 / 7%			50 / 17%			34 / 12%			**35%**	**65%**
Sum f f%	51 /9%			126 / 21%			64 /11%			241/ 41%	347/ 59%

The experienced benefits were divided into three main categories and their subcategories:

- Cooperation and Interaction (51)
  - Sharing experiences
  - Collaboration between VET schools and workplaces
  - Developing cooperation
- Learning and development (25)
  - Self-improvement
  - Work skills improvement
  - Training
  - Assessment and guidance
- Work environment and the VET viewpoint (22)
  - Demands of the labour market
  - Workplace-based approach

Cooperation and interaction seemed to be the most important benefits of the tandem training, according to the tutors (51 comments). They emphasised the importance of meeting people in the area and sharing the experiences and good practices of guiding students at work-based learning. They also said that tandem training was a better way to develop cooperation and hear from colleagues about what they do. VET tutors saw the understanding of employers' expectations as a valuable thing that increased the collaborative capacity. This was featured in many responses.

Cooperation, direct conversation with school and practice managers and feedback as a quality component were particularly featured in many of the responses from VET tutors. They also saw that they got new colleagues from companies and better understanding of opportunities for collaboration and professional development. They understood that there was a need for change in collaboration in both sides. However, they likewise understood the importance of communication and the possibility that two parties can meet and discuss problematic situations. There was no major difference between the responses of VET and WP tutors. Instead, both groups emphasised the sharing experiences and practices, and the main thing was that many participants understood the importance of cooperation and the collaborative developing of supervision and the guidance of students.

Learning and development of tutors' guiding skills was supposedly the main target for tutor training. This manifested clearly in the tutors' responses (25 comments). So it seems to be a good result of training. When looking at the content of responses, it can be found improvement in both personal and the overall quality of education. On a personal level, the tutors said that, as their analytical and theoretical capacity increased, their understanding of opportunities for collaboration and professional development got better and they acquired real practical skills, such as linking theoretical knowledge to practice, self-confidence, pedagogical, guiding and supervising skills. The theoretical perspective was featured in the comments, which emphasised that the tutors learned the basics of pedagogical education. They also highlighted the opportunity to combine the knowledge that is formed by practicing and the pedagogical methodology learned in the studying. Some tutors highlighted the perspectives of both the supervised and the supervisor in a broader sense and said that it is helpful in understanding how to approach reaching the goal in different cases. A greater understanding of the learners' needs and communication was also present.

Work environment and VET viewpoint of the workplace was the third important thing for the tutors (22 comments). Instead of directly telling things about training, the comments are connected to it indirectly. Practice, experience and developing students' specific competences that are useful in the work environment. VET tutors emphasised knowing the working environment of the workplace: students' practice in companies and greater opportunities for learners. This does not explain tutor coaching directly, but it is related to it from the perspective of the learning environment. It was said in these comments that the quality of work-based learning has improved. It could be therefore assumed that through it, the learning environment and cooperation in work-based learning has improved.

The tandem training for WBL tutors had been experienced helpful in many ways. The tutors also had views on how the WBL-tutor training could be developed. Their ideas can be describes in three categories and their subcategories as follows:

- Cooperation and tandem support (39)
  - Developing collaboration between VET schools and workplaces
  - Sharing experiences

- Training (18)
  - How to organise tandem training
  - Wider collaboration in the training

- Work environment and the VET viewpoint (14)
  - Developing the work environment and collaborative practices with VET partners

Cooperation and interaction was the clearest benefit of the training as mentioned before. Now, however, there was more desire for interaction when talking about *cooperation and tandem support* (39 comments). The tutors wanted greater openness, activity from both parties and new ways of spurring cooperation: seminars or a roundtable or similar events by VET schools for small businesses to share work experience with prospective professionals. Many comments highlighted the possibility to experience exchange between the participants of the joint training. That was a demand for some kind of further education for the participants, and an example of lifelong learning. Such comments called for the establishment of school-workplace cooperation. They also called for organising this type of training more frequently, creating closer cooperation between schools and business. There were many comments on such development proposals. There was also a proposal to call employers to be involved in curriculum development and supervising lessons. Overall, based on these comments, a mutual goodwill dialogue could be called for. When they emphasised cooperation and hoped that it will be developed, a phenomenon could be recognised: namely that they had come up with the idea of cooperation in this training and had gotten a little practical taste.

Then the WBL-tutors made proposals regarding *the training itself* (18 comments). The first thing was that the tutors wanted this kind of training to be organised more frequently, and here they once more highlighted the collaboration. It was hoped that trainings could be frequently organised from time to time, and thereby create closer cooperation between schools and business. Some called for a longer course and hoped that the training could be repeated in a few years. A methodological proposal was that teaching methods could be adapted to different types of participants, and it was hoped that training could be combined with the daily work of the training participants. One aspect of training was how the tutors assess, guide and supervise students. The tutors emphasised guiding practices and cooperation between the VET school and workplace.

The VET viewpoint in the work environment was also highlighted (14 comments). The tutors called for meetings with industry professionals to understand the latest trends in the real work environment. A common challenge in organising work-based learning was the number of practice places, and the tutors proposed that employers could take more apprentices. WP tutors hoped that the school could take the wishes of the employer more into account and prepare the curriculum accordingly. This was a larger question and one that cannot be solved in tutor training.

WP tutors called for greater support from school tutors so that practice supervisors in educational institutions could inform trainees more precisely about the work to be done in the company and, accordingly, draw up apprenticeship programmes.

5.3 THE VIEWS OF WBL TUTORS AT DIFFERENT PHASES

When looking at tutors' comments in different phases, it can be seen that they dealt with the same themes, but the order of importance, and in some cases also content, varied. The topic that received the most comments was considered the most important. The content was viewed by subcategory. The paragraphs in previous pages from the different issues presented more specific contents of the tutors' comments in each phase. The aim here is to summarise the categories and their meaning on the basis of qualitative data.

TABLE 8. WBL tutors' expectations on the training, comments on benefits of training and suggestions for development in the training		
Themes of expectations (in the beginning of training in the pilot phase)	**Themes of experienced benefits** (6 months after the WBL-tutor training)	**What should be developed in the future** (6 months after the WBL-tutor training)
Learning and development (1st) • Acquiring new knowledge • Work skills improvement • Assessment and guidance improvement	**Learning and development (2nd)** • Self-improvement • Work skills improvement • Training • Assessment and guidance	
Work environment and the VET viewpoint (2nd) • Workplace-based approach • Understanding the system of VET and WBL • Improvement of competences	**Work environment and the VET viewpoint (3rd)** • Demands of the labour market • Workplace-based approach	**Work environment and the VET viewpoint** (not necessarily in connection with the training but appeared in many responses) **(3rd)** • Developing the work environment and collaborative practices with VET partners
Cooperation and Interaction(3rd) • Building network • Sharing experiences • Collaboration between VET schools and workplaces • Developing cooperation	**Cooperation and Interaction (1st)** • Sharing experiences • Collaboration between VET schools and workplaces • Developing cooperation	**Cooperation and tandem support (1st)** • Developing collaboration between VET schools and workplaces • Sharing experiences
		Training (not about learning but training) **(2nd)** • How to organise tandem training • Wider collaboration in the training

Learning and development was the most important theme in the beginning of the training. After training it was the second most important theme, yet the content was almost the same. Acquiring new knowledge, work skills improvement, assessment, guidance improvement and self-improvement were important things in both phases. The tutors did not recommend any further development about these themes.

Cooperation and interaction was the third most important theme in the beginning of the training, but it appeared to be the main theme at a later stage. The expectations and experienced benefits of cooperation and interaction were building networks, sharing experiences, collaboration between VET schools and workplaces, and developing cooperation. One might think that the benefits of cooperation were sufficient, but the recommendations for future development work focused on this theme very much. The tutors wanted to develop the collaboration between VET schools and workplaces and made concrete proposals for activities, such as visits, seminars or a roundtable or similar events by VET schools for small businesses, in which work experience with prospective professionals could be shared.

The tutors regarded the *work environment and the VET viewpoint* in the beginning of the training as the second most important theme, but 6 months after training it was the third most important. At the beginning they were interested in the workplace-based approach and wanted to understand the system of VET and WBL, expecting they could improve their competences. 6 months after training one new theme was the demands of the labour market. What they recommended for further developing was not necessarily connected to the training but appeared in many responses nonetheless. Their important proposal was to develop the work environment and collaborative practices with VET partners. However, it is indirectly linked to tandem training and WBL.

One theme that did not appear in the beginning of the training and not clearly in the benefits of training was *the training itself*. The proposals dealt with organising the training and what could be wider collaboration in the training.

In summary, in the end initial expectations and perceived benefits appear as same themes. In the table they can be seen side by side and form a continuation of some sort of confusion from the beginning to structuring things towards the end, and by the end there is no longer a need to talk about own learning only. After the training, the key themes are collaboration, developing WBL and VET in working life and proposing new forms of collaboration. The regularity and continuity of the organisation of training is also clear.

6 WBL TUTORS' COMPETENCE IMPROVEMENT

Leena Kaikkonen & Tommi Veistämö

As described in more detail earlier in this report, the Baltic countries were testing the relevance of the tandem approach in training VET school and workplace tutors. A hypothesis that the joint training is beneficial for the development of WBL tutors' pedagogical skills and the collaboration of VET schools and companies was the starting point of the experimentation. The most demanding assumption that was laid on the hypothesis was that the tandem training can *improve the competence of WBL tutors for supervising work-based learning.*

Before going deeper in describing the analysed results from this point of view, it is necessary to raise two points related to the concepts of "*competence"* and "*supervising WBL".* Referring to chapter 2, the background, it is necessary to reiterate that in this research competence is understood as a combination of skills, knowledge, attitudes and behaviours required for effective performance in a real-world task or activity (see Figure 4, page 27) and as the holistic synthesis of these components. Concerning the research tools, this broader approach is intertwined with the tutor questionnaires, where each competence related to WBL consists of broader areas that are operationalised in the alternative questions, of which there are several. Furthermore, supervising WBL is considered as a wider task of organising, overseeing and developing work-based learning as an approach in a wider sense than just guiding an individual student in their studies.

6.1 THE PILOT PHASE RESULTS AS THE OPENING

169 tutors responded in the first questionnaire in the pilot phase. The empirical data at the beginning of the pilot phase was received from 169 WBL tutors, which was 89% of the tutors trained in the first field trial. A majority were female (almost 60%). They represented age groups from 20 to 60 years. The mean age group in Latvia and Lithuania was 30–40 years and in Estonia over 50 years. The distribution of VET and workplace tutors was uneven within individual countries, but the overall numbers of the involved VET and workplace tutors was fairly even, i.e. 81 workplace tutors and 83 VET tutors (with five persons not responding to this question). In Latvia and Lithuania, the amount of workplace tutors was approximately 40% and that of VET tutors 60%. In Estonia, however, the distribution was the other way around,

and there were more workplace tutors (70%) in relation to the amount of VET tutors. In Estonia, there had been other WBL projects going on, and for this reason they had to involve more workplace tutors. In all three countries, the WBL tutors represented several different professional fields.

To analyse the tutor responses of *the pilot phase*, sums of variables were produced of the four diverse areas of tutor competence in WBL, i.e. planning, guiding, assessing and developing. The differences between countries and between workplace and VET tutors in one country were surprisingly small concerning these four areas related to WBL. Overall, the respondents assessed their expertise to be good apart from their skills in developing cooperation between VET schools and workplaces. In this, the WBL tutors considered their expertise to be only satisfactory. The pilot phase results of the level of the four competence areas as assessed by the VET and workplace tutors separately and by country are described in Figure 8.

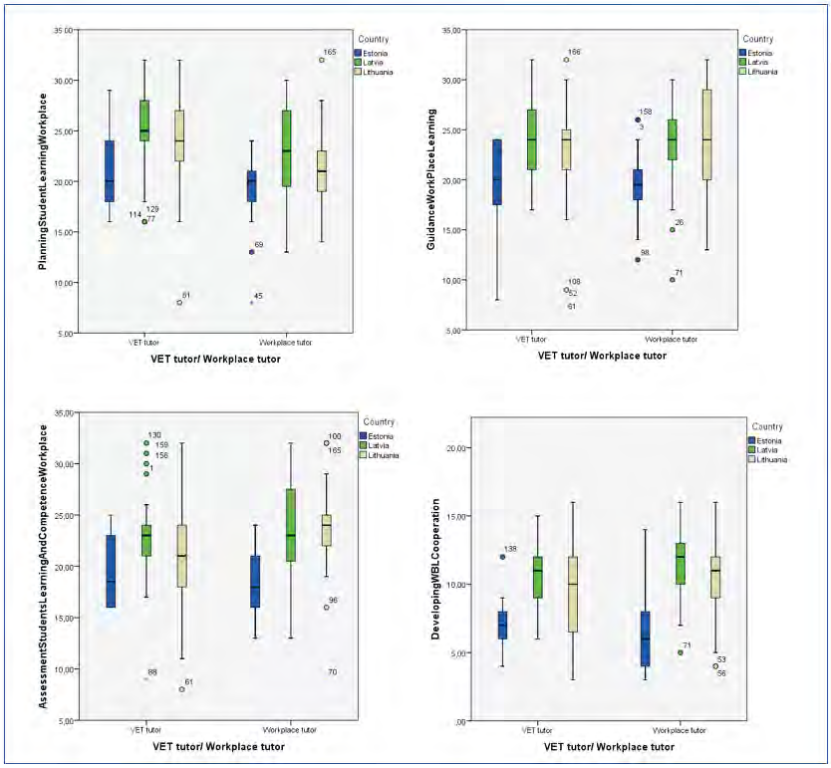

Figure 8. The Baltic WBL tutors' self-assessment of their skills in planning, guiding, assessing and developing WBL in the pilot phase of the experimentation

Overall, it can be said that in the pilot phase Estonian WBL tutors assessed themselves to be weaker in all elements than the representatives of the other countries, as can also be seen from Figure 8. For example, concerning the expertise in developing cooperation between VET schools and enterprises (the square in the bottom right of the figure 8), around 75% of the best Estonian VET tutors considered themselves to be at the same level as the weakest 25% of Latvian VET tutors. This tendency was similar in all assessment areas and with both VET and workplace tutors. However, none of the background factors explained this.

Within the questionnaire provided, the WBL tutors were also asked to give some open feedback about their experiences of the tandem training and having workplace and VET school tutors in the same group. The tutors said that it was good to have workplace and VET school tutors in the same group, as it gave them the opportunity to build connections, discuss and share experiences, and see the topics from another point of view. These topics were further confirmed in the lead trainer interviews, which were made by the researchers in each country in the end of the pilot phase. According to the lead trainers, the topics considered important varied slightly from country to country. Estonian WBL tutors, most of them from workplaces, were interested in learning how to give feedback to students during their WBL learning periods. However, they explained that they lacked information on the requisite professional qualification standards. According to the Lithuanian lead trainers their WBL tutors wanted to focus on administrative issues in order to understand the framework of work-based learning.

6.2 THE FIRST QUESTIONNAIRES – THE FIRST COUPLE FOR COMPARISONS

Besides the 169 tutors' responses in the pilot phase, a further 414 of the WBL tutors trained in the second and third phase (66%) responded to the first questionnaire in the beginning of their training. When added with the pilot phase results, altogether 583 tutors responded to the first questionnaire, which in total was 71% of all 820 trained tutors.

A plurality of these 583 respondents represented Latvia (43%), while Lithuania (30%) and Estonia (25%) were both less but almost equally represented. Among the respondents, there were a bit more female tutors (58%) than males (41%). Workplace tutors had been more eager to respond (59%) than VET school tutors (40%), but this was in line with the percentages on the amount of trained tutors overall. Quite expectedly, most of the respondents

had their professional background in the technology sector (35%), as this sector is the largest professional field in VET. Unfortunately, almost equally as many did not respond to this question at all (29%). All the other professional fields were quite modestly represented. This low response was supposed to be due to that in the pilot phase professional field was asked as an open question, and consequently it was changed to a multiple choice question in the later phases.

Workplace tutors were already quite experienced in their work, as were the VET school tutors with regard to experience in teaching. 70% of them also had experience in guidance of WBL, and almost half of the responding workplace tutors now had a student under their guidance at the workplace. The more detailed background

information of the respondents to the first questionnaire can be seen in Table 9.

TABLE 9. The background information of the WBL tutors who responded to the first questionnaire (N=583)				
Variable	Levels	Frequency	% Frequency	Missing
Country	1. Estonia 2. Latvia 3. Lithuania	145 252 178	24.9 43.2 30.5	8
Age	1. < 20 2. 20–30 3. 30–40 4. 40–50 5. > 50	0 62 168 149 197	0 10.6 28.8 25.6 33.8	7
Gender	1. Male 2. Female	238 336	40.8 57.6	9
Professional field (was asked as an open question in the pilot phase)	1. Technology sectors (construction, metal sectors, transport, information technology, etc.) 2. Food industry 3. Clothing industry 4. Business administration 5. Hotel, restaurant and tourism 6. Social services 7. Health, sports and wellness 8. Natural resources 9. Hand and art industry 10. Culture 11. Other	198 34 9 23 22 6 34 0 11 2 73	34.5 5.8 1.5 3.9 3.8 1.0 5.8 0 1.9 0.3 10.2	171
I am	1. VET tutor 2. Workplace tutor	230 343	39.5 58.8	10
Work experience	1. 0–2 years 2. 3–5 years 3. 6–10 years 4. 11 years or more	60 60 68 199	10.3 10.3 11.7 34.1	196
Do you have a student under your guidance at the workplace at the moment:	1. yes 2. no	163 230	28.6 39.5	217
Experience of teaching	1. 0–2 years 2. 3–5 years 3. 6–10 years 4. 11 years or more	50 37 40 135	8.6 6.3 6.9 23.2	321 (55.1%)

TABLE 9 continues				
Variable	Levels	Frequency	% Frequency	Missing
Guidance experience (on-the-job learning/ work-based learning):	1. 0–2 years 2. 3–5 years 3. 6–10 years 4. 11 years or more	191 129 124 101	32.8 22.1 21.3 17.3	38
Size of the company/VET school: number of employees	1. 1–9 2. 10–49 3. 50–100 4. 101–250 5. 251 or more	90 102 147 104 126	15.4 17.5 25.2 17.8 21.6	14
Recoded variable				
Trained in Tandem group (The Tandem group included 30–60% of VET tutors. Not tandem if one or the other tutor group was overrepresented (more than 70%)	1. Tandem group (17 groups) 2. Not-tandem group (16 groups)	210 196		8

The data gathered in the three phases of the field trials, with the beginning and 6-months-after questionnaires, will be compared and described in more detail in the following chapter.

6.3 THE 6-MONTHS-AFTER RESPONSES – THE OTHER COUPLE FOR COMPARISONS

The trained WBL tutors were sent another questionnaire approximately six months after they had participated in the training. The collections of the data with the 6-months-after questionnaires started in spring 2018 and continued until summer 2019.

Of the 583 tutors who responded to the first questionnaire, 294, i.e. 50.4%, also answered the 6-months-after questionnaire. There were some differences between response rates concerning the trainees in the pilot phase and the participants in the second and third phase. In the pilot phase, only 34.9% responded to the 6-months-after questionnaire, while in the second and third phase 56.8% of those who responded to the first questionnaire likewise responded to the second questionnaire. The difference might probably be explained by the fact that those who gave an incomplete answer during the pilot phase failed to answer the 6-months-after questionnaire. (A summary of all the received tutor responses can be seen in Table 5, in page 67).

THE 6-MONTHS-AFTER RESPONDENTS

Of the 294 WBL tutors who responded to both questionnaires, a plurality were from Latvia (131), while Lithuania (82) and Estonia (81) were equally represented. Two thirds of the respondents were female (64%) and the majority were 40 years old or older. There were more workplace tutors (60%) than VET school tutors (40%). Almost half of them represented the technological sector and nearly 40% of them had more than 11 years of work experience. They came quite evenly from different-sized companies or schools, but more came from larger organisations than from smaller ones. Many of them had some experience of guiding students in work-based learning, and half of the responding workplace tutors did not have, at the point of responding, a student to guide in their workplace. The background information about the respondents of the 6-months-after questionnaire is displayed in Table 10.

TABLE 10. The background information of the WBL tutors who responded to the 6-months-after questionnaire (N=294)				
Variable	Levels	Frequency	% Frequency	Missing
Country	1. Estonia 2. Latvia 3. Lithuania	81 131 82	27.2 44.7 28.2	0
Age	1. < 20 2. 20–30 3. 30–40 4. 40–50 5. > 50	0 25 84 87 95	0 8.6 28.7 29.9 32.7	1
Gender	1. Male 2. Female	104 184	36.1 63.9	6
Professional field	1. Technology sectors (construction, metal sectors, transport, information technology, etc.) 2. Food industry 3. Clothing industry 4. Business administration 5. Hotel, restaurant and tourism 6. Social services 7. Health, sports and wellness 8. Natural resources 9. Hand and art industry 10. Culture 11. Other	141 19 3 14 30 9 21 2 12 2 38	48.5 6.5 1.0 4.8 10.3 3.1 7.2 0.7 4.1 0.7 13.1	3
I am	1. VET tutor 2. Workplace tutor	116 170	40.6 59.4	8
Work experience	1. 0–2 years 2. 3–5 years 3. 6–10 years 4. 11 years or more	12 20 30 112	1.4 6.8 10.2 38.1	120
Do you have a student under your guidance at the workplace at the moment:	1. yes 2. no	80 95	27.2 32.3	119
Experience of teaching	1. 0–2 years 2. 3–5 years 3. 6–10 years 4. 11 years or more	34 20 17 50	12.4 6.5 5.5 17.1	161

TABLE 10 continues				
Variable	Levels	Frequency	% Frequency	Missing
Guidance experience (on-the-job learning/ work-based learning):	1. 0–2 years 2. 3–5 years 3. 6–10 years 4. 11 years or more	90 71 47 79	31.4 24.7 16.4 27.5	7
Size of the company/VET school: number of employees	1. 1–9 2. 10–49 3. 50–100 4. 101–250 5. 251 or more	46 48 62 71 62	15.9 16.6 21.5 24.6 21.5	5
Recoded variables				
Recoded professional field	1. Technology sectors 2. Food industry, hotel, restaurant and tourism 3. Clothing, hand and art industry 4. Business administration 5. Social services, health, sports and wellness 6. Culture and other	141 49 15 14 30 42	47.3 16.7 4.7 4.7 10.9 14.5	3
Participated in	1. the first phase (pilot) 2. in the second or third phase	59 234	20.1 79.9	0

When looking at background information of the respondents in both phases, in the beginning and 6 months after (see Tables 9 and 10), it can be stated that in both phases they were quite similar to one another. Accordingly, the so-called typical respondent of both phases could be described as follows: a female Latvian workplace tutor who is over 50 years old and has a long work experience, more than 11 years. She works at the technology sector, presumably in a larger, rather than a smaller, company. She does not have much experience of WBL guidance, less than 2 years, and at the moment does not have a VET student to guide.

When observing more thoroughly, the frequencies of the background variables in the first phase and 6-months-after phase occur in a similar fashion. It can be taken as a sign that even though the response rate decreased, it was not dependant on background variables. This was tested with the chi square test, and the correlations between non-response and background variables were almost non-existent. It also turned out that many of the background variables had no impact on the tutors' self-assessment results.

6.4 WBL TUTOR COMPETENCE DEVELOPMENT – COMPARING RESULTS OF IN-THE-BEGINNING AND 6-MONTHS-AFTER

When comparing results related to tutors' competences in WBL, both in the beginning and six months after the tutor training, it can be said in sum that they generally showed themselves as being good concerning planning, guidance and assessment. However, while evaluating themselves in developing WBL, they considered themselves to be lower. While there weren't many differences among the three countries, Estonia lagged somewhat behind the other two (Appendix 9). In Lithuania, the tutors considered themselves less capable in assessment than in planning or guidance. On the other hand, tutors with more experience in guidance and longer work experience considered themselves to be more skilful in all the areas evaluated. Furthermore, all VET tutors were more positive with regard to planning than workplace tutors male and female tutors (Appendix 10). Overall, in the pilot phase the tutors evaluated themselves lower than tutors in the second and third phase.

It can also be interpreted from the data that respondents who evaluated their competences higher were more likely to respond to the 6-months-after questionnaire than respondents who considered themselves not so capable. However, this did not affect the use of statistical analyses, e.g. paired t-tests. Hence, it can be stated that the lower response in the 6-months-after phase did not affect the reliability of the results.

To analyse further the tutors' results, a cluster analysis was made. The tutors were divided into three groups based on how they assessed their skills (low – medium – high). It turned out that the Estonians were crammed into the lowest group while the Latvians were crammed into the highest. Apart from nationality, it turned out that the participants who had more guidance experience were in the highest group. None of the singular questions as such explained the differences between the tutors. It was also tested with a linear regressive model that none of the questions can be considered better than others.

Concerning tutor competences, in Latvia the tutors considered their skills to be on a lower level compared to their opinion of the same in the beginning of the experiment. However, with a more thorough look it turned out to be so only with workplace tutors. In Estonia, the tutors' opinion of their planning skill was lower than it had been in the beginning of their training. Conversely, the Lithuanian tutors considered their skills to be better than they had thought in the beginning of their training. It was also investigated whether being trained

in the tandem group had any impact on assessing one's own competences; the answer was negative. The results do not get any worse or better regardless whether one is in a tandem group or not. (Appendix 11)

In sum, it can be said that, when looking at the competences, not much change occurred in tutor competences when analysed in the beginning of the training and six months after the training. This might not be considered a big surprise when one remembers that 'competence' as a concept is understood as holistic in broader competence areas and that the tandem training was in the end only a short training period. Nevertheless, with this said, it must be emphasised that the WBL tutors considered the training useful, and it can be shown to have had an impact.

6.5 THE USEFULNESS AND IMPACT OF THE TANDEM TRAINING

The tutors' evaluations on their own skills was used to analyse the experienced usefulness of the tutor training for their development. It appeared that Latvian and Lithuanian tutors found the training to be more useful than their Estonian peers. The difference was significant concerning the workplace tutors (Estonia-Latvia $p = 0.009$, Estonia-Lithuania $p=0.013$). It also showed that tutors who were trained in the tandem group with an appropriate level of workplace and VET tutors present found the training to be more useful than those trained in non-tandem groups ($H = 2.751$, $df =1$, $p= 0.099$). It also seems that tutors who had or have had a student to guide found the training to be more beneficial. Some differences were found according to the professional field of the tutors. Tutors from business fields found the training the most useful, whereas tutors from handicraft and arts regarded it useful the least.

The only difference based on gender was found in the competence area of planning WBL. In this particular area, male tutors considered themselves weaker than female tutors. Stimulated by this notion, it was also studied how the gender of the trainers possibly affected the training. What was learned was that tutors trained by a female-male pair found the training to be more useful, particularly if the tutor group itself was a real tandem group. This same tendency was also found with regard to collaboration between schools and companies. The tutors said it increased more clearly if they had been trained by a female-male pair. However, this would require more detailed investigations, as the trainer pairs differentiating in gender quite often differed also on their background, i.e. one of them was from school and the other from the company, in addition to their professional fields being different. Nevertheless, it would be

interesting to consider the idea of tandem – the groups being diverse according to school-company background – being also worth emphasising concerning the trainers and their diversity in several aspects of their background (gender, professional background, workplace-school).

The tutors' comments on the usefulness of the training, based on their assessment of their skills, was analysed further according to the grouping made with the cluster analysis on their skills (low – medium – high). It showed that the VET tutors in the highest group found the training to be more useful than those in the second highest ($p=0.08$), similarly with the workplace tutors in the highest group ($p < 0.001$). When comparing the highest group's assessment of usefulness with the other two groups separately, the difference remained with both VET tutors (highest- middle $p=0.015$, highest-lowest $p=0.01$) and workplace tutors (highest- middle $p=0.03$, highest-lowest $p<0.001$). The difference between the middle and low group was also in favour of the higher one (middle-low $p=0.023$).

To reflect on the impact of the tandem training, some questions on its overall influence were raised for the WBL tutors in the 6-months-after questionnaire (question 17 of VET tutors /18 of WP tutors) as follows:

After the joint training I have succeeded

- **a** in raising the quality of the cooperation with in-company trainers/ VET trainers
- **b** in developing my professional and pedagogical skills
- **c** in updating my vocational skills and knowledge in cooperation with in-company trainers/VET trainers
- **d** in improving my knowledge of current work practices in cooperation with in-company trainers/ in improving my knowledge of the VET curriculum and practices in cooperation with VET trainers
- **e** in improving my coaching competences to foster entrepreneurship and business awareness among students in cooperation with in-company trainers/ VET trainers.

A sum of variable called 'after training' was made of this question. How the tutors assessed their competences in guiding WBL (sums of variables on planning, guiding, assessing, developing) to have changed between the beginning and 6-months-after situation did not have an impact on how they thought about the impact of the training for them as asked in the five questions in the sum of variable 'after training'. This was investigated by summing up all the changes in the sums of variables of planning, guiding, assessment and developing, i.e. summing up all points of four sums of variables in the beginning and subtracting from that the sum caught of these variables 6 months after. This gave a value of how much change had occurred, based on which the respondents were divided into three groups titled 'rather big positive change', 'small change' and 'rather big negative change'. In the analysis it was seen that the sum of variable 'after training' scored similarly in all three groups. It can be summarised that, despite the change assessed to have happened in own competences, the WBL tutors nonetheless experienced the usefulness of the training as being equally good.

6.6 IMPACT ON VET SCHOOL AND COMPANY COLLABORATION

Concerning the other area of development, that of collaboration between VET schools and workplaces, the tutors felt very positive about it. As many as 68% of the WBL tutors said that the collaboration had grown since they started the process. In Latvia, the progress was felt the most, with as much as 87% of the tutors stating so. Lithuanians were slightly more modest (66%). In Estonia, only a little less than half of the tutors felt the collaboration to have grown (42%). However, it should be remembered that in Estonia the amount of VET tutors in training overall was small, so it perhaps was not so beneficial for this development. In Latvia, the development was even better (92%) for the tutors who had been trained in real tandem groups than in those who were trained in more identical groups (83%). This kind of a comparison was not possible in Lithuania and Estonia due to less real tandem groups.

The results achieved with the quantitative analyses were further supported in the responses of open-ended questions of the 6-months-after questionnaire.

In sum, it can be said that the quantitative data provided evidence on the tandem training approach being beneficial in regard to set assumptions. When one considers the improvement of competence areas of WBL tutors to supervise work-based learning as a wider phenomenon, then it can be seen that no big changes occurred when analysing this on a wider level. However,

this is understandable when one takes into account that competences in this research were holistically understood as broad competence areas and that the length of the training was only two days. However, it must be added that, overall, the WBL tutors considered their competences to be on a good level both in the beginning and six months after the training. WBL tutors experienced the tandem training approach as useful and having had an impact on their practices and thinking. They experienced their pedagogical skills to have grown alongside the collaboration between VET schools and companies. Accordingly, it can be said that there was development towards the expected impacts.

7 THE TUTOR GROUPS' INTERVIEWS – VALIDATING THE INDIVIDUALLY PROVIDED DATA ON THE TANDEM TRAINING

Leena Kaikkonen

The WBL tutors responded in an individual questionnaire during the training. As described in chapters 4–6, the questionnaires used for quantitative and qualitative data collection from the trained WBL tutors focused mostly on evaluating their competences and skills related to WBL.

In order to bring in other points of view, the research included WBL tutor group interviews at the end of the WBL-tutor trainings. These were done in order to receive information that is produced in a dialogue between the VET school and company representatives. By taking advantage of the group dynamics of the diverse respondents, the tutor group interviews aimed to produce new and additional data on the tutors' experiences of the WBL tutor tandem training.

7.1 IMPLEMENTATION OF THE TUTOR GROUP INTERVIEWS

The tutor group interviews were implemented in Latvia and Lithuania in spring and autumn 2018. The Lead Trainers of the specific countries chose randomly in advance which groups would be involved, ensuring that they were chosen from various parts of the countries in order to receive as diverse points of view from the tutors as possible. The interviews were implemented at the end of the tandem training session. For the interviews, the trainers divided the interviewees into small groups, with an equal amount of workplace and VET tutors.

The groups were provided with some open interview questions which they were supposed to discuss first, followed by collaboratively providing their responses and opinions on those questions in writing. The four questions asked from the tutors were: i) what was good in the tandem training, ii) what was unnecessary in the tandem training, iii) what were the benefits of the tandem training and iv) where did the tutors think they needed more training.

Altogether, 22 tutor groups were interviewed, with 19 in Lithuania and three in Latvia. Each of the groups involved two workplace tutors and two VET tutors, so the groups involved altogether 88 WBL tutors. However, in the analysis they are regarded as groups rather than individual respondents. All 22 groups provided responses to all questions.

The qualitative data of the tutor groups' responses were analysed and categorised. Then they were further compared with the other data produced with the questionnaires, regardless of whether they brought in the same elements as the questionnaires, thus strengthening already existing data, or if they brought in some new viewpoints that were not brought up in the other data. In the following, the results are displayed in accordance with that approach instead of proceeding on a question-by-question basis.

7.2 THE VIEWPOINTS THAT THE TUTOR GROUP INTERVIEWS FURTHER STRENGHTENED

In the individually produced questionnaire, where the responses concerned the benefits of the training, the most mentioned areas were interaction and cooperation, which were focused upon from many diverse angles. These areas were also brought up in the tutor groups, with the simplest way being plainly stating that meeting colleagues was good. They added that "*employers had the opportunity to interact with schools".* In addition, the "*combination of representatives of schools and companies"* had the opportunity to mingle, and hence "*new contacts*" were made.

The importance of meeting people from the other party, school or workplace, was also brought up emphatically, with the respondents saying that training allowed participants to discuss and communicate with each other. This was mentioned as a worthy reason by itself by seven groups.

> *"The participants enjoyed the possibility to communicate with colleagues from business /VET schools."*

However, it was further explained that the discussions helped the participants learn to know each other through opportunities facilitated as training activities but also through informal discussions. Accordingly, these helped in building plans for cooperation opportunities after the training.

> *"Sufficient time was allocated for both parties – tutors from schools and companies – to engage in meaningful formal and informal discussions, thus increasing mutual understanding."*

> *"Non-formal conversations allowed us to make plans for potential cooperation and opened up a path for starting/ improving cooperation."*

The discussions were appreciated as they were regarded to "*increase mutual understanding".* They were also seen as an opportunity to share practices and experiences about WBL overall because of the opportunity "*to hear experiences from schools implementing the WBL model*".

The possibility to interact and cooperate was not considered only as a way to meet and talk but also as a possibility to acquire new knowledge and information. All in all, the tutor groups considered that the "*topics [were) good*" in the training. Contentwise, they brought up that they felt they had attained more knowledge about the other party. As described above in regard to discussion possibilities, the tandem training had given the participants the opportunity to get to know each other, but now the tutor groups explained in more detail that they had had the opportunity to learn more about each other through hearing each other's opinions, expectations and needs related to work-based learning.

> *"Opportunity to get to know each party's (school-company) opinion on the common process called WBL."*

> *"Employers had an opportunity to talk about their needs and expectations."*

They felt that it had been good *"to hear out what the school/company thinks that the other party needs to improve and in what way"* as it

> *"gave a realistic outlook on both perspectives – of school and of company. Opened up a path for starting/ improving cooperation."*

Besides hearing "*experiences from schools implementing the WBL model",* they felt that it was possible to also talk about the *"problems that arise and providing solutions"* to them.

7.3 THE VIEWPOINTS THAT THE TUTOR GROUP INTERVIEWS BROUGHT IN DIFFERENTLY

There were also areas that the tutor groups brought out differently to some extent than in the other questionnaire data collections.

THE TRAINING APPROACH ITSELF

Related to interaction and cooperation possibilities, the tutor groups generated quite a rich amount of comments on the training approach itself, seeing it as an enabler for other experienced benefits. They stated that the approach of the training had been interactive and the participants had been active. They felt good about the approach where "*participants were incorporated into activities*" and they had the possibility "to learn together using interactive methods in the same room (school-company)." They praised the trainers for being professional and stated that the "*structure of the training*" and "*well-balanced course programme*" had been good.

> *"Two trainers leading the course. It enabled to maintain the focus and brought in two perspectives and real-life examples from two persons."*

> *"The active tempo of the workshop, which did not allow time for getting bored."*

By and large, however, the groups' comments were positive with regard to both the methods as well as the materials used.

> *"To learn together using interactive methods in the same room (school-company)."*

> *"Good mood was in line with presentations of material."*

Concerning the more content-based issues, they commented on them by saying that the contents were all good, though some were doubting whether there was *"too much details for company".* One of the areas that the tutor groups found good but was not mentioned so clearly if at all in individual 6-months-after responses was acquiring knowledge and information about laws, legal issues and regulations related to WBL. These issues were mentioned by both the Latvian and Lithuanian tutor groups.

> *"The participants got acquainted with sample documentation regulating WBL, as well as additional explanations on Cabinet Regulations for the implementation of WBL."*

PEDAGOGY RELATED TO WORK-BASED LEARNING

The largest amount of tutor group responses with regard to acquiring knowledge was on pedagogy related to WBL. The tutor groups pointed out some overall comments related to this area, such as *"pedagogical guidelines for WBL implementation",* but they also raised more specific areas found to be good, such as assessment and evaluation:

> *"Methodology for the evaluation of students` performance. Evaluation is always the complicated part. The trainers provided some very good tips about how to do it."*

A Latvian group concluded that acquiring knowledge of the students' WBL process was valuable because it happened through actively exchanging experiences:

> *"The workshop gave space and time for experience exchange on guiding the student through [the WBL] placement process. What was beneficial in this process were the activities aimed at acting out and giving feedback to real-life situations. Hearing out the experiences of others and comparing them with own practices were very useful."*

This was further emphasised in the tutor groups' considerations about the benefits of the training. In their responses they focused on one main area regarding learning about WBL, namely what it is. This was described through interrelated elements about WBL: knowledge and understanding about WBL, practical skills to promote it, real-life examples, and the benefits of sharing the discussion while learning these things.

In a similar fashion to that expressed by tutors individually in the questionnaire responses, the tutor groups said that they had gained *"theoretical knowledge"* about *"what WBL means"* and *"about the organisation of apprenticeship*" or "*placements".* On the other hand, the tutor groups went further and stated that they had achieved an improved and better understanding of what WBL is as *a system* and "*of the responsibilities of all parties involved*". In a more detailed description, they stated as having acquired knowledge about *"the 3 phases [of WBL] and the responsibilities of the 3 actors involved".*

Though the tutors said that they had "*learned the opinion about WBL from VET specialists and employers",* they had also been led to consider that there was still work to do with regard to developments of WBL:

> *"Legal grounding for active implementation of WBL is not sufficient – this we realised after discussions and viewing the presented material."*

However, the acquired knowledge had supported them and given them *"motivation to go ahead with WBL".* In addition to further knowledge, the tutor groups reported of having learnt practical skills. This had helped them to consider themselves as WBL tutors.

> *"The real-life examples, --- helped much to better see myself in the role of the WBL tutor."*

On the other hand, they considered it a benefit of having acquired some knowledge to better see the point of view of the students when working with them.

> *"How to use active teaching methods that will definitely help when working with students in placements."*

> *"Understanding Generation Z; an insight into how school functions nowadays and what the requirements in the labour market are."*

The tutor groups also considered it a benefit to have had the opportunities of learning about professions and schools' learning environments.

> *"It was useful also to learn about particular professions, as well as challenges in other industries from participants who told us about their daily work."*

> *"…tour around the school facilities (labs) to understand that school is able to provide high-quality practical training with modern equipment."*

According to the tutor groups, they comprehended that the participants representing different sectors allowed them to understand that the same issues exist in different learning/working environments. This enriched the variety of the sample situations shared with others. Sharing experiences, examples,

information and so forth was further mentioned as a benefit, similarly to being mentioned as a good element in the training.

> *”Opportunity to share experiences with colleagues and company representatives and listen to others.”*

Discussions were not only seen as an opportunity to learn about the current situation of the others and the other party, but for also building the future together for the implementation of WBL.

> *”Both parties were able to agree on common opinions. It was achieved through discussions – through information gained from trainers. New contacts and potential placement providers.”*

As can be seen from above, the tutor groups again emphasised the meaning of the trainers in facilitating the tutors’ work and their learning during the tandem training. In addition, the tutor groups also expressed the significance of the used ”well-prepared handout material and presentations” and methods as a benefit for their understanding to have grown. For example, taking the role of a student in role-playing had helped in understanding the students’ perspective.

> *”To step into the shoes of a student during role-playing was extremely useful.”*

It seemed that the training had brought them self-confidence. Despite the challenges, they felt that they *”can prepare persons for the market – training them in the workplace”.*

7.4 NEEDS FOR FURTHER TRAINING

As the last question, the tutor groups discussed whether they have further needs for training in the area of WBL. In short, their needs can be considered to go under only one category, that of learning more about WBL, divided into three subcategories. They still mentioned the need to acquire knowledge, along with learning about the practices of how WBL is implemented. In relation to the latter comes the third subcategory, the need to receive real examples of the WBL practice.

Most of the needs focused on acquiring knowledge about WBL. In short, it can be identified that they felt a need for legislation, regulations and documents on how to implement WBL: how to start it, who is responsible for what and so forth.

> *"We will need more training when we have all the documentations to understand how the process will go. What we will be responsible for, how the process will start."*

The tutor groups were adamant that these kinds of documentations and regulations do not yet exist. Because of that shortage, another group responded to the question regarding the need for further training by simply saying *"Not at the moment, as we have no clear system".* So it can be considered that, without the legislative and regulative developments, the tutors felt it difficult to go forward. However, besides the quite strong expectations for the development of these wider regulations to enable their work, the tutors considered that, for their part as tutors, they would need something more to go forward.

> *"It is not easy to launch WBL in certain professions due to the specific requirements and specifics of the profession, therefore it would have been interesting to hear (see videos) real-life examples from companies-schools who implement WBL on how they really do it in real life."*

Accordingly, they asked for good examples of WBL, of its good practice from both schools and workplaces.

> *"Best practice examples from an already experienced WBL implementer (both – school/company)."*

Furthermore, they requested for more training on pedagogical issues related to WBL such as "*VET students' evaluation methods"* and "*teaching methods, evaluation techniques"* and *"life-long learning possibilities".*

In sum, it can be said, based on the tutor group interviews, that the trained tutors felt the WBL tutor tandem training to have been good and beneficial for them. They felt that they had acquired meaningful knowledge, experiences and practical examples and skills to be used in guidance of students in work-based learning. It seemed, however, that when thinking about and learning how to do their own part as tutors in the process of WBL, it made them think about the development and implementation of WBL more widely. In a way it

might be summarised that, though the tutor groups were strongly emphasising the importance of the policy and wider administrative area, they would have hoped to leave that challenge more on the shoulders of those parties who are responsible for developing laws, regulations and administrative guidelines. For themselves, they hoped to have opportunities to move further in the area that they considered as their responsibility, that of the actual guidance of students in WBL.

PART
III

Results of the other informant groups

8 STUDENTS' EXPERIENCES ABOUT WORK-BASED LEARNING

Leena Kaikkonen

During the experimentation, data was also collected from vocational education students. This was done in order to find out how students who have had work-based learning during their vocational education studies felt about these experiences. The students' viewpoints were gathered using a questionnaire, which was delivered through an online link to students by the project partners.

In this chapter, we first describe the student respondents (N=100) according to their background details. Then we will present the students' thoughts regarding their guidance before, during and after their work-based learning periods.

8.1 BACKGROUND OF THE STUDENT RESPONDENTS

The data collection for the students was started during the pilot phase of the experimentation. In the end, 24 students responded to the questionnaire. However, 12 of them had not gone through work-based learning and hence their responses did not meet the requirement of WBL experiences. For that reason, their responses were left out of the study and the amount of used responses from the pilot phase was 12. During the 2nd and 3rd phase, data was further collected from a total of 88 VET students. Thus, the entire amount of student responses was 100, representing all three Baltic states. However, a plurality of the student respondents, 44%, were from Latvia, while 28% came from Estonia and another 28% from Lithuania.

The age of the student respondents varied from 16 to 21 years or older. Only six of the respondents were 16–17 years old, while the others were quite evenly spread out among the other year cohorts from 18 to 21-or-older. Male students were slightly more represented (56%) than female students. The students came from a variety of backgrounds with regard to their professional studies, but more than half of them came from technology sector studies (N= 55). The next largest groups were hotel, restaurant and tourism (N=16) and food industry (N= 13). The rest were studying clothing and handicrafts industry (seven students), health, sport and wellness or social services (four students), and business (one student), and another four students were studying in some

other unspecified field. The variable was recoded for further purposes. In contrast to the original 11 categories, the professional fields were recoded into three categories: the technology sector remained as it was (N=55), while the food industry and hotel, restaurant and tourism fields were combined into a second category *called Food &Hotel* (N=29) and the rest gathered into a third category, *Other* (N=16).

Two thirds of the students were already quite advanced in their studies: one third was in their 3rd year (32 students) and another third was in their 4th year (33 students) of their studies. The last third were still more in the beginning of their studies, whether first year (18 students) or second year (16 students).

All the student respondents had already had some learning periods at workplaces, with 38 only having one period, 32 having two or three periods and 27 more than three periods. The learning periods at workplaces were of varying length, ranging from only 1–5 days (11 students) to 2–3 weeks (24 students) and 1 month (24 students). Additionally, as many as 40 students described the length of their work-based learning periods to be something else, but without clarifying it in more detail.

The background information of the students is described in more detail in Table 11.

TABLE 11. The background variables of the student respondents (N=100)					
	Variable	Levels	Frequency	% Frequency	Missing
1	Country	1. Estonia 2. Latvia 3. Lithuania	28 44 28	28.0 44.0 28.0	0
2	Age	16 years 17 years 18 years 19 years 20 years 21 years or older	1 5 24 24 18 28	1.0 5.0 24.0 24.0 18.0 28.0	0
3	Gender	1. Male 2. Female	56 43	56.0 43.0	1
4	Professional Field	1. Technology sectors (construction, metal sectors, transport, information technology, etc.) 2. Food industry 3. Clothing industry 4. Business administration 5. Hotel, restaurant and tourism 6. Social Services 7. Health, sports and wellness 8. Natural resources 9. Hand and art industry 10. Culture 11. Other	55 13 5 1 16 1 3 0 2 0 4	55.0 13.0 5.0 1.0 16.0 1.0 3.0 0 2.0 0 4.0	0
4 Recoded	combining old levels: 1 2+5 3+4+6+7+ 8+9+10+11	New levels: 1. Technology sectors 2. Food & Hotel 3. Other	 55 29 16	 55.0 29.0 16.0	0
5	I have studied in VET school	1 years 2 years 3 years 4 years	18 16 32 33	18.0 16.0 32.0 33.0	1
6	I have had learning periods at the workplace	1. once 2. twice 3. three times 4. more than three times	38 15 17 27	38.0 15.0 17.0 27.0	3
7	My learning periods at the workplace have been	1–2 days 3–5 days 2 weeks 3 weeks 1 month something else/how long	5 6 9 15 24 40	5.0 6.0 9.0 15.0 24.0 40.0	1

8.2 BEFORE WBL – GETTING TO KNOW WORK-BASED LEARNING POSSIBILITIES

The students were asked how they got to know about the possibilities of work-based learning (question 8). As expected, the best informants were their own teachers: more than 80% of the students stated that their teachers had told a lot (56%) or quite much (25%) about this possibility for learning. However, peers and parents had also been good informants, as a third of the students said that they had received a lot or quite much information from their peers, while a fifth had likewise received a lot or quite much information from their parents. In regard to other sources of information, students contended that they existed, but only a few identified these sources in their open responses. The ones that were mentioned by the students were school administration, practical training guide, sector manager or social educator, employer, radio and the internet.

According to the students, the most common way for teachers to inform the students about work-based learning before going to the workplace (question 9), was to talk about it to the whole class. Half of the student respondents said that the teachers had done this a lot, and nearly a further third said that the teachers talked quite a lot about it. In addition to providing information to the whole class, teachers seemed to have also relied on informing their students individually. More than half of the students (55%) said that their teachers had talked a lot or quite much about the possibilities of WBL with them individually. Furthermore, one third of the students said that their teachers had provided them with some written information. In light of these responses, most of the students seemed to have received quite sufficient information. However, there were also quite many students who had not received any kind of information from their teachers, and even slightly more students who had only received a little bit of any information from their teachers about work-based learning.

Students were also asked (question 10) about the kind of information, they had received when the teachers had shared any information with them. Around 70% of the students said that their teacher talked a lot or quite much about what the students should do at the workplace, how they should behave there and some of the practicalities related to learning at the workplace. According to the students, what the teachers talked about most, however, were the skills and competences that are needed in working life or the skills and competences that students should learn at the workplace during their learning period. Less time, though still quite much, was spent discussing the

workplaces the students were about to go to. Some 12–18% of the students felt that the teachers only talked a little about any of these matters, and 4–9% said their teachers did not talk about these things at all.

For their part, the workplaces seem to have had a role in engaging students into their work-based learning periods, though the students considered the workplaces' role to be more modest than that of the teachers at schools (question 11). Approximately 30% of the students said that they did not have any existing connection with the workplace they were going to. As far as they knew, the workplaces did not send any information to the school, nor were they acquainted with them through an advance visit to the workplace. However, though almost one third of the students were less informed of or by the workplaces than their peers, the other two thirds did get information from the workplaces or visited the workplace before starting their work-based learning period there. In addition, over 70% of the students said that they had used the internet to at least some extent to familiarise themselves with the workplace, and 55% of the students stated that they discussed with their peers whom they knew to be acquainted with the company in question.

TABLE 12. Results of students' questions 8–11 about guidance before the WBL period						
Question 8. Before the learning-at-work period, I got information about the possibility of 'learning at the workplace'	**not at all (1)**	**a little (2)**	**quite much (3)**	**a lot (4)**	**empty/ missing**	**Total N**
from my teacher(s)	3	7	25	56	9	100
from my peers	12	25	24	7	32	100
from my parents	25	17	12	5	41	100
from somebody/ somewhere else, from who/where?	23	4	9	14	50	100
Question 9. My teacher(s) informed me about learning at the workplace before the period by	**not at all (1)**	**a little (2)**	**quite much (3)**	**a lot (4)**	**empty/ missing**	**Total N**
talking to the whole class	5	8	29	50	8	100
talking with me individually	10	17	23	32	18	100
giving me some information in writing	19	21	24	6	30	100
in some other way, how?	22	3	5	1	69	100
Question 10. Before the learning-at-work period, my teacher(s) talked with me (told me) (N=100)	**not at all (1)**	**a little (2)**	**quite much (3)**	**a lot (4)**	**empty/ missing**	**N**
about the workplace I was going to go to	9	18	21	42	10	100
about what I should do there	4	13	31	41	11	100
about the kind of skills that are needed at working life	4	12	37	37	10	100
about the kind of skills/ competences I should learn at the workplace	4	13	38	38	7	100
about how I should behave at the workplace	6	13	28	45	8	100
about practicalities related to the learning period at the workplace (working hours, how to dress, where to eat, how to get there, etc.)	4	17	32	40	7	100

Table 12 continues						
Question 11. Before the learning-at-work period I got information from the workplace	**not at all (1)**	**a little (2)**	**quite much (3)**	**a lot (4)**	**missing /empty**	**N***
they sent some information to the school and I got it from there	30%	24%	23%	16%	7%	88
I made a preliminary visit to the workplace with my teacher before the learning period started	32%	15%	26%	17%	10%	88
I made a preliminary visit to the workplace on my own before the learning period started	27%	18%	26%	16%	13%	88
I used the internet to find information about the workplace	17%	18%	25%	29%	11%	88
I talked with some other student(s) who knew the workplace/company	24%	21%	31%	15%	9%	88

*= In the pilot phase, question 11 was formulated only with the alternatives *yes* or *no.* Of the 12 pilot phase students, 11 responded to this question and the majority (50–67%) said they had experiences of the diverse alternatives. Because of the difference in scale, the responses of the pilot phase are not included in this summary of the question, and accordingly N=88.

8.3 DURING WBL – LEARNING PERIOD AT THE WORKPLACE

When the students had their work-based learning periods at workplaces, more than 60% said that their teachers had come to oversee them at the workplace. However, as many as 38% of all the students from the three Baltic states said that their teacher did not show up at the workplace at all.

If the teacher came to visit the workplace (which was the case for 62% of the students), the most commonly discussed issues (a lot or quite much) according to the students were what the students had done at the workplace and especially what kind of skills and competences they had learnt at the workplace. Questions of equal interest also were: how things learnt at school are related to the work at the workplace in question and whether the tutor or some other people at the workplace had guided students in their learning. The other side was likewise taken into consideration, and issues related to the students' own activity and interaction at the workplace were also talked over.

The students also felt that much of the focus of the discussions had been on how well the students had learnt, what they had learnt and what more they should still learn. Nevertheless, some 8–13% of the students felt that only a little of these issues had been discussed with their teachers, and a further 2–3% of the students felt that none of these elements had been discussed.

When assessing their discussions with their workplace tutors (question 15), there was not much difference with what the students said about the discussions with their teachers. The students said that, similarly to the discussions with their teachers, the most common discussion subject with their workplace tutors was about the kinds of skills and competences they had learnt, followed by discussion regarding their own activeness. An almost equal focus was on how well they had learnt what they had learnt, its relation with things learnt at school and what more they should learn. Perhaps the main difference was in the number of students saying that their discussions with their teachers/tutors had been modest. Whereas 8–13% of the students said their discussions with teachers had been quite modest, a slightly larger proportion of students (15–18%) assessed this to have been the case concerning discussions about most of the issues with their workplace tutors, apart from 'talking about the student's activeness,' where the rate 'a little' was 10%. Similarly, slightly more students (2–8%) said that none of the elements was discussed with their workplace tutors, whereas in regard to discussions with their teachers this was pointed out by only 2–3% of the students.

Besides these discussion elements, students were asked whether their teachers or tutors were actively engaged in modelling the work to be learnt to them (question 14). Most of the students (77%) said that their teachers visiting the workplaces had been observing them a lot or quite much while they were learning the work and had provided them feedback with regard to doing the work (74%). Furthermore, the teachers (77%) also shared and discussed matters in a meeting that involved the teacher, student and workplace tutor. However, the students also said that less than a third of the teachers were personally involved in the work, i.e. showing the work processes to students, during their visits to workplaces and seeing the students handling their work processes. As expected, the students said that this was the element where their workplace tutors had been very active.

Overall, it seems that the students were quite satisfied with their workplace tutors. Almost all (84%) of the students considered their workplace tutors to know their work very well or well. As many as 85% of them thought (a lot or quite much) that the workplace tutors had given them the chance to learn through diverse tasks, showed them the work (83%) and advised them in the

work (87%). Many of the students said that their tutor had observed them doing the work tasks (78%) and given them feedback during their work performance (72%), and they felt that the tutors had talked with them a lot about the skills and competences to be learnt (74%). Many of the students (62%) also said that their tutor was keen (a lot or quite much) to work with them.

TABLE 13. The students' responses about guidance by their tutors during WBL

Question 13. When my teacher visited the workplace, she/he talked with me (N=62)*	**not at all (1)**	**a little (2)**	**quite much (3)**	**a lot (4)**	**missing**	**N***
about what I had done at the workplace	0	13%	32%	52%	3%	62
about what kind of skills/ competences I had learnt	0	8%	40%	45%	7%	62
about how things learnt at school are related to the work at this workplace	2%	8%	42%	42%	6%	62
about what I still should learn	2%	13%	44%	35%	6%	62
about how well I have learnt what I have learnt	2%	13%	42%	35%	8%	62
about how the tutor at the workplace has guided me	0	11%	35%	49%	5%	62
about how the other people at the workplace have guided me	3%	8%	39%	42%	8%	62
about my interaction with others at the workplace	2%	12%	42%	39%	5%	62
about my activeness	2%	11%	40%	39%	8%	62
Question 14. When my teacher visited the workplace (N=62)	**not at all (1)**	**a little (2)**	**quite much (3)**	**a lot (4)**	**missing**	**N**
s/he observed me doing the work;	2%	21%	40%	37%	0	62
s/he was doing the work tasks with me;	45%	19%	15%	13%	8%	62
s/he gave me feedback about me doing the work	10%	10%	43%	31%	6%	62
we had a meeting with the teacher and my workplace tutor where we talked about my learning at the workplace	2%	15%	42%	35%	6%	62

TABLE 13 continues						
Question 15. At the workplace I talked with my workplace tutor about (N=100)	**not at all (1)**	**a little (2)**	**quite much (3)**	**a lot (4)**	**missing**	**N**
what I had done at the workplace	2	17	41	33	7	100
what kind of skills/ competences I had learnt	3	16	44	33	4	100
how things learnt at school are related to the work at this workplace	6	15	45	27	7	100
what I should still learn	7	14	41	31	7	100
how well I have learnt what I have learnt	3	17	40	34	6	100
how the tutor at the workplace has guided me	7	17	42	25	9	100
my interaction with others at the workplace	8	18	38	29	7	100
my activeness	6	10	45	30	9	100
Question 16. My workplace tutor (N=100)	**not at all (1)**	**a little (2)**	**quite much (3)**	**a lot (4)**	**missing**	**N**
showed me how to do work tasks;	0	11%	37%	46%	6%	100
observed me doing the work tasks;	1%	15%	41%	37%	6%	100
advised me about me doing the work;	0	8%	48%	39%	5%	100
was doing the work tasks with me;	5%	26%	31%	31%	7%	100
gave me feedback while I was doing the work tasks;	2%	19%	33%	39%	7%	100
let me do many/diverse work tasks;	0	9%	43%	42%	6%	100
talked with me about the skills I should have in this professional field;	4%	15%	42%	32%	7%	100
knew well his/her own work;	2%	4%	25%	59%	10%	100

8.4 AFTER WBL – UTILISING THE WBL EXPERIENCES AT SCHOOL

After they had returned to school from the workplace, the students were also asked how their teachers had utilised students' experiences of work-based learning. Overall, approximately 10% of the students said that the experience was not utilised at all (at least according to the viewpoints that were asked from them). The students were not asked to reflect or assess their WBL experience, nor was it used as a resource for learning through sharing with other students, or as a starting point for planning the next phases of work-based studies. Another 10–15% of the students said that their experiences of work-based learning had been utilised only a little at school.

As for the rest, up to 75–80% of the students said that their WBL experiences had been utilised quite much or a lot as part of their studies at school. Most commonly, this meant that the student was asked to tell about their experience to other students, but it seemed to be also quite common to write a report about it. Another way of gauging the experiences was related to the assessment of learning, meaning that the students were asked to assess their own learning at the workplace, on top of the teacher assessing the students' workplace learning and encouraging them further in their learning.

TABLE 14. The students' responses about guidance by their teachers after WBL						
Question 17. My teacher(s) (N=100)	**not at all (1)**	**a little (2)**	**quite much (3)**	**a lot (4)**	**missing**	**Total**
talked with me about my experiences in the workplace	7	15	32	38	8	100
let me tell other students about my experiences regarding learning at the workplace	11	10	36	37	6	100
made me assess what I had learnt at the workplace	7	13	42	31	7	100
assessed my learning at the workplace	9	11	36	35	9	100
talked with me about the next learning-at-work period	10	14	38	30	8	100
talked with me about what I should learn next at the school	13	14	34	30	9	100
encouraged me further in my learning	5	12	33	41	9	100
asked me to write a report of my learning at the workplace	13	11	34	33	9	100

Furthermore, over 90% of the student respondents (N=87; question 18) said that what they had learnt in school was useful for the tasks they did at the workplaces. However, in their quite few open responses students also reflected the meaning of the WBL period for the professional skills and self-awareness. Workplace provided them an opportunity to learn something that was not possible at school for example due to missing equipment.

> *"What is taught at school is not always accompanied by what is taught or done at the company. My company was very modern with different diagnostic equipment in road transport. There are none in my school."*

But, it cleared thoughts also the other way round. The learning period at the workplace helped to see the value of learning at school professionally but also in raising awareness of own plans on the career path to come.

”I am grateful for the opportunity to work for the company during my internship. It was a valuable experience to realise that mass production is absolutely not for me. In practice, I do the same job duties, which in my opinion, in most cases, did not improve my sewing knowledge. In school, on the contrary, I have had the opportunity to learn many different sewing techniques. Thanks!”

Majority of the students were also convinced that their teachers knew well what was needed in real work (question 19) and considered their teachers to be capable of doing the work tasks required in real work (question 20).

In sum, it can be said that the students had had quite positive experiences of their WBL, and they assessed their teachers as having good or almost-good skills in guiding them before, during and after the WBL learning periods. In the students’ experience, their teachers informed them well about work-based learning, though workplaces are less involved in all three countries. For example, in Estonia the information provided by teachers was considered good and that of the workplaces satisfactory. In Latvia and Lithuania, students had a slightly better opinion of the information received than in Estonia. However, the information received from teachers was better than that received from the workplaces.

The existing differences mostly concerned with what happened while they were learning at the workplaces. Many of the teachers do not go to the workplaces, and as expected this has an impact on the students’ experiences about the guidance received. However, even when the teachers go to the workplaces, their students seem to expect to receive more detailed discussion and guidance than their teachers can provide.

The investigated students were quite critical about their teachers in regard to assessing students according to the competences as defined in the curriculum. Only about half of them considered their teachers to have good skills in this area. In a slightly paradoxical twist, however, almost all of the students stated that their teachers knew what was needed in working life and that teachers could do these tasks themselves.

Concerning their workplace tutors’ skills, Estonian students assessed them to have a lower level of skill compared to their peers in Latvia and Lithuania with regard to their tutors’ skills. Such a tendency was similar in all the assessment areas. However, none of the background factors could explain this.

9 COMPARING EXPERIENCES OF STUDENTS AND WBL-TUTORS

Leena Kaikkonen

In this chapter, we put two elements together; the Baltic students' experiences about WBL, and the WBL tutors assessment of their own skills in WBL. We compare how students experienced the support they received from their own tutors with, how the WBL tutors involved in the experimentation in this project assessed their own skills with regard to guiding their students' work-based learning.

It is important to note that the students were not knowingly connected with the WBL tutors in the experimentation. Therefore, the students are not assessing the WBL tutors who were involved in the experimentation. Such a 'comparison' is more likely to bring in students as other interested party informants, and how students currently experience the situation about their guidance in WBL. The purpose of this is that by benchmarking the students' experiences and opinions against those of the WBL tutors the project partners can find more extensive ideas for the development of the experimented WBL tutor tandem training and the policy development of WBL.

9.1 PLANNING THE STUDENTS' LEARNING PROCESS BEFORE WBL AT THE WORKPLACE

The students were asked to assess their experiences about what had happened before their learning periods at workplaces. These issues were itemised in the students' questionnaire in altogether 14 statements in five different questions (8a, 9a-c, 10a-f, 11b, 17e-g). There were also alternatives focusing on the student's individual work or working with their peers but these were left out of this. The alternatives chosen focused on the kind of information that students had received from their teachers about work-based learning and its goals in addition to getting acquainted with the actual workplace itself. A sum of variables called 'extended planning' (= before WBL) was produced based on these 14 statements on teacher support before learning at the workplace.

For their part, WBL tutors were asked to assess their own skills and competences with regard to planning work-based learning for their students. These were focused in WBL tutor questionnaire 1 and 2 in question 11,

alternatives a-h. A sum of variables was produced of these eight statements to describe the self-assessment of the WBL tutors in planning WBL. The same questions were posed to VET tutors (teachers) and workplace tutors.

Student questionnaire; questions concerning guidance BEFORE work-based learning (in questions 8, 9, 10, 11, 17)

8. I got information about the possibility of 'learning at the workplace'
   a) from my teacher(s)

9. My teacher(s) informed me about learning at the workplace before the period by
   a) talking to the whole class
   b) talking with me individually
   c) giving me some information in writing

10. Before the learning-at-work period, my teacher(s) talked with me (told me)
    a) about the workplace I was going to go to
    b) about what I should do there
    c) about the kind of skills that are needed at working life
    d) about the kind of skills/competences I should learn at the workplace
    e) about how I should behave at the workplace
    f) about practicalities related to the learning period at the workplace
    g) (working hours, how to dress, where to eat, how to get there, etc.)

11. Before the learning-at-work period I got information from the workplace
    b) I made a preliminary visit to the workplace with my teacher before the learning period started

17 After the workplace period my teachers
   e) talked with me about the next learning-at-work period
   f) talked with me about what I should learn next at the school
   g) encouraged me further in my learning

WBL tutors' competences related to PLANNING of WBL (question 11)

11. My expertise in designing *students' learning at workplaces.*
I have
a. knowledge about the role and activities of the workplace tutor at the workplace
b. skills in organising a visit at the workplace
c. skills in informing the student about learning at work
d. skills in informing the student about the key competences in the working life in my professional field
e. knowledge of VET examinations in my professional field
f. knowledge of the VET curriculum and the key competences in my professional field
g. skills in planning the tasks for the student at the workplace according to the VET curriculum
h. skills in informing other members of my workplace/VET school about work-based learning

A sum of variables (planning) was produced to describe the self-assessment of the WBL tutors in planning WBL In their self-assessment, WBL tutors assessed themselves in each statement with a scale of 0–3 (0=not at all, 1=a little, 2= quite much, 3=a lot). Based on their assessment they could get a maximum of 24 points from the 8 statements.

According to their self-assessment, WBL tutors on average assessed their expertise in planning to be good (16 points or above). The differences between countries and between workplace and VET tutors in one country were surprisingly small with regard to Latvia and Lithuania, where both VET and workplace tutors considered their skills in planning to be at a good level. The Estonian VET tutors assessed their skills to be even better than that of their colleagues in Latvia and Lithuania, but it is worth remembering that in Estonia the number of VET tutors was very small (N=14). In contrast to the other respondents, the Estonian workplace tutors assessed themselves to have only satisfactory skills in planning. The results of the VET and workplace

tutors' self-assessment of their skills in planning WBL by country are displayed in figure 9.

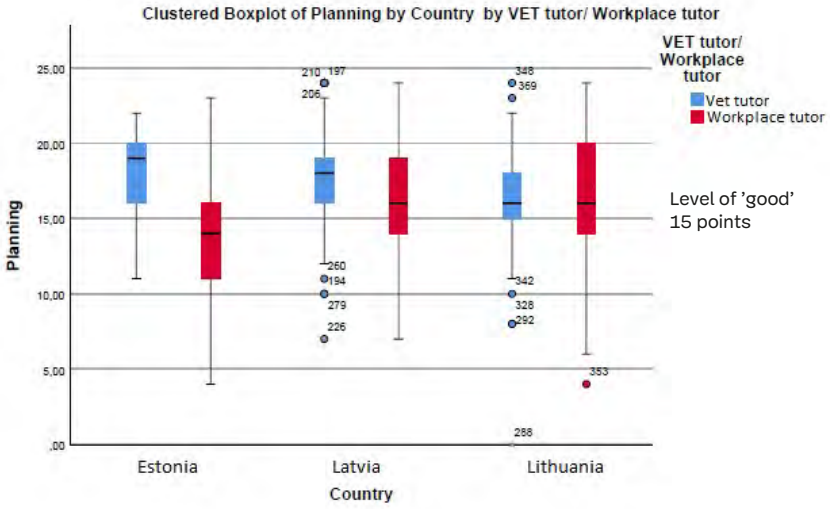

Figure 9. VET and workplace tutors' self-assessment of their skills in planning WBL

Similar to the WBL-tutors assessment, also students assessed their WBL tutors' guidance through their questionnaire statements. Based on their assessment with the scale of 0–3 they could give a maximum of 42 points from the 14 statements, where the level of good was 28 points.

Concerning their assessment about the kind of support they had received before the work-based learning periods, a majority of the students (approximately 80%) thought that they had received sufficient information from their teachers. In fact, the students felt more positive about this than their teachers, who assessed their own abilities with regard to their skills in planning WBL. However, when looking by country, it showed that the Lithuanian students assessed the support from their teachers to have been clearly better compared to their peers in Estonia and Latvia. The Estonian and Latvian students' assessment of their teachers' skills were quite close to each other, with both assessments staying below the level of good, though Latvians almost reached said level. Estonian students' experience about receiving information from their teachers about the possibility of 'learning at the workplace' remained significantly worse than that of their Lithuanian peers (P=0.029).

This trend intensified when the students' opinions were analysed in more detail. When students were asked about the diverse methods that teachers had used when telling them about learning at workplaces (talking to the whole class or individually, providing written information), they assessed them to have done this only between satisfactory and good, especially concerning discussions with them individually. This was also related to advising them about the more practical parts of WBL, such as providing essential information about the workplaces the students were about to go to, how the students should behave or dress and other practicalities related to workplace cultures. Additionally, approximately a third of the students said that they did not make a preliminary visit to the workplace in advance with neither their teacher nor on their own. It seems that teachers shared the students' opinion to a certain degree, as approximately a fifth of the teachers assessed their skills in organising pre-visits to workplaces to be only satisfactory or non-existing.

Nevertheless, students felt that the teachers told them sufficiently about the kinds of skills that are needed in working life and about what kinds of skills/ competences students should learn at the workplace (students' questions 10 c-d). The students also assessed that these issues were sufficiently re-examined afterwards when students returned from the WBL and the next WBL period was planned (students' questions 17 e-g).

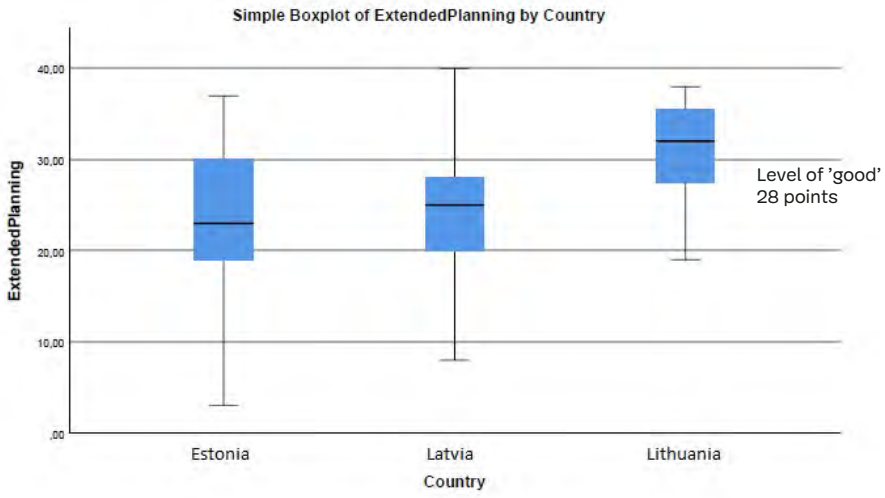

Figure 10. Students' assessment of how WBL tutors guided them before the WBL

One interesting difference emerged in how students in diverse professional fields experienced their teachers' support for WBL before they had gone to their learning periods in workplaces. Most of the student respondents had their background in the technological sector (N=55). Food industry and hotel, restaurant and tourism fields as the recoded second level was represented by 29 students, and the rest of the respondents from diverse professional fields, recoded as the third, 'other' level, consisted of 16 students.

It turned out that students in the 'other' field felt more satisfied about the guidance they received from their teachers and tutors before WBL. Students in the 'other' field assessed their teachers to have provided more information than those in the 'food & hotel' field (P=0.005). Teachers in the 'other' field also talked more about all the issues in regard to WBL (question 10) than in the 'food & hotel' field (P=0.002), as did the teachers in the technology field (P=0.052). In the 'other' field, workplace tutors discussed more widely than in the 'food & hotel' ($P < 0.001$) and technology fields (P=0.011).

Furthermore, concerning the question how the work-based learning experiences were utilised in school after the period at the workplace, students in the 'other fields' considered teachers to do that better than the students in the food & hotel fields ($P<0.001$) or students in the technology fields ($P<0.003$) thought their teachers did.

9.2 GUIDING STUDENTS' LEARNING DURING THE WBL AT WORKPLACES

TEACHERS' GUIDANCE

Students also assessed their experiences about the events during their learning periods at the workplaces. These issues focused firstly on how their teachers had facilitated their learning process while they were studying at workplaces (questions 13 a-j and 14 a-d). A sum of variables called 'guidance-teachers' (= during WBL) was produced based on these 14 statements on how teachers had supported them during their learning at workplaces.

For their part, the teachers were asked to assess their skills and competences in regard to guiding their students during work-based learning. These aspects were focused upon in the WBL tutor questionnaire in question 12, alternatives a-h and 13 a. A sum of variables was produced from these nine statements to describe the self-assessment of the WBL tutors in Guidance of WBL.

Students' questionnaire; questions concerning TEACHERS' guidance DURING work-based learning (questions 13 and 14)

13 When **my teacher** visited the workplace, she/he talked with me
a) about what I had done at the workplace
b) about what kind of skills/competences I had learnt
c) about how things learnt at school are related to the work at this workplace
d) about what I still should learn
e) about how well I have learnt what I have learnt
f) about how the tutor at the workplace has guided me
g) about how the other people at the workplace have guided me
h) about my interaction with others at the workplace
i) about my activeness
j) something else, what

14. When **my teacher** visited the workplace
a) s/he observed me doing the work;
b) s/he was doing the work with me;
c) s/he gave me feedback about me doing the work
d) we had a meeting with the teacher and my workplace tutor where we talked about my learning at the workplace

WBL tutors' questionnaire; TEACHERS' competence-related GUIDANCE of WBL (questions 12 and 13a)

12. My expertise *in guidance of Work-Based Learning.*

I have
a) skills in guiding the student in work practices
b) skills in interaction with the student
c) skills in organising guiding discussions with the student
d) skills in giving feedback to the student
e) skills in guiding the student in self-assessment
f) skills in handling problematic situations in workplace guidance
g) knowledge of different kinds of guiding styles
h) skills in guiding the students in cooperation with the VET school/workplace tutor

13. My expertise in *assessing the student´s learning and competence at the workplace.*
I have
a) skills in observing the student´s practices at the workplace

The students assessed their WBL tutors using the questionnaire statements and with a scale of 0–3. Based on their assessment, they could give a maximum of 42 points from the 14 statements, where the minimum level of 'good' was 28 points. In general, the students assessed the guidance of their teachers to be good during WBL, the mean being 28 points.

The teachers self-evaluated themselves to have good skills in Guidance of WBL, though Estonian teachers evaluated themselves a bit lower, yet still almost reaching the level of good (see figure 11).

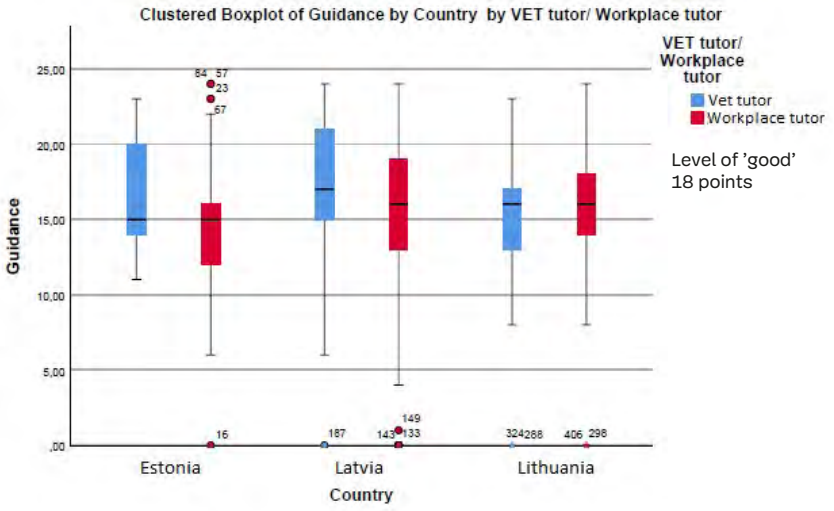

Figure 11. VET and workplace tutors' self-assessment of their skills in guidance during WBL

Both teachers and students assessed the teachers' feedback skills to be good (students' question 14 c – teachers' question 12 d). In addition, both teachers and students were in agreement with regards to teachers observing students in their work during the WBL at the workplace (students' question 14 a – teachers' question 13 a). However, there was more variation in opinions regarding teachers' skills in interacting and organising guiding discussions with students. Half of the students considered the teachers' skills in this to be good, but ¾ of the teachers considered themselves to be at least good at this. It might be assumed that the students were expecting more from the diverse elements of their discussions with their teachers (students' question 13) than their teachers had. On the other hand, teachers involved in the experimentation considered themselves to be inadequate in organising meetings involving the student and workplace tutor, where the student's learning at the workplace was discussed.

When investigating the results by country, there emerged differences. In Latvia, over half of the students assessed their teachers' guidance during WBL to be good, while in Lithuania this amount was slightly less. However, in Estonia most of the students assessed their teachers' skills in providing guidance to them during WBL to be only on a satisfactory level. This was also the level that the teachers considered themselves to be in.

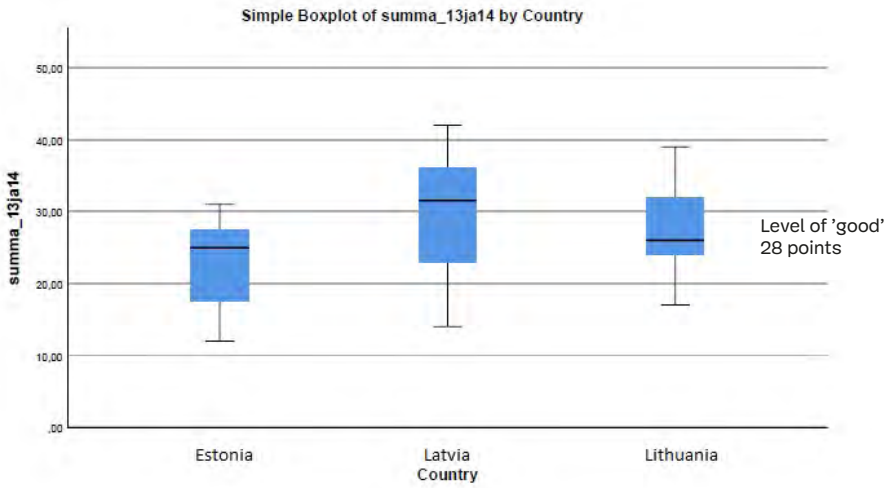

Figure 12. Students' assessment by country on how teachers guided them during WBL

Furthermore, as described earlier, as many as 38% of all the students from the three Baltic states stated that their teacher did not show up at the workplace at all. According to a more detailed analysis, it turned out that this was especially the case for Estonian students, of whom 3/4 said that their teachers did not come to the workplaces at all. In Latvia and Lithuania, this was the case for 21–23% of the students. Accordingly, it does not seem to come as a surprise that the Estonian students did not assess their teachers equally well compared to their peers in Latvia and Lithuania. Furthermore, if the Estonian teachers visited the workplace, the students considered their teachers' skills in guidance to be lower than what their Latvian and Lithuanian peers felt about their teachers, i.e. only on a satisfactory level. All in all, there were difference between Estonian students' experiences and that of Latvian and Lithuanian students' experiences concerning the guidance their teachers provided when visiting at the workplace in discussions (question 13; H=4.522, df=4, P=0.104) and in guidance of the work performance (question 14; H=5.781, df=2, P=0.056).

WP TUTORS' GUIDANCE

Besides assessing their teachers' skills in guiding them in WBL, the students also assessed their experiences regarding their workplace tutors facilitating their learning process while they were studying at workplaces (students'

questions 15 a-i and 16 a-h). A sum of variables called 'guidance-WP-tutors' (= during WBL) was produced based on these 17 statements regarding how WP tutors had supported them during their learning at workplaces.

For their part, in their WBL tutor questionnaire the workplace tutors were asked to evaluate their skills and competences with regard to guiding their students during work-based learning. These aspects were focused upon in the WBL tutor questionnaire in question 12, alternatives a-h, and 13 a. A sum of variables was produced from these nine statements to describe the self-assessment of the WBL tutors in Guidance of WBL.

Students' questionnaire; questions concerning WP TUTORS' guidance DURING work-based learning (questions 15 and 16)

WORKPLACE TUTORS

15. At the workplace I talked with **my workplace tutor** about
   a) what I had done at the workplace
   b) what kind of skills/competences I had learnt
   c) how things learnt at school are related to the work at this workplace
   d) what I should still learn
   e) how well I have learnt what I have learnt
   f) how the tutor at the workplace has guided me
   g) my interaction with others at the workplace
   h) my activeness
   i) something else, what

16. My workplace tutor
   a) showed me how to do work tasks;
   b) observed me doing the work tasks;
   c) advised me about me doing the work;
   d) was doing the work tasks with me;
   e) gave me feedback while I was doing the work tasks;
   f) let me do many/diverse work tasks;
   g) talked with me about the skills I should have in this professional field;
   h) knew well his/her own work;

WBL tutors' questionnaire; WP TUTORS' competences related to guidance of WBL (questions 12-13a)

12. My expertise *in guidance of work-based learning*.
I have
   a) skills in guiding the student in work practices
   b) skills in interaction with the student
   c) skills in organising guiding discussions with the student
   d) skills in giving feedback to the student
   e) skills in guiding the student in self-assessment
   f) skills in handling problematic situations in workplace guidance
   g) knowledge of different kinds of guiding styles
   h) skills in guiding the students in cooperation with the VET school/workplace tutor

13. My expertise *in assessing the student´s learning and competence at the workplace.*
I have
   a) skills in observing the student´s practices at the workplace

Students followed again the similar procedure when assessing their WBL tutors providing guidance during WBL. Based on their assessment, they could give a maximum of 51 points from the 17 statements, while the minimum level of 'good' was 34 points.

The students considered the guidance of their workplace tutors to be pretty good during WBL. However, only the Latvian students assessed their WP tutors' skills in guidance to be good, whereas both Lithuanian and Estonian students assessed them to be a bit lower (figure 12).

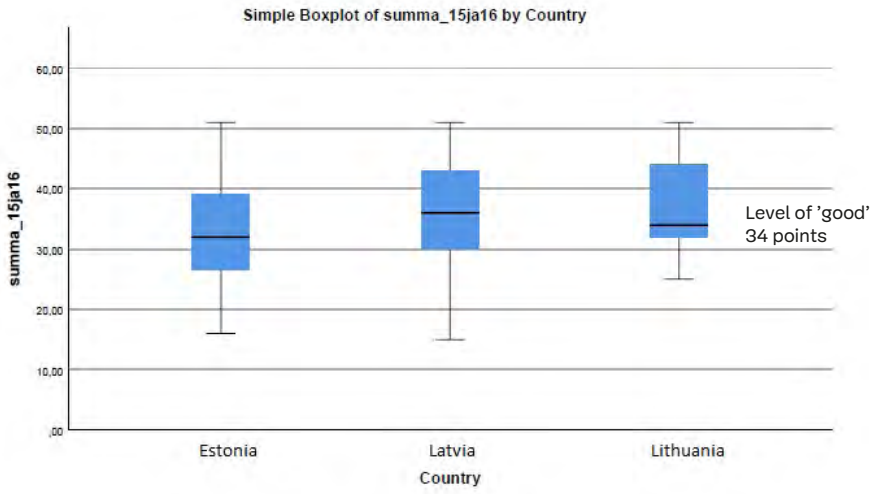

Figure 13. Students' assessment by country on how workplace tutors guided them during the WBL

All in all, the students assessed their workplace tutors to be almost as good as their teachers. However, the number of students saying that their workplace tutors provided only a little guidance, or none at all, was bigger than the equivalent numbers regarding teachers, which possibly explains the slightly lower level of overall student satisfaction.

For their part, the workplace tutors in Latvia and Lithuania assessed their skills in guidance during WBL to be on a good level. In Estonia, on the other hand, the workplace tutors were slightly more modest in their assessments.

Interestingly, a strong correlation appeared between questions 13 (what is discussed with teachers when they visit workplaces during WBL) and 15 (what is discussed with workplace tutors during WBL). It seems that if the teacher spends a lot of time discussing with students, so does the workplace tutor, or the other way around. However, the data does not provide any explanation for this connection.

9.3 ASSESSMENT OF LEARNING AFTER WBL

Students also assessed their experiences in school after their learning periods at workplaces. These issues focus on how their learning experiences were utilised at school and how their teachers facilitated their assessment of these learning experiences, along with setting targets for their future learning (question 17). A sum of variables called 'teacher-after' was produced based on the eight statements of question 17.

For their part, the teachers were asked to assess their own skills and competences with regard to assessing students' learning and competences at workplaces. These were focused upon in the WBL tutor questionnaire in question 13, alternatives a-h. A sum of variables was produced from the eight statements (Q1/Q2 13 a-h) to describe the self-assessment of the WBL tutors in assessing WBL.

Students' questionnaire; questions concerning TEACHERS' guidance AFTER work-based learning (question 17)

III AFTER the learning period at the workplace

17. My teacher(s)
- a) talked with me about my experiences at the workplace
- b) let me tell other students about my experiences regarding learning at the workplace
- c) made me assess what I had learnt at the workplace
- d) assessed my learning at the workplace
- e) talked with me about the next learning-at-work period
- f) talked with me about what I should learn next at the school
- g) encouraged me further in my learning
- h) asked me to write a report of my learning at the workplace

WBL tutors' questionnaire; WBL tutors' competences related to ASSESSMENT of WBL (question 13)

13. My expertise *in assessing the student´s learning and competence at the workplace.*
I have
- a) skills in observing the student´s practices at the workplace
- b) skills in organising systematic discussions with the student at the workplace
- c) skills in building a learning-friendly atmosphere at the workplace
- d) skills in organising an evaluation discussion as a means of guidance
- e) skills in organising discussions for the student at the workplace/VET school in cooperation with the workplace tutor/VET tutor (so that the student, VET tutor and workplace tutor are present in those discussions)
- f) skills in giving and receiving feedback
- g) skills in giving corrective feedback
- h) skills in student assessment according to the curriculum competences

Latvian and Lithuanian students assessed their teachers to be good in handling WBL experiences in school after the learning periods at workplaces. Estonian students, yet again, were more critical regarding their teachers' skills and assessed them to be only satisfactory.

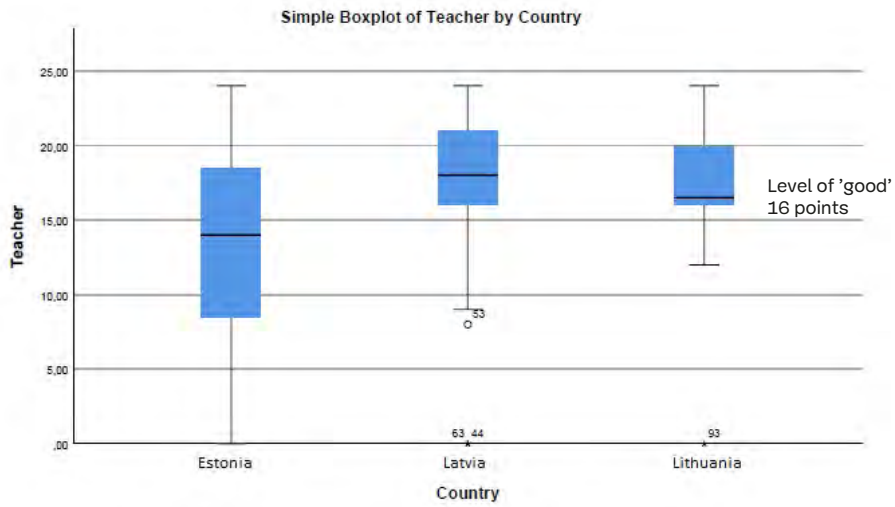

Figure 14. Students' assessment by country on how teachers guided them after the WBL

Both Latvian teachers and WP tutors assessed their skills to be good. Estonian teachers and WP tutors in Lithuania also considered their skills to be good, but Estonian WP tutors and Lithuanian teachers considered their skills in the assessment to be only satisfactory.

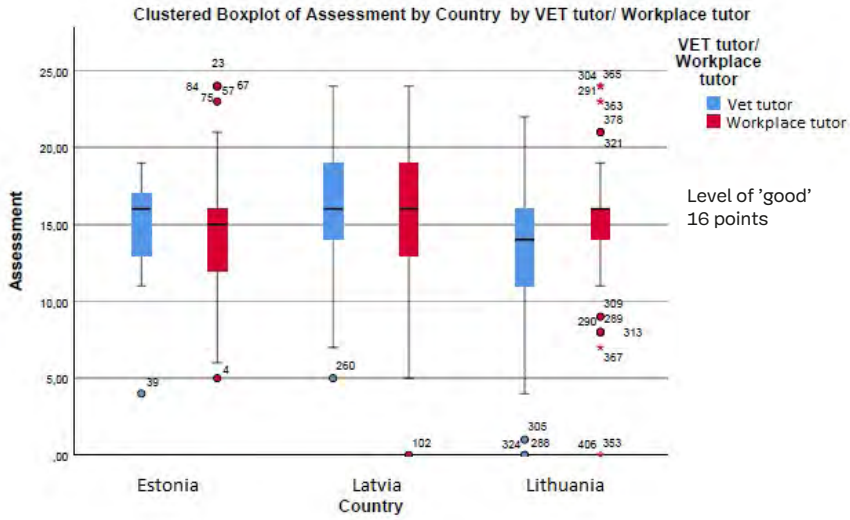

Figure 15. VET and workplace tutors' self-evaluation of their skills in assessment after WBL

Overall, both teachers and students agreed that more than half of the teachers had the requisite skills to use the diverse methods (as described in student question 17 and WBL tutor question 13) to handle the experiences of the WBL period afterwards at school. In the students' opinion, the teachers had generally acted well and they had good skills in providing feedback. Latvian students assessed their teachers to have the best skills in assessment and acting after the WBL period, while Estonian students were once again more critical.

10 THE VET SCHOOL MANAGERS' PERCEPTIONS ABOUT WBL- TUTOR TRAINING

Irmeli Maunonen-Eskelinen

The data was collected with a questionnaire from VET school managers in order to analyse their experiences and opinions about their WBL practices and governance.

10.1 THE RESPONDENTS

In total, 90 managers of the VET schools responded to the survey. 57.8% of the respondents were Lithuanian, 26.7% Latvian and 15.6% Estonian. It is notable that nearly 60% of the VET school managers were Lithuanian; as such, their views impact the data. More than 55% of the respondents were female. Nearly 70% of the respondents had over seven years of experience in the school. About 83% of the respondents have been involved in the issues of work-based learning.

TABLE 15. The background variables of the VET-school manager respondents				
Variable	Levels	Frequency	% Frequency	Missing
Country	1. Estonia 2. Latvia 3. Lithuania	14 24 52	15.6 26.7 57.8	0
Size of the organisation: number of employees	1–9 10–49 50–100 101–250 251 or more	0 5 20 34 15	0 5.6 22.2 37.8 16.7	16
Position in the organisation	1. Principal/Manager 2. Assistant principal 3. Head of department 4. Other, which?	2 13 33 26	2.2 14.4 36.7 28.9	16
Years in the organisation	0–1 2–6 7–10 11 or more	4 23 9 53	4.4 25.6 10.0 58.9	1
Gender	1. Male 2. Female	39 50	43.3 55.6	1
In what way have you been involved in work-based learning issues	1. WBL coordinating 2. Practical organisation 3. Management (contracts, financing, etc.) 4. Tutoring	24 21 14 15	26.7 23.3 15.6 16.7	16

Nearly 70% of the respondents answered the open questions. When looking at the answers to the open questions, Table 16 shows that the weight of the Lithuanian VET school managers' answers increases, hence over 50% of those who answered the open questions were Lithuanian. Furthermore, the Lithuanians wrote longer answers and provided more perspectives for the questions than the Estonian and Latvian respondents provide.

TABLE 16. The VET school managers' responses to the open questions in their questionnaire										
Open Questions	**Estonia**		**Latvia**		**Lithuania**		**Total**		**Missing**	
	f	**f%**	**f**	**f%**	**f**	**f%**	**f**	**f%**	**f**	**f%**
Q16. How should collaboration regarding work-based learning / on-the-job learning be developed in your country?	12	13.3	16	17.7	37	41.1	65	72.2	25	27.7
Q18. What is the optimal length of the training?	12	13.3	18	20	30	33.3	60	66.7	30	33.3
Q19. What is the optimal way of organising the training?	12	13.3	17	18.8	38	42.2	67	74.4	23	25.6
Q20. Who should train?	12	13.3	17	18.8	32	35.5	61	67.8	29	32.2
Q21. How do you think work-based learning/ training should be developed over the next four years in your country?	12	13.3	18	20	24	26.7	54	60	30	33.3
f f%	60 13.5		86 19.4		161 36.3		307 69.1		137 30.9	

10.2 COLLABORATION WITH COMPANIES

Overall, based on the statistical data, the VET school managers had a positive impression about the collaboration with companies. About 75% of the VET school managers stated that the schools inform companies about the objectives of work-based learning well or excellently. One fourth of the managers, however, said that the companies had received information satisfactorily. More than half of the VET school managers (56.7%) stated that the responsibilities between the companies and VET schools had been divided well or excellently. Yet, nearly one fourth of VET school managers said that the responsibilities had been divided satisfactorily (21.1%) or not at all (3.3%). It is notable that 18.9% of the VET school managers did not

provide any answer to the question. The majority of VET school managers (68%) assessed that the schools and companies had reached an agreement about guidance for the students well or excellently (10%). However, a third of the managers stated that the guidance for the students had been established satisfactorily (26.7%) or not at all (3.3%). The VET school managers noted that the assessment of the students' competence was discussed with companies well or excellently (64.5%), satisfactorily (30%) or not at all (4.4%). Concerning the VET schools' role in work-based learning, the VET school managers (over 72%) thought that the schools could have a supportive role. However, 3.3% disagreed with that notion, saying that the schools did not need to have such a role at all.

Approximately half of the VET school managers had a very positive opinion about the staff's willingness to guide the students in the companies. In addition, about 42% of the VET school managers believed the staff's willingness to be satisfactory. Concerning the skills required to guide the students in the companies, the VET school managers were more critical. About 9% of the VET school managers were of the opinion that the staff members of the companies do not have the skills to guide and tutor the students at all. Nearly 30% said that the guiding and tutoring skills were satisfactory. Only 2.2% of the managers stated that the company personnel have excellent skills. However, over 53% of the managers considered the tutoring and guidance skills of the staff in the companies to be good.

Table 17 shows the most desirable and feasible forms of collaboration with companies according to the VET school managers. The most wanted forms of collaboration were: Work-based learning / on-the-job learning to students, Apprenticeship collaboration and Taking part in assessing students' competences (Table 17).

TABLE 17. The desirable and feasible forms of collaboration with companies		
Variable	Freq.	%
Work-based learning / on-the-job learning to students	50	16
Apprenticeship collaboration	38	12
Taking part in assessing students' competences	37	12
Organising visits for the students in the company	36	11
Being a member of the VET school's working groups	35	11
Giving expert lectures at VET schools	24	7
Scholarships to the students	23	7
Providing summer jobs to the students	20	6
Sponsorship of the VET schools, support for the economy	18	6
Providing introductory places to teachers and study counsellors of VET schools	14	4
Recruiting new employees	13	4
Giving topics for students' projects	11	3
Ordering projects and reports that are implemented by students from the VET schools	4	1

The less desirable and feasible forms of collaboration were giving topics for students' projects and ordering the implementation of projects from the VET schools.

DEVELOPMENT OF COLLABORATION REGARDING WORK-BASED LEARNING

The VET school managers brought up the problems that they currently see in WBL. Firstly, the problems were related to the attitudes of the company representatives, which show a lack of interest and enthusiasm, and a lack of communication and interaction, as well as a lack of sense of responsibility. Secondly, there were gaps between the curriculum and tasks for the students, as often the students were not given relevant tasks. Thirdly, there are some financial issues which form obstacles to companies and students, e.g. the companies' requirements to pay a minimum wage and the full payment of social tax.

The VET school managers' answers were categorised into four main categories: 1) collaboration activities, 2) goals for collaboration, 3) ways to enhance collaboration, and 4) policy and administrative issues regarding collaboration. Each of the categories consisted of the following subcategories:

- Collaboration activities (20)
  - Employers' involvement (7)
  - Collaboration (13)
- Goals for collaboration (20)
  - Work-based learning (12)
  - Motivation and shared responsibility (8)
- Ways to enhance collaboration (17)
  - Training (13)
  - Resources and finance (4)
- Policy and administrative issues (8)

The VET school managers proposed a number of different ways to collaborate with the companies. They suggested that employers should participate in preparing the programmes and curriculum development, choosing students and assessing their competence. The employers' role in the assessment was highlighted in several answers. It was also suggested that each speciality (programme) should have a few business partners to jointly develop the above-mentioned matters. The VET school managers described different forms of collaboration: those which already exist and those that they see as meaningful also in the future. Those forms of collaboration include meetings with the leaders of companies, seminars, sharing experiences, tutorials, surveys, projects, company visits with the students, and closer dialogue overall. The VET school managers contended that employers are not yet ready for work-based learning. In many comments, the VET school managers were dissatisfied with the interaction and communication from the employers' side. They expressed their dissatisfaction with words like "hard, sluggish, reluctant, no conversation." Therefore, interaction and communication between the business and VET schools should be improved.

"The employers do not understand apprenticeship." (SMLi 22–23)

"Companies are reluctant to communicate." (SMLi 34)

Regarding the goals to develop collaboration, motivation and shared responsibility are seen as the key issues. More emphasis should be put in finding out motivators for the companies and motivating them to engage

in work-based learning. The VET school managers emphasised that there should be mutual understanding and trust, equivalent responsibility and well-developed equal partnership between the companies and VET institutions in order for the students' learning outcomes to be achieved. Collaboration can only take place in case of mutual (company-school) interest. It was also pointed out that the essence of work-based learning is teaching and learning the profession, not just employment. Furthermore, the VET managers said that employers should accept more students to learn in the company. They wanted to increase both the number of newly recruited people in work-based learning and the contribution of on-the-job tutors to students' training. In addition, they wanted to increase the share of work-based learning in the studies and broaden the different forms of workplace learning, by e.g. considering entrepreneurship (freelance, self-employed, sole proprietor, NGO, etc.).

According to the VET school managers, the most important way to advance collaboration between the VET schools and companies is to provide training for the companies. The companies need to have a better understanding of what work-based learning means. In addition, they need information about learning opportunities in the work environment. Trainers at the workplaces should be qualified, equipped with good pedagogical knowledge and the willingness to teach, and work with a learner in a company. Furthermore, in the trainings and seminars, good examples and practices should be shared to encourage companies to take in students. Along with the different formal trainings, teachers from VET schools can informally train companies and advance the collaboration by being more present at the workplaces, discussing work-based learning with the representatives of companies, making contacts and being involved in the students' learning and assessment of their skills at the workplace.

The VET school managers highlighted that cooperation between VET schools and business should be strengthened and be on a higher level in the near future. In practice, the closer collaboration can take many forms in addition to the implementation of the students' work-based learning and joint assessment of students' competence in companies. The VET school managers would like to increase teacher placement in business and visits to companies during the WBL periods. Overall, closer cooperation should be established between schools and placements at all stages, from the development of WBL programmes to the evaluation of results. The VET school managers suggested that there should be increased company ownership of work-based learning in the future. They called also for consistent cooperation. Even though the

collaboration between VET schools and companies was seen as being very important, the VET school managers pointed out problems with managing and collaborating with a large network of companies.

Motivation was considered grounds for collaboration and a successful WBL process. The VET school managers discussed motivation firstly from the companies' point of view and secondly from that of the students. They thought that there should be a motivational system for companies that motivates them to cooperate with the educational institutions implementing WBL. Employers must have the desire to train students and provide and motivate a specific employee who can devote enough time to being with the students. In addition, the students need a motivation system, as not all students are motivated to learn in the workplace. For those students who are motivated to learn at work, WBL should be made easy for them.

DEVELOPMENT OF THE FRAMEWORK FACTORS FOR COLLABORATION

The issue of resources was examined from different angles. Firstly, it was discussed as a general issue regarding WBL, with participants stating that WBL needs to allocate resources. Secondly, the VET school managers considered such obligations of the companies like the requirement to pay a minimum wage to the students and full social taxes to be burdens on the implementation of WBL. There should be ways to make it easier for the companies to accept students. Among other things, it was suggested that the companies could pay scholarships instead of a salary. Thirdly, the VET school managers stated that the companies should get support from the VET schools, with the VET schools providing training for the company instructors. Fourthly, as work-based learning is a new approach, development projects, pilots and more research should be conducted on different perspectives of WBL.

The VET school managers stated that the educational stakeholders (education policymakers, employers, social partners, VET schools) have to have a common understanding about work-based learning and its role in vocational education. Furthermore, the diverse umbrella organisations should inform and communicate with the companies about work-based learning and encourage the companies to contact the VET schools actively. From the practices point of view, the VET school managers brought up agreements on work-based learning, bilateral or tripartite contracts and other administrative procedures needed in the implementation of work-based learning.

”To ensure continuous improvement and implementation of vocational education programmes in accordance with the requirements of the state, social partners and industry associations.” (SMLa 121–122)

10.3 THE JOINT TUTOR TRAINING

In general, the VET school managers had a positive opinion about the joint training for the teachers and workplace tutors. The Latvian VET school managers were more positive about the joint tutor training than the Estonians and Lithuanians (Latvia-Lithuania P=0.075). Nearly 70% of the VET school managers thought that the joint tutor training has increased understanding about the curriculum goals well (58%) or excellently (11%). However, 3.3% of the managers thought that the joint tutor training did not increase understanding about the objectives at all. In addition, 4.4% of the managers did not know the state of the affair. The collaborative development of the curriculum, in which workplace tutors and teachers together develop the curriculum, was increased according to 65% of the VET school managers. Nevertheless, nearly 7% of the managers did not think that the collaborative development of the curriculum had been increased. Moreover, 4.4% of the managers did not know about the matter. The VET school managers (60%) estimated that the joint tutor training had increased the assessment skills of professional competence in the company. However, 14.5% of the managers did not consider that the joint tutor training had developed the assessment skills at all in the companies (6.7%), did not know about the matter (5.5%) or did not answer the question (2.2%). Similarly, the VET school managers stated how the joint tutor training has strengthened guidance and tutoring skills in the company. According to the VET school managers, the guidance and tutoring skills strengthened well or excellently (63%), satisfactorily (28.9%) or not at all (3.3%), and 4.4% of the managers did not know about the matter. Concerning collaboration between the VET schools and companies, 70% of the VET school managers stated that the joint tutor training has increased the collaboration well or excellently, about 23% of them assessed that the collaboration has increased satisfactorily and 5.6% of the managers did not know about the matter.

THE CONTENTS OF THE TUTOR TRAINING

The qualitative data provided the additional views of the VET school managers regarding joint tutor training. The VET school managers commented on the overall aims, contents and implementation of the training. Their answers were categorised as follows:

- The overall aims of the training (9)
- The contents of the training (42)
  - Regulations and administration of WBL (12)
  - Curriculum and standards (13)
  - Pedagogy regarding WBL (17)
- Implementation of the training (13)

According to the VET school managers, the overall aim of the WBL tutor training is ”to ensure continuous improvement and implementation of vocational education programmes in accordance with the requirements of the state, social partners and industry associations (SMLa 121–122).” The WBL tutor training should promote understanding about work-based learning opportunities, benefits for the company, the school and students, and objectives and tasks of each party to achieving the goals. In addition, the VET school managers noted that the training supports interaction, communication and cooperation between the VET schools and companies. The overall aims of the WBL tutor training should express the knowledge, skills and competence actually acquired by the tutors.

The contents of the training should cover three main areas: regulations and administration of WBL, curriculum and standards, and pedagogy of WBL. The VET school managers stressed the examination of the legal basis of the WBL and introduction of the documents that regulate the workplace learning and vocational training. In particular, the VET school managers brought up the need to get familiar with the rights and obligations of the different parties concerning WBL in the training. They also emphasised that the training should include the required documentation of WBL, as it is needed to discuss how to design and manage the documents.

The training of the WBL tutors should include processing the curriculum and standards. The VET school managers highlighted that the WBL tutor training should be based on the professional standards of vocational

programmes. It is necessary to process the learning outcomes expressed in the curriculum and ways to ensure that they will be reached. Such viewpoints as the coordination of the VET curriculum between the company and the VET school and ensuring that vocational training and on-the-job training are in line with employers' needs were pointed out. In addition, the WBL tutor training should focus on how the school and company develop the implementation of the curriculum, taking into account the students' needs as well.

The VET school managers suggest that the WBL tutors should possess psychological and pedagogical competence. Accordingly, the WBL tutor training should cover the following general contents: the psychology of communication, motivation of students, andragogy and subject didactics, linking theoretical and practical knowledge and knowledge about personnel management. In particular, emphasis should be placed on competence-based assessment, feedback and guidance, because these skills are still lacking among the tutors and hence need attention the most. In the WBL tutor training, there should be the possibility to practice the coaching process, including guiding the students, giving and receiving feedback and going through the roles of a tutor. The WBL tutors should understand the students' competence development and the level at which the students are, and accordingly guide them and organise the learning opportunities and practice in the company.

Regarding the implementation of the WBL tutor training, the main point was that the training should be based on real examples. The VET school managers suggested that the WBL tutor training should offer specific and clear information with real examples. Furthermore, they wanted tutors to be able to go to businesses, get to know the workplace and observe how the apprenticeship works. The tutor training should be authentic, practical, targeted and creative in nature. Furthermore, the implementation of tutor training should be flexible, with a possibility to change the schedule and content according to the competence of the participants. In the tutor training, there should be space to discuss the main challenges and problems in the implementation of WBL in practice. Moreover, disseminating and sharing good experiences and examples from the companies in the national context and that of other countries was seen as important. The VET managers suggest that the WBL tutor training should be future-oriented and consider the current and future state of the world of work. In this regard, work for portals / platforms, migrant workers, projects, job sharing, clients from the other end of the world, etc. were brought up. In order to enhance the exchange of experiences, the tutor training should include more employers' representatives.

THE OPTIMAL WAY OF ORGANISING THE TRAINING

The VET school managers pointed out three aspects regarding organising the WBL tutor training. The aspects are as follows:

- Joint training (5)
- The methods of the training (24)
- The structure of the training (11)

The VET school managers said that the joint training, where the tutors from the companies and schools interact with each other, is beneficial. There should be more common training for the representatives of business and school to enhance cooperation, consistency and flexibility in the implementation of WBL. In addition, the VET school managers suggested that teachers could go to work in the companies and become a tutor for the school.

> *"The more common training for business and school representatives."* (SMLi136)

> *"Interacting with each other. Teachers go to work in the company and become an instructor for the school."* (SMV159–160)

The methods used in the WBL tutor training should be participatory and collaborative. Such methods as seminars, workshops, lectures, master classes, discussions, working in groups, using working groups, practical work and visiting each other's businesses were mentioned. Face-to-face communication between the workplace tutors and teachers was emphasised. Moreover, it was brought up that there should be both a theoretical part and practical lessons in modelling different situations, e.g. problem solving. WBL tutor training should help the participants combine theory and practice at school and in the company. Along with face-to-face training events, remote studying and self-studying courses were proposed.

The VET school managers produced some aspects regarding the structure of the WBL tutor training. The suggestion was to share the training between different days (for example 4 + 4 + 8) because the company tutors cannot attend long training periods. A three-day training period would be the maximum, and a one-day period was also suggested. In fact, the VET

school managers did not pay much attention to the issue of the length of the WBL tutor training; they laconically said that the training should be short and clear.

> *"Seminars, workshops, meeting with employees and representatives etc."* (SMLi129) (SMLi154)

The VET school managers proposed different options where trainings could take place. Firstly, one suggestion was that the tutor training could take place at school. Secondly, it was suggested that the tutor training should take place in the company on the spot or in one area and for trainers to work together in one area. Thirdly, the training could be in-house/ on-site training. Finally, professional training days, in which a benchmarking process would be the core idea, was brought up.

WHO SHOULD TRAIN

The VET school managers provided their opinions about who should train the WBL tutors. They expressed the qualities of the trainers of WBL tutors in general and more specifically suggested implementation quarters for WBL tutor training.

The VET school managers brought up three aspects:

- Educational and experiential background of the trainers (18)
- Responsible organisations (11)
- The role of the VET schools and companies (27)

The VET school managers highlighted that the trainers of the WBL tutors should be qualified, competent and possess relevant expertise and experience. The VET school managers described the different areas of knowledge and skills that the trainers should have. Those were as follows: knowledge and skills about pedagogy, andragogy, didactics in the field in question, e.g. technology, communication psychology, experiential learning, assessment, feedback and expertise in the curriculum, experience in the field in question, e.g. in technology and manufacturing, experience in youth work, apprenticeship training and personnel management. In the answers, being a specialist and having experience were highlighted. Furthermore,

it was stressed that the tutor trainer should know WBL from the company and school perspectives. Other qualities that were associated with the tutor trainers were inspirers, visionaries and good spirits. Some of the comments concerned the formal training of the trainers of the WBL tutors, stating that the trainers should have appropriate qualification. The Educational University or another educational institution that prepares teachers could provide training for WBL tutors.

> *"The trainer must be an expert on curricula, assessment and feedback. Trainers must use active learning methods and training must be based on practical tasks."* (SMV200–201)

The VET school managers, particularly in Lithuania, emphasised the role of the Ministry of Education, Science and Sport and the Chambers of Industry, Commerce and Crafts in training the WBL tutors. They suggested that the highest organisations should be responsible and involved in the training and nominate the people and representatives who should train the WBL tutors.

The VET school managers expressed a wish that the trainers should represent both the school and the company: "Managers of companies that actually provide on-the-job training, representatives of vocational schools who organise practical training (SMLi271–273)." However, some of the VET school managers highlighted the role of companies and saw that they have the latest knowledge and experience in apprenticeship training. Other VET managers emphasised the schools' role as they conduct the work-based learning. Mentoring was also suggested, which could take place "in the company, with the teacher training the employee of the company and the teacher in the school being a mentor to the company employee who supervises the workshop or lesson (SMV294–295)." The idea of mentoring was brought up in four answers.

An idea of using a foreign lecturer in the WBL tutor training was brought up.

10.4 STUDENTS' LEARNING AT THE WORKPLACE

Over 72% of the VET school managers estimated that the students reach the learning objectives set for work-based learning well or excellently. None of the managers said that the students do not reach the objectives at all. Concerning the companies' familiarity with vocational education and the curriculum in question, about 42% of the VET school managers stated that the companies

have been acquainted well or excellently with the matters in question. However, 53.4% of the VET school managers saw that the familiarity was on a satisfactory level or less. About half of the VET school managers stated that the companies ensure that the objectives of the curriculum are covered well or excellently %), while the other half saw that the objectives are covered satisfactorily or less. Regarding the students' competence development during work-based learning, the majority of the VET school managers found that the students' tasks change in the company so that the desired competence could be achieved. More than 53% of the VET school managers assessed that the competence development process takes place well or excellently in the company. However, 4.4% of the VET school managers stated that the tasks for the students' competence development do not change at all. On the whole, 67% of the VET school managers stated that companies' operations are well or excellently in line with the competence requirements of the profession that are described in the curriculum. Only 2.2% of the managers said that companies do not meet the requirements at all. Concerning the companies' support and guidance for the students' learning, 50% of the VET school managers assessed that the companies support the students' learning satisfactorily or not at all. The answers regarding systematic and goal-oriented guidance from the companies to the students was polarised, so that 7.8% of the VET school managers perceived them as being excellent or well (about 40%) and 7.8% saw that the students get systematic and goal-oriented guidance satisfactorily or not at all (40%). According to the VET school managers' (13.3%) opinions, the companies did not train staff for the guidance of the students at all. However, 51% of the managers expressed there being trained staff in the companies satisfactorily, well (23%) or excellently (6.7%).

Nearly 86% of the VET school managers considered the professional skills learnt at school to meet the demands of working life well or excellently. About 13% of the VET school managers had an opinion that the correspondence between the education and working life is satisfactory.

In the qualitative data, the VET school managers referred also to the work-based learning of the students in their answers. The aim is that WBL enables students to acquire quality education and professional skills in order to be able to integrate themselves into a changing real work environment. Thus, systematic long-term training, characterised by changing periods of workplace learning or VET schools, is beneficial to the students. The VET school managers suggested some structures or models for work-based learning:

- The first part of the learning programme (about 60%) is carried out at a VET school. The rest of the learning (about 40%) occurs in a business enterprise, with the intermediate assessments of learning outcomes (achievements) held at school.
- 1 month – theoretical training, 1 month – placement visits, and the other time spent on a specific job placement in institutions.
- Mixed: A workshop in the classroom and coaching / demonstration in the company where the practical training takes place.
- Training at a workplace should be under the supervision of higher-level managers.

10.5 THE DEVELOPMENT OF WORK-BASED LEARNING

The VET school managers provided many different viewpoints for the development of WBL in the near future. The answers were verbose, covered many aspects and were categorised into four categories, which include subcategories. The categories are as follows:

- Framework factors for WBL (19)
  - Societal issues (11)
  - Legal issues (2)
  - Financial issues (6)
- Quality of WBL (9)
  - Development of WBL (5)
  - Curriculum and WBL (4)
- Collaboration between employers and VET schools (14)
  - Cooperation and communication (8)
  - Motivation (6)
- Training and WBL (18)
  - Forms of training (15)
  - Flexibility (3)

FRAMEWORK FACTORS FOR WBL

The VET school managers brought up different framework factors regarding WBL. They said that the business environment is inadequate and unsupportive for WBL, and thus society is not yet ready to implement WBL. In addition, economic development influences the possibilities to implement WBL: when the economic situation is good and the economy is growing, it is easier than if the conditions of economic growth have slowed down. Furthermore, they commented that there is too much undeclared labour, which in turn reduces employers' interest to take in students. There are some attitudinal barriers, as the students are seen as a cheap labour force to be used at the expense of building their well-being. In addition, the structure of business influences the implementation of WBL, and therefore it is necessary to increase the number of small enterprises that are interested in WBL. Students in vocational secondary education have a somewhat low socio-economic background, as they tend to come from broken families and live alone, which means that they need different kinds of support. The new generations, particularly generation Z, are challenging the older ones, and hence a better understanding of diversity and the world is needed.

The VET school managers suggested that economic growth should be taken care of and the development of entrepreneurship supported in society. A stronger business environment provides possibilities to implement WBL. The attitudinal change towards WBL and students as well as development of human resources should take place. To achieve this aim, informative campaigns, workshops and conferences should be organised for a wide audience. WBL should become popular and attractive. The VET school managers emphasised the fact that rooting the WBL system is tireless and hard work.

There were a few comments about setting the legal basis for WBL, because without it WBL would be impossible to implement and develop. In connection with that, the financial issues, such as compensating the work for those who have the responsibility to supervise the apprentices, have to be resolved. The VET school managers suggested that there should be state aid to entrepreneurs, and tax breaks and tax-free scholarships for students. The students should receive the minimum living allowance. The scholarship system was seen as a means to anchor the students to the companies and get the graduated students to work in the company after their studies. The VET school managers also saw that vocational schools need financial support to implement WBL because, in practice, the biggest burden falls on the schools.

Thus, the schools could support the students and employers financially. In addition, there was a suggestion that a salary should be paid to a person who works with the students in a company.

QUALITY OF WBL

Concerning the quality and continuous improvement of WBL, there should be a systematic evaluation process in order to find out the challenges concerning the implementation of WBL and subsequently get information for the improvement. The VET school managers suggested regular surveys for monitoring the implementation of WBL and finding gaps and challenges. In addition, they brought up an idea to assess the experiences of professional masters and train managers in specific fields, gathering success, good practices and challenges and summarising them in focus groups. Feedback was also seen as a means to get information and recommendations for improving WBL. Close cooperation between the students, VET schools and companies was considered as a way of improving the quality of WBL. In addition, the cooperation between the three Baltic states was seen as meaningful in terms of quality and development.

The curriculum was seen as an important structure that should ensure the quality of WBL. Firstly, the VET school managers stated that the companies should comply with and fulfill all the competences set out in the VET programme. Companies should contribute more to training programmes and adapt them to specific qualifications. Accordingly, the objectives of the training in the company should be combined with the requirements of a specific qualification. Secondly, the VET school managers said that the schools also should be more flexible in their curricula and take into account the changing market needs. There should be the possibility to allow easy adjustments of existing approved programmes. Concerning the curriculum and objectives for WBL, the VET school managers emphasised closer and stronger collaboration between schools and companies.

COLLABORATION BETWEEN EMPLOYERS AND VET SCHOOLS

The VET school managers highlighted that cooperation between VET schools and business should be strengthened and be on a higher level in the near future. In practice, the closer collaboration can take many forms in addition to the implementation of the students' work-based learning and joint assessment of students' competence in companies. The VET school managers would

like to increase teacher placement in business and visits to companies during the WBL periods. Overall, closer cooperation should be established between schools and placements at all stages, from the development of WBL programmes to the evaluation of results. The VET school managers suggested that there should be increased company ownership of work-based learning in the future. They also called for consistent cooperation. Even though the collaboration between VET schools and companies was seen as being very important, the VET school managers pointed out problems of managing and collaborating with a large network of companies.

Motivation was considered a basis for collaboration and a successful WBL process. The VET school managers discussed motivation firstly from the viewpoint of the companies and secondly from that of the students. They thought that there should be a motivational system for companies that motivates said companies to cooperate with the educational institutions implementing WBL. Employers must have the desire to train students and provide and motivate a specific employee who can devote enough time to being with the students.

TRAINING AND WBL

The VET school managers saw, firstly, that the company managers need to understand what WBL means and what the role of the school and companies regarding WBL is. The task of the school is to give an overview of the profession, communicative skills and creativity, and develop the competence approach. Employers, meanwhile, should understand that specific things can only be taught while working in a particular workplace. Secondly, it would be necessary to train the company staff, in particular the workplace supervisors, instructors and mentors. The VET school managers said that there were no people in the companies who would like to be an educator. Accordingly, pedagogical training and understanding the importance and role of company mentors is needed.

Concerning the actual work-based learning, the VET school managers suggested 50% of the studies could take place in a company and 50% in a school. It was also suggested that the training should be implemented in schools so that students spend 2–3 days in the company and the rest of the days at school. Many of the answers stated that WBL as a training form should be continued and applied. Regarding the teachers' skills and training, it was suggested that all teachers should have experience about WBL, and training should be provided for the staff of vocational

schools. Methodological materials should be developed for both schools and companies.

The VET school managers emphasised that workplace-based learning must be planned flexibly. In reality, many factors cannot be considered beforehand, which influences the implementation of WBL.

11 THE COMPANY MANAGERS' PERCEPTIONS ABOUT WBL TUTOR TRAINING

Irmeli Maunonen-Eskelinen

The data was collected with a questionnaire from company managers in order to analyse their experiences and opinions about their WBL practices.

11.1 THE RESPONDENTS

In total, 90 company managers from Estonia, Latvia and Lithuania responded to the survey. Of the company managers who responded, almost 45% were Latvian, 38% Lithuanian and 17% Estonian (Table 18). Table 18 displays the background variables and missing information regarding the variables.

TABLE 18. The background variables of the company manager respondents				
Variable	Levels	Frequency	% Frequency	Missing
Country	1. Estonia 2. Latvia 3. Lithuania	15 40 34	16.7 44.4 37.8	1
Size of the company: number of employees	1–9 10–49 50–100 101–250 251 or more	23 25 11 11 19	25.6 27.8 12.2 12.2 21.1	1
Position in the company:	1. Owner 2. Manager 3. Superior 4. Expert 5. Craftsman	25 39 13 3 6 2	27.8 43.3 14.4 3.3 6.7 2.2	2
Years in the company:	0–1 2–6 7–10 11 or more	4 26 17 42	4.4 28.9 18.9 46.7	1
Gender	1. Male 2. Female	35 55	38.9 61.1	0
Does the respondent have a trainer role in the company at the moment?	1. Yes 2. No	47 43	52.2 47.8	0
What is the annual intake of VET students in the company?	0 1–3 4–6 7 or more	4 44 21 20	4.4 48.9 23.3 22.2	1
For how many years has your company collaborated with VET schools?	No collaboration 0–1 years 2–3 4–5 more than 6 years	3 7 15 20 42	3.3 7.8 16.7 22.2 46.7	3

The respondents of the survey mainly (77.8%) represented small and medium-sized enterprises. It is notable that 53.4% of the enterprises were small, employing less than 49 employees, and 25.6% of those enterprises were microenterprises. The majority of the respondents (65.6%) had extensive experience, over seven years, in the company. As much as 93.4% of the companies had collaborated with the VET schools. Accordingly, most of the companies (94.4%) have received students for workplace learning.

TABLE 19. The field of business of the company managers			
Field of business	n	Percent	Missing
			4
Technology sectors (construction, metal sectors, transport, information technology, etc.)	37	41.1%	
Food industry	4	4.4%	
Clothing industry	3	3.3%	
Business administration	3	3.3%	
Hotel, restaurant and tourism	10	11.1%	
Social services	0	0%	
Health, sports and wellness	14	15.6%	
Natural resources	0	0%	
Hand and art industry	1	1.1%	
Culture	0	0%	
Other	14	15.6%	
Total	86	95.8%	4.4%

The majority of the respondents (41.1%) represented the technology sector (Table 19). Even so, 55% of the respondents were female.

On average, 62% of the respondents wrote their answers to the open questions (Table 20). It should be noted, however, that the least answered question complements the respondents' answers if they have answered "no" or "satisfactory" to the question of equivalence between education and work. 65.6 – 75.6% of the respondents responded to all the other open questions. As can be seen from Table 20, one third of the respondents were Latvians, a fifth Lithuanians and about a sixth Estonians.

TABLE 20. The respondents to the open questions are as follows:										
Open Questions	**Estonia**		**Latvia**		**Lithuania**		**Total**		**Missing**	
	f	**f(%)**	**f**	**f(%)**	**f**	**f(%)**	**f**	**f(%)**	**f**	**f(%)**
Q12. Correspondence between education and working life	8	8.8	1	1.1	5	5.6	14	15.6	76	84.4
Q19. How should collaboration regarding work-based learning / on-the-job learning be developed in your country?	13	14.4	31	34.3	20	22.2	64	71.1	26	28.9
Q22. What are the good experiences of the joint workplace tutor training from the company's point of view?	11	12.2	35	38.9	22	24.4	68	75.6	22	24.4
Q23. What should be the contents of the training?	11	12.2	29	32.2	19	21.1	59	65.6	31	34.4
Q24. What is the optimal way of organising the training?	11	12.2	30	33.3	20	22.2	61	67.8	29	32.2
Q25. Who should train?	10	11.1	31	34.3	22	24.4	63	70	27	30
Q26. What are the company's needs regarding guiding students at the workplace?	11	12.2	28	31.1	20	22.2	59	65.6	31	34.4
Total	75 12%		185 30%		128 20%		388 62%		242 38%	

11.2 COLLABORATION WITH THE VET SCHOOL

According to the statistical data, most of the company managers were satisfied with the collaboration between the companies and schools. The male managers (30%) in the companies regarded the collaboration with the schools more positively than the female managers (22%). Regarding the objectives of the work-based learning, 63% of the company managers had received information from the schools. However, nearly 7% of the company managers had no information at all. 71% of the company managers stated that the guidance to the students has been discussed and agreed upon with the schools. Accordingly, the responsibilities between the company and schools have been clarified according to 85% of the company managers. About 5% of the company managers had no information whatsoever about the guidance of the students and the responsibilities between the company and school. Assessment of the students' competence was an area which 11% of the company managers had not discussed with the school. Although the company managers were satisfied with the collaboration with the schools in general, assessment turned out to be an issue, with about 50% of the company managers being informed and the rest being either not fully content with the information they had received (24.4%), unaware about the state of the matter (6.7%) or not answering at all (6.7%). In the companies, the duration of cooperation with the VET schools does not affect perceptions of the quality of cooperation ($H=1.407$, $df=4$, $P=0.843$). Thus, based on this, long-term partnerships do not entail a positive impact.

Concerning the forms of collaboration (Table 21), the most important ways of collaboration were: Recruiting new employees, Work-based learning / on-the-job learning for students and Apprenticeship collaboration (Table 21).

TABLE 21. The desirable and feasible forms of collaboration with VET Schools		
Variable	Freq.	%
Recruiting new employees	38	14
Work-based learning / on-the-job learning to students	35	13
Apprenticeship collaboration	34	12
Organising visits for the students in the company	29	10
Providing summer jobs to the students	25	9
Scholarships to the students	21	8
Giving expert lectures at VET schools	20	7
Taking part in assessment of students' competences	19	7
Being a member of the VET school's working groups	17	6
Providing introductory places to teachers and study counsellors of VET schools	13	5
Sponsorship of the VET schools. support for the economy	12	4
Giving topics for students' projects	10	4
Ordering projects and reports that are implemented by students from the VET schools	3	1

Giving assignments to the students turned out to be the least desirable and feasible form of collaboration between companies and schools. Thus, the company managers do not consider VET schools as being capable of providing services that benefit the company.

To companies, the most important contribution of the collaboration with VET schools and students is the possibility of recruiting and training new employees (Table 22). In general, the students were not considered as a temporary workforce, although some of the company managers brought up the possibility that the students could compensate for the lack of permanent employees.

TABLE 22. How collaboration and students benefit the company		
Variable	Frequency	% Frequency
Recruiting new employees	78	19.5
Collaborating with VET schools	63	15.7
Inducting a new employee to the company	61	15.2
Participating in VET education	52	13
Creating and maintaining a positive image	46	11.5
Maintaining the staff's competences through guiding students	46	11.5
Increasing clientele through students	24	6
Smoothing backlogs via student work	21	5.2
Getting free labour from students	10	2.5

The qualitative data supports the quantitative data. In their open answers, the company managers highlighted the fact that work-based learning provides opportunities to learn to know the students as their potential employees and collaborators. They can select the best employees, i.e. those who have appropriate skills for the field of work and new knowledge that benefits the company

> *"Employees value students as potential collaborators, so cooperation, knowledge transfer and practical advice are heard every day."* (CMLi143–144)

The company managers also stressed the aspect that work-based learning promotes the positive image of the company. The company becomes more attractive because they train students and specialists that are more qualified. During the work-based learning, the students can get familiar with the company's working conditions, which can forward recruitment.

> *"The company gains collaboration with prospective employees and has the opportunity to show students their working conditions, make a positive impression and change their minds, even for people who had not previously planned a career at the company."* (CML225 – 227)

DEVELOPMENT OF THE COLLABORATION

The qualitative data introduces the respondents' understanding about how collaboration regarding work-based learning should be developed. When itemised by country, 34.3% of the answers were from Latvians, 22.2% from Lithuanians and 14.4% from Estonians.

The company managers' answers were categorised into the following categories and sub-categories:

- General picture (10)
  - Cooperation (22)
  - Communication (10)
  - Agreements (4)
- Modes of cooperation (8)
- Financial resources (8)
- Regulations (1)

- Curriculum (11)
- Students (2)
- WBL Tutors (2)
- Public information (2)

The company managers commented on the overview of the current situation regarding work-based learning. Their opinions indicated that they were quite satisfied with the current situation and development. However, some of the company managers wanted a stronger and closer school-company relationship and hence saw a need to improve the collaboration. In addition, it was suggested that the development could be implemented through projects.

> *”The cooperation we have now established is satisfactory.”* (CML101)

Regarding the actual cooperation, the company managers highlighted communication and the need for information about work-based learning. They expected information from the schools regarding e.g. the goals for the work-based learning and the things that require more attention. The company managers suggested getting a broader range of information on everything possible, so it seemed that they lacked different types of information. Therefore, they suggested discussions over specific and selected topics that could be worked on.

> *”We have identified a number of concerns regarding practices: 1. Too little information about internship agreements (including internship area, course, etc.) 2. There are no internship goals in the agreement, neither do the students know about them. 3. Cooperation between the internship and the school is fraught with problems (the school gives too little notice of the internship period).”* (CMV72–75)

The company managers paid attention to the agreements and coordination of the work-based learning between the company and the school. They stressed the need of having someone who coordinates the collaboration and enhances interests between companies and schools. There have to also be contracts that allow students to ”freely engage in practical training and step

into the shoes of professionals to understand what lies ahead (CML117–119)". Furthermore, the company managers brought up the need to clarify both the needs and expectations of the students and the company.

Concerning collaboration activities, the company managers suggested the modes of collaboration that should be emphasised more by the schools. For example,

> *"The staff member of the educational institution must constantly visit the workplace, monitor the student's professional growth, and prepare and adjust the training programmes."* (CMLi35–36)

> *"Organisation of pupils' practical training in the company, training them to work according to the curriculum and company qualification requirements."* (CMLi39–40)

> *"More collaboration in curriculum development, more organisation in training companies to help students get to know different companies and make their own choices."* (CMLi48–49)

In addition, closer collaboration between the school and workplace could motivate, stimulate and develop the workplace, commit the students to the profession and promote the employment of the students in the company they have worked. In addition to the above-mentioned forms of collaboration, the company managers suggested that collaboration should be developed on different levels: between schools, businesses, municipalities and other organisations.

DEVELOPMENT OF THE FRAMEWORK FACTORS FOR COLLABORATION

The company managers discussed *the financial support* from different angles. Firstly, they saw that financial support is a motivation factor in taking students to learn in the company. Secondly, they said that the companies do not have sufficient materials to provide good quality training. In addition, the companies do not have extra equipment for the use of students as the machines and equipment are reserved for production. Finally, the company managers brought up taxes, which are a burden to the companies, suggesting that they should be reduced.

”Work-based learning is very necessary and effective, but the availability of free equipment, programming and other things that students need to go through in the learning process would require additional resources in the form of equipment, computers and more. You just have to find a way to free up your machine at the workplace, but it is very difficult with fast production.” (CMV67–71)

There was one comment concerning the lack of regulations. The absence of the legal basis was seen as an obstacle to the collaboration.

Overall, the company managers considered work-based learning to be important. They saw it as a great opportunity to train a specialist in the real world of work, with them getting to know the work environment in everyday life and acquiring professional skills in the work environment. They stressed that work-based learning needs to be given more prominence. Concerning *the curriculum*, the company managers stated that the theoretical part is taught at school and the practical part in the company. Accordingly, the studies should be organised so that the students receive theoretical follow-up on workplace topics, e.g. having a regular day at school during the workplace learning period. A cycle model, in which workplace learning and school-based learning periods would alternate, was also suggested. More frequent learning at work helps the students to learn the practical side of the job. The company managers wanted to have more flexibility for timing the work-based learning and a possibility to design the studying based on the opportunities of the company. They also suggested that work-based learning could be conducted in different departments and positions within the same organisation.

”Work-based learning needs to be given more prominence. In our profession practical training is much more important than the proportional distribution of the current training programme. Practical training, inside or outside the workplace, should play a major role in programming.” (CML103–106)

The company managers brought up the need for support and training for work-based learning.

”Entrepreneurs who can and want to welcome students should be educated and supported.” (CML107–108)

In addition, they noticed that the students also need to be motivated. Subsequently, they must be encouraged to have positive attitudes towards work-based learning. The company managers called for more information about work-based learning to be disseminated to the public via the media.

11.3 THE JOINT TUTOR TRAINING

Overall, based on the statistical data, the company managers held the joint work-based tutor training in high regard. About 65% of the company managers stated that the joint tutor training has increased understanding about the goals of the curriculum and the assessment skills of professional competence, as well as strengthened the guidance and tutoring skills in the company. However, about 20% of the company managers said that assessment skills had not developed at all in the company (4.4%) or they did not answer (11.1%) or know the answer to the question (4.4%). Similarly, about 15% of the company managers did not think that the joint tutor training had increased the understanding of the curriculum at all (6.6%) or they did not know the subject (3.3%) or they did not answer the question (5.6%). Concerning the guidance and tutoring skills, 4.4% of the company managers stated that the joint tutor training had not strengthened such skills at all, or they did not know the subject (3.3%) or they did not answer the question at all (6.7%). Nearly 60% of the managers were of the opinion that the joint tutor training increased the development of the curriculum together with VET schools. Whereas about 11% of the managers said that the joint tutor training had not increased the collaborative development of the curriculum, 4.4% of the company managers did not know the state of the matter, and 7.8% of the managers did not answer the question. The Latvian company managers (50%) had a more positive impression about the joint tutor training and collaboration with the VET schools compared to the Estonians (25%).

The qualitative data opened the viewpoints of the respondents regarding the experiences concerning the joint tutor training. The company managers' answers were categorised as follows:

- The joint workplace tutor training (33)
  - Mutual understanding (18)
  - Guidance of the students (7)
  - Competence of the WBL tutors (6)
  - Future aspects (2)

The company managers discussed the benefits of the joint workplace tutor training, highlighting communication with the schools and development of mutual understanding. They said that the companies learnt to know the education system and schools and understand the school's points of view better during the training. In addition, the joint workplace tutor training added insight into work-based learning overall and common understanding about the goals of work-based learning between the companies and schools. The company managers considered the joint workplace tutor training to provide an opportunity to gain new experiences and listen to the thoughts of other participants, to get to know colleagues and solve common problems, and furthermore, to get new ideas for their own business. The joint workplace tutor training enhanced and strengthened cooperation between the companies and schools. The responsibilities of companies were discussed and clarified. The company managers emphasised the coordination of the cooperation. Furthermore, they noted that the training supported skills to manage work-based learning.

> *"Skills in managing work-based learning. Understanding of cooperation with vocational schools. Get in touch with like-minded, progressive people in the field."* (CML210–211)

Concerning the skills to guide students, the company managers noticed that after the training, the practice management and mentoring skills of the WBL tutors of the company had been improved. The participants of the joint workplace tutor training noted that they were more aware of the guidance process of the students. In particular, they know what to pay attention to and how to give feedback. The company tutors' skills in recognising the student's preparedness and suggesting the content of the study to the teaching staff were enhanced in the training. In addition, the WBL tutors have a greater understanding of the work-based learning process, assessment and communication with young people. The training provided additional useful information that will improve collaboration with the students. The WBL tutors have received positive feedback from learners. According to the company managers, the greatest benefit of the training can be that adults learn the skills of coaching each other, along with learning to transfer their knowledge as well as feedback.

> *"Based on participants' feedback, they are more aware of the guidance process on what to notice and how to give feedback."* (CMV180–181)

From the WBL tutors' competence development point of view, the joint training enhanced the ability to gain new knowledge and deepen prior knowledge, as well as provided new experiences and contacts with other companies. During the training, ideas for collaboration projects were formed.

> *"Upgrading of existing knowledge, their deepening, acquisition of new competences."* (CMLi149)

The company managers referred to the quality of vocational education and the meaning of work-based learning, saying that the purpose is to get well-trained professionals for the future.

THE CONTENTS OF THE TUTOR TRAINING

The company managers commented on the contents of the WBL tutor training, as well as the students' training overall. The answers concerning the WBL tutor training were categorised into three categories and the comments related to the students' professional training formed one category. The categories were as follows:

- General characteristics of the WBL training (16)
- Contents (20)
  - Pedagogy (10)
  - Theory-practice (6)
  - Regulations (4)
- Development of WBL tutor training (2)

The company managers were quite satisfied with the training overall. However, they brought up some qualities that the training should have. Firstly, they mentioned that the training should be short, concise, informative and clear, because the representatives of companies do not have time to take part in e.g. seminars. With connection time, they wanted that the training should be accessible and lightweight. Secondly, the company managers said that the WBL training should be understandable for both the representatives of companies and schools. Thirdly, they pointed out that the training should be purposeful, interesting and dynamic.

Regarding the contents of the WBL training, the company managers brought up different pedagogical issues that they considered important. They noted the need to learn contemporary youth psychology and supporting students' motivation. In addition, they expressed the need to know how to prepare and organise learning processes and develop individual training programmes. They stressed the skills to provide high-quality pedagogical support to young people, and in particular the skills to provide feedback. The company managers wanted the WBL tutor training to contain innovations for training students.

> *"Discussing individual programme development issues. Increasing student motivation. Collaboration."* (CML288–289)

The company managers emphasised that "the training should be not only theoretical but also practical" (CML304). Besides the theory, they wanted to get practical examples and particularly experiences from other participants. Concerning the contents of the WBL training, specifically legislation was discussed. The company managers wanted to know more about the legislation, regulations and administration regarding work-based learning. They

> *"More examples of document filling."* (CMLi260)
> *"More legislative acts."* (CMLi262)

The company managers suggested that, in order to develop the work-based tutor training, continuing evaluation and needed actions based on the evaluation should take place. In addition, the structure of the tutor training was brought up. It was suggested that the tutor training could consist of two phases: the first phase could be general for potential tutors, and the second phase could focus on specific programmes and the qualifications and issues related to them.

> *"Be sure to consider the feedback from participants. On that basis, make changes with the company for the next year."* (CMV269–270)

> *"First, a general section that all potential tutors would pass, and second, a group of specialties, which are passed according to the specialty (where the tutor is)."* (CMV275–276)

THE OPTIMAL WAY OF ORGANISING THE TRAINING

The company managers mainly discussed the students' training and how it should be organised, and they also commented on organising the work-based tutor training. The answers were categorised as follows:

- Students' training (27)
- Work-based tutor training (21)
  - Duration of the tutor training (10)
  - Mode of the tutor training (5)
  - Contents of the tutor training (6)

The comments regarding the work-based tutor training were brief and straightforward. The company managers suggested that the duration of the training could be one day. However, they had an idea that the one-day training period could take place a couple of times a year. The implementation of the training could vary, with workshops, joint seminars, lectures and web-based training. The contents of the work-based tutor training were expected to be practical, cover the methods of direct perception, raise awareness of the curriculum and exchange understanding and enhance communication about standards.

> *"One day training with fewer people a couple of times a year."* (CMV354)

> *"Practical and bilateral."* (CMV357)

Concerning the students' learning in a workplace, the company managers highlighted the viewpoint that, in addition to theoretical studies, the students need to learn in practice in real environments. The company managers suggested that the ratio between theory and practice in the studies could be 30/70 or 70/30. Furthermore, they suggested that the students could work part-time in the company in addition to their studies. A periodic implementation, which includes defined periods at the school and company, was brought up in a couple of answers.

> *"Combine theoretical lectures with practical training in a ratio of 30/70."* (CMLi331)

”70% theory, 30% practice.” (CML392)

”School – Company – School – Company.” (CMLi335)

The company managers described the relationship between theory and learning a profession in practice with the following statement: the theory learnt at school should be put into practice in a real environment. The theory parts and practical parts should interact with each other. The theoretical knowledge can be tested in practice. The theory to be learnt at school should be interesting to the students, while practice should convince the students of their chosen profession.

”Theoretical learning should be consistent with new technologies and leading working methods. In order for students to understand the need for new job prospects and the introduction of new technologies in the company, there should be more practice in the learning process so that students understand.” (CML393–396)

The company managers stated that the training at the workplace should be based on the standards and qualification requirements of the profession. The school has a role in developing the training plan, which should be adapted according to the individual needs of the students. The company managers emphasised good communication and mutual understanding between the school and the company in order to provide practical training of good quality.

WHO SHOULD TRAIN

The company managers focused on both the students’ training and the work-based tutor training in their answers. The answers were categorised into three main categories: 1) the trainers, 2) the competence of the trainers and 3) the quarters. The distribution of the answers was the following:

- Trainers (25)
  - Teachers and workplace tutors jointly (14)
  - Teachers or workplace tutor (10)
- Competence of the trainers (30)
  - General competence (21)
  - Pedagogical competence (3)
  - Training (6)
- The quarters (5)

The company managers referred to the students' work-based learning when they suggested that the trainers should represent both the schools and the company, and that the training should be implemented in collaboration

> *"The training should be led by both professional teachers and company staff who can demonstrate the practical side of the job."* (CML475–476)

Furthermore, the company managers pointed out different roles for teachers and workplace tutors in the students' learning process, saying that the teachers' role is to provide the theory while the company representatives provide the practice.

The competence of the trainers was brought up in a general manner. The company managers emphasised that the trainers have to be competent, but they did not explain in detail what they meant by that. However, experience was mentioned as a component of the competence, as was pedagogical and communication skills. Linked with the competence, the company managers stated that the trainers should be trained and qualified to train specialists. They referred to the need for tutor training by saying that "not every good professional can be a good teacher."

> *"Work-based learning should be conducted by suitably trained professionals who have acquired knowledge of work-based learning courses."* (CML462–463)

The company managers suggested organisations that could provide the trainers, with the ministry, schools and employers' organisations being proposed. In addition, they considered the trainers from a position point of view, e.g. those who organise the students' internships and are responsible for it could be the ones who train.

11.4 THE STUDENTS' SKILLS DEVELOPMENT

CORRESPONDENCE BETWEEN EDUCATION AND WORKING LIFE

According to the statistical data, the company managers had a generally positive conception of the professional skills learnt at school. The majority (60%) of the respondents stated that the correspondence between education and working life is good and that the skills the students learn at school meet the requirements of working life. It is notable that none of the company managers

said that the education does not correspond with working life at all. About 36% assessed that the correspondence was satisfactory.

Those company managers who were not satisfied with the correspondence between education and working life were asked to provide more information about it. The qualitative answers were categorised into five categories as follows:

- The difference in focus (4)
- Lack of basic skills (1)
- Lack of practice (6)
- Lack of understanding the profession (1)
- Negative attitudes (1)

The company managers said that one of the gaps between the professional skills of the students and the demands of working life is that the students lack experience and, accordingly, practical skills. However, the company managers understood that the focus of vocational education is wider and thus cannot serve all the requirements that the companies have.

> *"Educational institutions are obliged to provide a wide range of knowledge, depending on the student. Not always mastered. And in the company, often, we focus on specific work, which results in the need for additional training and deepening of knowledge and skills."* (CMLi5–7)

Furthermore, the company managers mentioned that the students lack the basic skills, which causes difficulties at work and with performing the tasks. Also, they noticed that the students do not have any real understanding about the profession that they have chosen.

Overall, the company managers seemed to have a positive impression about the students' skills, but on the other hand, they said that there were very negative comments concerning said skills at the workplaces.

GUIDING THE STUDENTS IN THE COMPANY

The respondents had a positive impression about the students' learning in the company. Nearly 67% of the company managers stated that the students reached the objectives set for work-based learning satisfactorily. The majority

of the company managers (67.8%) said that they are familiar with the education and curriculum that the students are studying. However, there were company managers (4.4%) who did not know the education and curriculum at all. The company managers (80%) thought that the company provides decent support to the students in their learning and achieving the objectives set for them. The companies ensure that the objectives of the curriculum are covered and that the tasks for the students change according to the objectives.

Concerning systematic and goal-oriented guidance for the students, the company managers (80%) considered themselves as having the skills to guide the students' learning. They stated that about 75% of the staff of the company is willing and has good or excellent skills to guide and tutor the students. However, 9% of the company managers said that the company had not trained its staff for guiding the students' learning. It seems that the guidance skills develop through experience, since the companies which take in 1–3 students were compared with companies that take in 4–6 students (P=0.017) and over 7 students (P=0.083). In short, the companies that take in more students tend to find that their work-based learning runs smoother.

Even though the statistical data displayed a positive overall picture concerning guiding the students in the company, the qualitative data revealed the necessities for improving the guidance and support for the students. The company managers provided different viewpoints regarding their needs for the guidance of the students at the workplace. The answers were collected into eight categories as follows:

- Curriculum (3)
- Preparation (2)
- Collaboration (4)
- Guidance (15)
- Resources (14)
- Students (9)
- Recruitment (3)
- Training (5)

In order to guide the students, the company managers expressed the need to know the students' programme, in particular the practice programme, and what the reporting requirements are. In addition, they wanted to be more aware of the possibilities to create individual learning paths based on the students' career plans. Some of the company managers have had good experiences about written and understandable documents provided by the vocational school.

> *"To know the student's practice programme and report work."* (CML543)

The company managers would like to get information about the students' skills before the students start their practice. The company managers wanted to meet the students and discuss the work-based learning with them before they start the practice.

Tri-partial collaboration (the student, the school and the company) was seen as important in solving possible problems and getting students to commit themselves to the profession. The company managers wanted to get support from the school and also support the students and their motivation. Close cooperation and the willingness of the schools to work with companies were stressed.

Regarding guiding the students' learning, the company managers wanted to get help from the schools. They stated the need for methodological help in monitoring the students' progress and assessing their skills. Furthermore, they expressed the need to know how to provide qualitative pedagogical support to young people, enhance and maintain their motivation, and help them to achieve the goals. The company managers wanted to be updated with requirements and changes concerning coaching the students. In addition, the company managers would like to share their experiences with others.

> *"Engage and motivate your students to reach the goals and provide qualitative pedagogical support."* (CML534–535)

The company managers referred to the need for more resources in order to guide the students' learning. The companies wanted to have written materials for guiding the students and for covering the theory required in the curriculum. They also wanted to get assistance for the preparation of the materials. In addition to the written materials, the company managers wanted additional equipment and professional tools.

"Requires additional equipment for workplace organisation for the trainee (hardware and software, computer, desk, chair)." (CML551–552)

"Support for the purchase of the necessary equipment and materials in accordance with the internship programme." (CML566–567)

The company managers stated that companies are looking for potential employees. Therefore work-based learning can enable both the employers and the students to get to know each other.

Concerning the need for training the staff of the company, the company managers emphasised that coaching and mentoring the students requires trained professionals. They suggested that the tandem training should continue because someone needs to be trained every year. However, some of the company managers said that they already have certified specialists for coaching in the company.

THE BENEFITS OF THE WORK-BASED LEARNING FOR THE STUDENTS

The company managers provided the comments which argued for the work-based learning from the students' point of view. The comments were categorised as follows:

- WBL from the students' point of view (16)
  - Theory and practice (11)
  - Learnt skills (3)
  - Employment (3)
  - Transfer of knowledge (1)

The company managers expressed their opinions about the benefits of the work-based learning to the students. They considered that work-based learning would make it possible to combine both theory and practice in a real context. Work-based learning should be based on the students' individual training plan, which takes into account the capabilities and specifications of the particular company.

"Real conditions, practically individual training, we train according to the needs of the company." (CMLi159–160)

The company managers stated the dimensions of the students' competence that the students learn in the company. They referred to the development of communications skills, which are needed when working in teams, and in general when communicating with the personnel. In addition, they brought up the development of problem solving and independent decision-making skills and having responsibility for clients.

According to the company managers, the students can acquire employment easier and faster as an outcome of work-based learning, having gained professional experience in real-life and work situations. During the work-based learning period, the students learn to know their profession and can make decisions concerning their future jobs.

> *"The student immediately finds himself in a real job, which helps him decide if he really wants the job, helps him enter the job market faster, and gets paid while he is still studying."* (CMLi157–158)

According to the company managers, during work-based learning exchanging professional knowledge between different generations could take place.

12 COMPARING VET SCHOOL MANAGERS' AND COMPANY MANAGERS' PERCEPTIONS ABOUT WBL TUTOR TRAINING

Irmeli Maunonen-Eskelinen

In the surveys, there was some overlap in the questions given to VET school managers and company managers. They covered topics such as development of collaboration regarding work-based learning, students' overall learning at the company, the willingness and skills of the company staff to guide students in WBL, and correspondence between VET education and working life, as well as experiences and views about the joint tutor training (tandem training). In this chapter, the managers' responses to the quantitative and qualitative questions are compared to each other.

In general, the VET school and company managers had similar perceptions regarding the forms of collaboration. Table 23 shows the most and least sought-after forms of collaboration. The numbers in the table describe the ranking of the different forms of collaboration done by the respondents. The colours visualise the importance of the different forms so that the green colour represents the most wanted forms of collaboration, the red colour the less wanted forms, and the yellow colour possible forms of collaboration. The table demonstrates that the VET school managers' and company managers' perceptions about the collaboration are parallel. However, the VET school managers prioritised the assessment of the students' competence as a form of collaboration higher than the company managers did. The company managers considered the form of collaboration possible but not the most desirable. Primarily, the company managers wanted to collaborate concerning the recruitment of new employees, whereas the VET school managers did not consider recruitment as an important form of collaboration.

TABLE 23. The desirable and feasible forms of collaboration		
Variable	Company managers	School managers
Recruiting new employees	1.	11.
Work-based learning / on-the-job learning to students	2.	1.
Apprenticeship collaboration	3.	2
Organising visits for the students in the company	4.	4.
Providing summer jobs to the students	5.	8.
Scholarships to the students	6.	7.
Giving expert lectures at VET schools	7.	6.
Taking part in assessment of students' competences	8.	3
Being a member of the VET school's working groups	9.	5.
Providing introductory places to teachers and study counsellors of VET schools	10.	10.
Sponsorship of the VET schools, support for the economy	11.	9.
Giving topics for students' projects	12.	12.
Ordering projects and reports that are implemented by students from the VET schools	13.	13.

Overall, the collaboration between companies and VET schools was seen as positive. Statistically, this can be seen in sum variables VET teachers' question 9 and workplace tutors' question 11, with the mean value being 16.67 in companies and 12.25 in schools, $P< 0.001$. However, there was a fine difference in the level of satisfaction. As much as 75% of the company managers thought that the cooperation between the company and school works well, whereas 55% of the VET school managers were satisfied with the collaboration. Regarding the development of collaboration, both VET school managers and company managers called for closer cooperation in the future. The coordination of the work-based learning, information and communication about work-based learning and diverse forms of collaboration were suggested as factors that promote common goals and shared responsibility.

The VET school managers placed more emphasis on the need to provide training to companies concerning work-based learning in general. Furthermore, the VET school managers did not consider company staff to be competent enough to guide the students. As for the company managers, 30% of them assessed the ability and willingness of the companies to guide the students to be excellent. Only 2.2% of the VET school managers had such a positive opinion about companies' skills to guide the students, and thus most

of them disagreed with the company managers. The company managers, by contrast, brought up the lack of training resources in companies, such as materials, equipment and machines, which could hinder the students' learning.

The correspondence between the vocational education and training and working life was considered to be good. 60% of the company managers and up to 90% of the VET school managers were satisfied with the correspondence. Despite the general satisfaction, both the VET school managers and company managers emphasised the need for work-based learning to increase the working life relevance of the education and provide authentic learning experiences to the students. The VET school managers highlighted the increasing responsibility and role of the companies to train the students.

Overall, both the VET school managers and company managers saw the joint tutor training (tandem training) in a positive light. However, in Latvia both the VET school and company managers were more positive concerning the tandem training than their colleagues in Lithuania and Estonia. 70% of the VET school managers and nearly 60% of the company managers stated that the tandem training has increased collaboration. The valuable aspects of the tandem training were the exchange of knowledge and communication about the work-based learning. Thus, the tandem training worked within a context where mutual understanding was developed and enhanced.

Concerning the length of the WBL tutor training, both the VET school managers and company managers suggested that the training should be short, from one day to a maximum of three days, which could be divided into smaller units for a longer period. In addition, the VET school managers and company managers had very similar opinions about the contents of the training. The main themes of the training should be 1) regulations and administration of WBL, 2) curriculum and standards, and 3) pedagogy of WBL. Both the VET school managers and company managers attached weight to discussing the contents through practical examples. They emphasised that the WBL training should be understandable to both the representatives of companies and schools. In addition, they pointed out that the training should be purposeful, interesting and dynamic.

Both the VET school managers and company managers approved of the cooperation, but the company managers were even more satisfied with it. Similarly, they thought that the tandem training has increased the collaboration. In addition, the tandem training was seen to increase the pedagogical skills, such as guiding and tutoring the students learning in the company and assessing the students' professional competence in the

company. Furthermore, the tandem training was considered to enhance the understanding about the goals and joint development of the curriculum. Figure 16 illustrates the consistency between the VET school and company managers' answers.

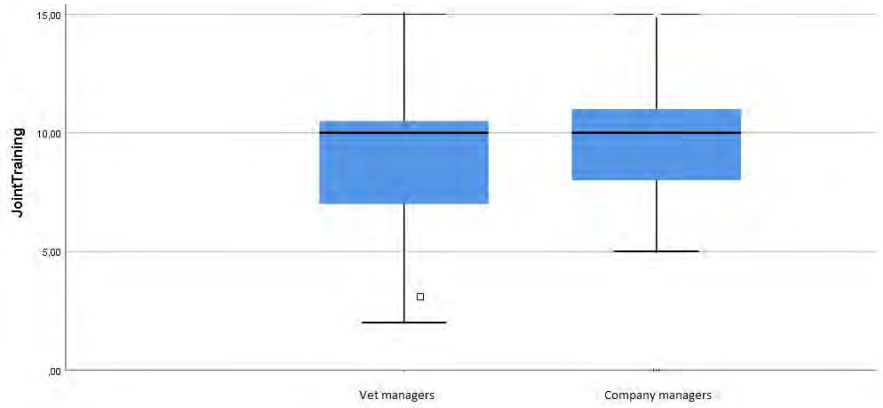

Figure 16. Comparison of the VET school and company managers' views about the benefit of the tandem training

Figure 16 shows that at least half of the managers estimated that the tandem training has been beneficial for the competence development of the WBL tutors and the collaboration between the VET schools and companies.

When comparing the VET school managers' and company managers' opinions about different aspects regarding the students' learning in the company, the opinions differed. The sum variable 'The students' learning in the company' was comprised of the following statements:

- How well do the VET students reach learning objectives that have been set for work-based learning?
- How well do the companies support the students to attain the learning objectives set for them?
- The companies are familiar with the education and the curriculum in which the students are studying.
- The companies ensure that the objectives of the curriculum are covered.

- The work tasks change during the on-the-job learning so that the desired competence is achieved.
- The companies' operations are in line with the competence requirements of the profession that are described in the curriculum.
- The companies provide systematic and goal-oriented guidance for the students.
- The company has trained staff for guidance

Figure 17 illustrates the difference between the opinions of the VET school managers and those of the company managers regarding the sum variable.

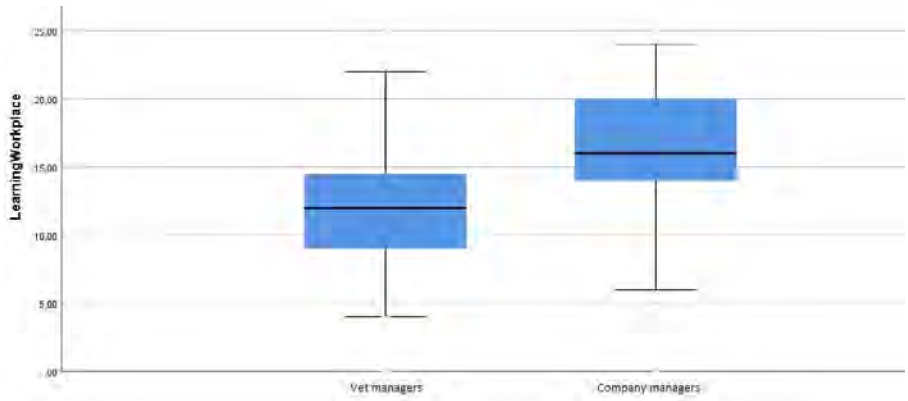

Figure 17. Comparison of the VET school managers' and company managers' views about the students' learning in the company

The difference between the school managers' and the workplace managers' views was obvious, as the mean for the company managers was 16.67, while that of the VET school managers was 12.25, P <0.001. The VET school managers regarded the students' learning in the company and the companies' abilities to support the students' goal-oriented learning more negatively than the company managers did.

In addition, both the VET school managers and company managers had positive opinions about the tandem training for the workplace tutors and VET tutors. They considered that the tandem training has been of benefit and supported at least well the competence development of the tutors.

13 THE LEAD TRAINERS' EXPERIENCES ABOUT THE TUTOR TRAININGS

Irmeli Maunonen-Eskelinen

The data was collected from the lead trainers in order to analyse their experiences about the WBL training and its practices. This happened three times, at the end of each implementation phase of the experimentation in the national trainer group interviews, where the lead trainers discussed their experiences about the implementation of the joint training.

In total, there were 16 lead trainers in the experimentation project: four in Estonia, six in Latvia and six in Lithuania. Five of them were males and 11 females. The background of the lead trainers differed with regard to the field, subjects and current jobs; however, all of them were very experienced experts and developers. The lead trainers (13 in total) were interviewed about the implementation of the joint tutor trainings in the Baltic states. There were altogether 242 answers, which consisted of the answers from the Estonians (43), Latvians (80) and Lithuanians (119). The qualitative data was analysed and categorised as follows (Table 24):

TABLE 24. The categories of the lead trainers' interviews

Category	Sub-category	Estonia	Latvia	Lithuania	Total
The joint tutor training	General	3	2	7	12
	Contents	9	1	14	24
	Methods	8	12	22	42
	Baltic model		4	10	14
	Participant of the tutor training	1	8	11	20
	Challenges	4	19	9	32
	Collaboration		10	11	21
	Competence development of the tutors	3		6	9
Contextual issues		2	8	12	22
Students' learning		1	1	5	7
The lead trainers					
	Co-training	1	7	2	10
	The lead trainers' role	2	5		7
	The lead trainers' competence	5	2	15	22
	Total	39	79	124	242

Principally, the qualitative data created four main categories. Two of them were organised thematically into sub-categories. The discussions emphasised joint tutor training, but other related topics were also brought up.

13.1 THE JOINT TUTOR TRAINING

The lead trainers considered the joint tutor training to be a new and good idea that worked well. They noted that the diverse backgrounds of the participants seemed to enhance their openness and creativity, which helped the lead trainers in the training process. According to the lead trainers, the overall awareness of the work-based learning is still rather weak. Thus, the trainings involving participants from different regions increased the awareness of the work-based learning in the Baltic states. Furthermore, the joint tutor training brought different backgrounds, experiences and languages (VET school and company) of the participants together, hence the joint tutor training was about learning to understand each other better.

> *"Having the VET school and company together is good. First they spoke different languages, but later they were starting to understand each other better."* (LT3Li 117–118)

The lead trainers discussed the duration of the training. During the experimentation they tried different models of implementation: two evening sessions + one whole day, one evening session + one whole day, and two days in a row. According to the lead trainers' experience, the training process should be longer than two days in a row. There has to be time between the sessions to reflect on the things that have been learnt. The time span of the joint training was discussed from different angles. Firstly, the lead trainers examined the period of the training from the participants' competence development point of view. The training time was considered to be very short for internalising pedagogical issues and approaches in addition to many other topics. Secondly, from the companies' point of view a training time of two days was considered to be excessive, even though learning new things always requires time. There were conflicting opinions between business life and learning. Thirdly, from the schools and teachers' point of view, as observed by the lead trainers, a two-day training period was not a problem. The lead trainers themselves stressed flexibility regarding the schedules and time span.

”A very short time (2 days) for understanding important pedagogical issues and approaches for implementing WBL. The 32-hour programme is too short, a more appropriate one would be 72 hours.” (LT1L53–54)

”Timing: for companies 2 days is rather much (luxury), while schools are ok with 2 days.” (LT2Li173)

”But how can one gain skills if they don’t have time.” (LT2Li174)

CONTENTS OF THE JOINT TUTOR TRAINING

There were two opposing views concerning the contents of the joint tutor training: ”Contents of the training are well chosen and relevant (LT3E37)” and ”Contents have to be changed (LT2Li22)”. The lead trainers brought up the issues that they struggled with as well as the issues that they found to be important. The importance of the legislation, regulations and administrative issues were seen differently in Estonia, Latvia and Lithuania. The Estonian lead trainers stated that these contents are not very important to the participants as they have prior knowledge about them. Additionally, in Estonia, according to the legislation, the VET schools are responsible for the documentation related to the work-based learning. Whereas in Lithuania the legal basis of work-based learning is lacking, which makes this content more complicated. In particular, the companies want to know about the laws and regulations because they are unclear. The Lithuanian lead trainers pondered ”the laws and regulations vs. person and apprenticeship” (LT2Li93) as the focus of contents. The Latvian lead trainers saw that the participants had various interests concerning the administrative issues but did not express the matter in detail. The content of legislation, regulations and administrative topics decreased in all the countries during the experimentation process.

”Admin issues, laws, regulations, etc. were not an important issue for the participants, they were lightly touched upon in the introductory round, e.g. they were asked how they handle documentation, etc.” (LT3E42–43)

”Legal background is lacking, it is difficult to explain to the participants.” (LT2Li17)

Particularly in Estonia, the participants from the companies needed to learn the professional qualification standards in order to set the goals for the students and be able to give feedback. The lead trainers found it difficult to handle the theme due to the general description of the criteria and pedagogical language. In addition, connecting the standards with giving feedback was hard. There were contradictions concerning the content of the professional qualification standards: ”the representatives from the companies need to learn them, the teachers from the VET school already know them and the participants criticised the content of professional standards yet also asked for criteria for giving feedback (LT3E40–41).”

The lead trainers described the contents regarded as important. The participants of the joint tutor training considered the topics of ”student motivation” and ”giving feedback” to be important. Furthermore, the lead trainers stressed the importance of discussing and understanding the tripartite starting point for the work-based learning. There are three important parties: the school, company and student vis-a-vis the school representative, the company representative and the student. The content of the training should include more stories of good practice as well as practical and real examples from the country in question and abroad.

The contents not considered to be important was abstract information, e.g. EU and societal level issues. In addition, simple and obvious contents, like the role of teachers, were seen as not important.

THE METHODS OF THE JOINT TUTOR TRAINING

All lead trainers emphasised the importance of using participatory methods in the trainings. There should be space for discussions about relevant issues that interest the participants. Dialogue between the teachers and the representatives of the companies enhanced the changing of perspectives and discovering the other side’s expectations. The communication and interaction between the participants and the lead trainers also supported a friendly and good atmosphere, and thus the participants were able to open up and be creative and committed to the tasks.

The lead trainers implemented and introduced experience-based learning in the seminars and promoted the participants’ reflection. Examples of methods such as roleplaying (concerning evaluation and giving feedback), practical exercises, the ”tutoring mini model,” games, modelling, telling success stories, good and bad examples and video presentations were brought up by the lead trainers. The lead trainers noted that they could only handle vital topics due

to the time limit. Therefore, they had to think carefully about the method or task that would be the most effective for the topic in question.

The lead trainers pondered the methods while taking the participants' motivation, attitudes and engagement into consideration. Using different methods, they addressed the attitudinal problems between the teachers and company representatives. In addition, the participants' attitudes regarding the training and work-based learning were superficial and prejudiced. Therefore, the lead trainers needed to focus on selecting methods that motivated the participants to go deeper into understanding the importance of the topics. Furthermore, the lead trainers purposely used the school and company backgrounds of the participants in pair and group work in order to facilitate the exchange of information and experiences and touch upon challenging issues. The lead trainers emphasised that the methods had to be varied during the training in order to engage and attract the participants. The lead trainers emphasised the ability to use creative, new methods instead of using well-known methods, presentations, speeches and lectures.

> *"To reconcile the mutual resentment between schoolteachers, employers and 'dry theorists.'"* (LT1L38–40).

> *"Participants do not approach the issue from a person's (student) point of view and the participants say they know everything -> We need to use different materials and methods, like movies and tasks, to motivate them."* (LT2Li37–39)

> *"The company and school participants were not from the same fields. On the other hand, this was a good thing as it gave added value for discussions. Similarities exist, and to some extent the challenges are the same."* (LT3E9–11)

> *"Finding schools and WP participants from the same sector and forming tandems; based on that it was possible to have better focused tasks, and participants were able to develop issues together."* (LT2L61–63)

The lead trainers developed a wide repertoire of methods and materials, which they applied according to the needs of different tutor training groups. They put an emphasis on being flexible and responsive in the training situations. The relevance of the contents and methods is important, and thus they suggested inviting students to share their work-based learning experiences with the

participants of the joint tutor training. The lead trainers would like to develop the training process in the future so that they could use online methods between the sessions as a part of the training.

THE PARTICIPANTS OF THE JOINT TUTOR TRAINING

The joint tutor training inspired discussion about the participants among the lead trainers. According to them, the joint tutor training is not an easy concept, and therefore attention has to be paid to the recruitment of the participants. During the experimentation, the lead trainers experienced the recruitment as a challenge. They had opposite experiences concerning selected participants.

> *"I was upset as the target groups were not well planned. They were managers and the programme was too easy for them."* (LT2Li15–16)

> *"The tutors are very qualified and motivated. We did not have to motivate them. We have very good tutors. We have selected the right people."* (LT3Li141–143)

There were challenges involved in getting the participants to the training. Consequently, the lead trainers suggested investing more in the preparation of the recruitment. From the companies' point of view, the managers have to be informed about work-based learning and the joint tutor training. The managers have to understand the importance of the training before allowing their staff to attend the training. It is generally good if the company owners can take part in the course, but often they are very busy with business matters. In addition, the lead trainers considered it meaningful that the participants are the ones who are working with the students. If there are managers in the training who are not involved in the practical training of the students, they will not have motivation and interest in the training. However, the lead trainers mentioned that they had motivated, interested and experienced workplace tutors in the trainings. Regarding the participants' requirements, there were regional differences within the countries. In some places, it was hard to get participants to attend the training, while in other places the tutors could get a higher salary after the training, which increased their motivation to attend it.

The lead tutors suggested that it would be good to have the possibility to involve the WBL tutors from the schools as experts in the trainings. The school tutors could share their expertise regarding pedagogy and the implementation of work-based learning.

THE CHALLENGES REGARDING JOINT TUTOR TRAINING

The lead trainers expressed the challenges they faced while implementing the trainings. The challenges formed three thematic categories: the attitudes of the participants, the diversity of the participants, and balancing the contents. The lead trainers found that the participants from the VET schools had superficial attitudes towards reforms in VET in general. The lead trainers thought that working with skeptical participants was hard, as they rejected the need for changes. In addition, some of the participants from VET schools did not behave in a responsible manner but instead signed on to the training despite having to attend to other duties. Thus, they did not engage themselves in the training at all. The lead trainers noticed the existence of a double-faced phenomenon regarding the tutors' training: on the one hand, the feedback from the participants was great, but on the other hand their dissatisfaction was hidden. Therefore, the lead trainers suggested that the tutor training should benefit the teachers' potential better.

> *"During the training I was sad; I felt that the attitudes of the participants were related to Soviet times."* (LT2Li171–172)

The participants from the companies and schools had contradictory opinions about the responsibilities concerning work-based learning. For example, according to company representatives schools bore the main responsibility for the students' learning and future, while the teachers had the opposite opinion. The company representatives blamed the schools for the students being unprepared to work in the companies, whereas the teachers considered the companies to be uninterested in admitting students. The lead trainers were faced with the challenge of releasing the participants from their prejudices by designing applicable tasks and methods.

The lead trainers said that the participants had an unrealistic understanding about their skills. The participants imagined that they knew everything and that the training held nothing new for them.

> *"The participants did not have a realistic understanding of their skills, they believed they know everything – 'don't tell us, we know, go to procedures.'"* (LT2Li9–10)

The lead trainers recognised the diversity of the participants within the groups and between the groups. The participants of the joint tutor training had different backgrounds, education, experience, needs and expectations. The

lead trainers noticed that the company representatives lacked a theoretical background while the school representatives lacked practical knowledge. The participants' daily work differed from each other, e.g. some were managers of a company, some were craftsmen, and others were teachers. The lead trainers also realised that the participants had differing philosophies, which showed in practice in their interests.

"We are interested in procedures, not people." (LT2Li13)

Therefore, it was necessary to find a common language during the training. The lead trainers experienced working with adults to be demanding and challenging. The joint tutor training brought on diverse demands for the lead tutors.

The lead trainers found it challenging to balance the contents of the joint tutor training with the diverse needs of the participants. Many important contents were covered superficially due to time constraints. During the two-day training period, it was impossible to discuss every important matter in depth while raising awareness about them. The lead trainers needed to find a balance concerning the contents between pedagogical innovations and WBL regulations. They had to separate the political and economic issues from pedagogical ones, to bring together two different worlds, the workplace and the school, and balance between different critical prejudices of both sides. In addition, the lead tutors balanced the goals of the joint tutor training regarding the pedagogical competence of the tutors. According to them, it is impossible to ensure the participants' pedagogical competence for WBL. From the pedagogical competence development point of view, the company representatives should be trained separately. However, the joint tutor training made it possible to exchange views and experiences between the representatives of companies and schools, which was valuable.

COLLABORATION

According to the lead trainers, a big benefit of the joint tutor training was having the representatives of schools and enterprises work together and establish a basis for cooperation in implementing work-based learning. It was evident that the teachers and representatives of the companies established the collaboration in both formal and informal training situations. In the formal training situations, the participants shared the good examples of existing collaboration between schools and companies. Furthermore, the participants met good and experienced WBL tutors from both schools and companies, and

their expertise was shared among the participants. During the training days, the breaks provided informal time for discussions between the representatives of schools and companies, the exchange of contacts, arranging meetings for the future and making plans for collaboration.

> *"Yes, we can see changes, they build contacts, and they start to work together already during the training, exchanging ideas, seeing other points of view."* (LT2L72–73)

> *"This training has increased the cooperation, which is nice. Joint coffee breaks are good, that enables informal cooperation and discussion. The trainers hope that it will enable better understanding between the VET and workplaces. The level of understanding is better."* (LT3Li46–48)

The joint tutor training provided a context where people from different professional environments could meet and concentrate on a common issue. The joint tutor training benefitted all participants as regards content and collaboration. Besides the contacts between the schools and companies, the tutor network was built during the training. The lead trainers saw that the tutor network could serve development work and projects in the future.

COMPETENCE DEVELOPMENT

The lead trainers noted the competence development of the participants even though the training was short. According to the lead trainers, concerning pedagogical competence the participants gained skills in motivating, giving feedback and evaluating students and using different teaching methods. Accordingly, the participants learnt to focus more on people and understand youths.

> *"The participants asked for a list of characteristics related to competences, thinking that they would help them evaluate and give feedback to the students."* (LT3E61–62)

In addition, the participants gained an understanding about the work-based learning process as a whole (before, during, after). The lead trainers brought up the regulation basis for work-based learning that was strengthened during the training. Cooperation and interaction skills with people with different backgrounds were gained as one component of the tutor competence.

THE BALTIC MODEL

The lead trainers suggested that the Baltic model is about training tutors for work-based learning, not about work-based learning as such. Furthermore, the Baltic model should be oriented for small companies, i.e. those with less than 50 employees. That is because the big companies have a different motivation to be involved; their interest is in getting competent employees through work-based learning, which is seen as a long-term strategy. In addition, the big companies have streamlined work-based learning and they have clear structures and shared responsibilities for it already, whereas small companies are motivated to get training about work-based learning. In addition, they want to have the Work-Based Learning certificate, which allows them to get financial support (e.g. in Latvia) for implementing work-based learning.

In addition, the lead trainers considered the Baltic model to be about sharing experiences regularly between the Baltic states. They stated that the laws and regulations are different between the countries. Furthermore, the mentality towards work-based learning is also different. Therefore, learning from others' experiences is valuable in many ways. The lead trainers highlighted that the ministries of the Baltic states should be involved jointly in the work-based learning.

The lead trainers emphasised that tandem training is at the core of the Baltic model: implementing the joint tutor training where the participants come from companies and VET schools and the trainers work in pairs. The Baltic model should have a legislative basis in order for it to be sustained after the project.

"It will be in the law, so it will live." (LT3Li158)

13.2 CONTEXTUAL ISSUES

The lead trainers expressed some factors that had an impact on recruiting the participants to the joint tutor training and implementing it. The context of the policy experimentation was different in each of the Baltic states. In Estonia, the VET schoolteachers have gotten a lot of training, and therefore the recruitment of teachers in this policy experimentation process was a challenge. There were participants mainly from the companies in the trainings and the idea of the joint tutor training was not fulfilled. In addition, there are similar ongoing projects: the MoE's project, in which two universities are

providing different types of trainings for school staff related to work-based learning (8–24 hours), and an ESF project which started in spring 2017 for schools and enterprises.

In Latvia, the recruitment of teachers has likewise been a challenge. The VET schools have been under pressure because of significant ongoing developments in VET: big changes are happening in the VET system, and accordingly there are many projects in the schools. Many development projects mean lots of work, time, money and energy from the schools and teachers, and therefore they are not motivated to participate in the joint tutor trainings. There are schools where the teachers have already been trained and they have a wide network of companies to collaborate with. For example, in one VET school 15 trained teachers collaborate with 150 companies. Furthermore, the lead trainers said that in Latvia there exists a mentality according to which the system is good, so there is no need for change. That lessens the interest and willingness to change things. Nevertheless, the lead trainers brought up development needs that should be addressed. Firstly, the capacity of regional directors should be developed, and secondly, there are many unclear issues from ordinary people's point of view. Though regulations exist, they are ambiguous and hence there should be guidelines on how to apply cabinet regulations. In addition, the lead trainers raised the issue of finance for tandem training (co-training); without financial support, the co-training would be difficult to implement.

In Lithuania, during this policy experimentation, a new law was under development. The participants of the joint tutor training thought that they could influence that law. The timing of the joint tutor training experiment was good because the regulation basis was in progress. The participants of the joint tutor trainings felt like being responsible for a bright future of work-based learning in the country. The situation regarding implementing work-based learning at that moment, however, was challenging. The companies did not want to admit students because there is no financial motivation for it. Similarly, the teachers are not paid enough and they lose hours (=money) if their students go to learn in companies. The teachers do not have time to guide students, because guiding takes three times more time than teaching in classes. The documentations related to work-based learning also take time. Regardless of the challenges that have been experienced, there are some success stories regarding work-based learning e.g. in the field of ICT. The companies are interested in the best students. However, in sum, the overall purpose of the work-based learning in Lithuania is still unclear.

13.3 STUDENTS' LEARNING

The lead trainers touched upon students' learning in the interviews while they talked about the implementation of the joint tutor trainings. Firstly, the lead trainers wanted to focus on long-term commitment and future orientation concerning young people's learning. They emphasised the responsibility of taking care of young people so that they will work in business and any professional field. The schools and companies have to take care of the young people and think about the needs of the students.

The lead trainers had both positive and negative experiences about how well the participants of the joint tutor training considered the students' point of view during the training. The positive experiences concerned the participants' interest in the development of students' competence, overall progress and professional growth. Thus, some of the participants were strongly committed to supporting the students' learning. Conversely, there were participants who did not approach the issues from the students' learning point of view at all. There was an attitude barrier, as they thought that they already knew everything and that there was no point in changing the perspective.

From the students' learning point of view, the lead trainers suggested changes concerning the structure and organisation of the work-based learning. The students should go to learn in companies at the beginning of their studies in order to know what working life is and have several work-based learning periods during their studies. In addition, the students need guidance and support in their learning, and therefore the teachers must have more possibilities to go to workplaces to tutor students.

13.4 THE LEAD TRAINERS

The lead trainers worked in pairs during the joint tutor trainings. The pairs were formed in four ways: 1) two teachers from the VET schools, 2) one teacher from the VET school and the other partner from the company, 3) two experts from the company and 4) one from the chamber of commerce and a teacher from the school. In addition, by gender the pairs were all-female, all-male and mixed. The lead trainers described the co-training as being their mutual learning process, providing an opportunity to learn from each other. The lead trainers had different backgrounds, which was used consciously in order to learn more during the experimentation process. The co-training, called tandem-training, enabled complementing each other, mutual support, more relaxed feelings than training alone, facing the challenges together, flexibility,

sharing knowledge and dividing the work, along with the possibility to reflect, evaluate and improve the trainings together.

> *"Tandem teaching is great, we learn from each other all the time."* (LT2L94)

> *"The lead trainers have different backgrounds, they work in pairs, but we switched the pairs to be different so they learn from each other. We like to work in pairs."* (LT3E26–27)

> *"After each training we look how we can do this better and how we can change roles. He knows the laws well and I am not so interested in those. I learn more all the time."* (LT3Li144–149)

According to the lead trainers, the joint tutor training required continuous learning and restructuring the programme and content. They needed to know, be aware of and follow the official requirements and procedures related to the work-based learning system. Tolerance, flexibility and agile actions were needed to facilitate the participants' learning.

> *"To be more flexible and try to decide quickly 'what to do' when I see that the planned task or method does not work (not enough time, or too difficult for participants)."* (LT1L86–87)

> *"I have broad experience and some contacts with companies, but maybe now I also have a wider picture."* (LT2E74–75)

The lead trainers described their strengths and development needs in implementing the joint tutor training. The lead trainers' answers formed the following categories regarding their strengths: experience, the knowledge basis about VET, pedagogical competence and having agency skills. Many of the lead trainers referred to their long training experience, as well as experience from both the business and education sectors. In addition, they mentioned having good knowledge about VET and, in particular, laws and regulations related to work-based learning. The lead trainers highlighted their skills to work with groups, to use diverse teaching- learning methods, to activate and motivate people in different ways and having good communication and interaction skills. Furthermore, they stated having agency skills, which refers to their proactive approach, the defined value basis and the confidence and willingness to develop work-based learning in their country.

”Long experience, I have done a lot of trainings; I have a pool of methods, my values are defined.” (LT3E68–69)

”Involve people to think about the theme. Use a method of contradictions (e.g. comparing two examples that do not fit with each other at first sight) that makes it interactive for listeners.” (LT2LI163–164)

The lead trainers expressed their developmental needs regarding implementing the joint tutor training. They saw the need to strengthen their knowledge basis regarding work-based learning, and pedagogical and practical skills. Regarding the stronger knowledge basis, the lead trainers wanted to have broader knowledge about the implementation of work-based learning. Furthermore, the lead trainers brought up the need to strengthen their knowledge about the legal basis of work-based learning and involving widely different parties. The development of the pedagogical skills covered learning new methods, improving communication and interaction skills, increasing situational flexibility and having the skills to make the change. In addition, the lead trainers wanted ”to have practical skills on how to help the company start the apprenticeship in their environment.” (LT2Li140).

”I’d like to get more knowledge of uniting people to work together and going deeper into the subject, which changes understanding and attitude.” (LT2Li120–121)

”Not to be afraid of talking to an audience, gaining more knowledge (not only from practice) about WBL and giving examples to be more certain that WBL training has a bright future.” (LT2Li130–131)

In order to have a broader perspective and more knowledge regarding work-based learning, the lead trainers suggested the exchange of the good examples of good practices in companies on three levels: firstly, on this experimentation project level; secondly, between the Baltic states; and thirdly, on the European level. They thought that the lead trainers from the Baltic states could support each other from the pedagogical point of view and in their professional development.

”To share with trainers of other countries; to have a larger view.” (LT3E71)

PART
IV

Discussion

DISCUSSION

Irmeli Maunonen-Eskelinen & Leena Kaikkonen

The aim of the research within the experimentation was to seek evidence on whether the tandem approach, initially developed and applied for the training of work-based learning tutors in Latvia, works in all the Baltic countries.

The experimentation was based on the hypothesis on the superiority of the tandem approach in training of VET and workplace tutors, with said training supposedly having several benefits affecting the development of work-based learning and the skills of the WBL tutors. The hypothesis was tested in all the Baltic countries in connection with implementing the WBL tutor tandem trainings, called the field trials, which were experimented three times in a row. The research explored the impact of the joint WBL tutor training: How do the work-based learning tutors participating in the tandem training ensure their skills in guiding students in WBL, and furthermore whether the tandem training supports the development of cooperation between VET schools and enterprises or any type of workplaces.

Resulting from the hypothesis, the research in the experimentation focused on investigating the impact of the training on skills and competence areas considered important for WBL tutors. Data was collected from the WBL tutors twice, in the beginning of the training and six months after they finished it. In both stages the WBL tutors self-evaluated their own skills in four competence areas related to work-based learning: i) planning the WBL at workplaces, ii) guidance of learners in WBL, iii) assessment of students' WBL and, iv) developing WBL in cooperation with the VET school/ workplace. WBL tutors also gave feedback on the experienced benefits of the training for themselves and the estimation about the possible change in collaboration between their VET schools and workplaces. The impact of the WBL tutor training was investigated through analysing the results of the two tutor questionnaires with quantitative and qualitative methods. In addition, more specified data was also collected from WBL tutors through some group interviews.

To bring in the wider context of work-based learning in VET, the research also included data collection tools appointed to other parties and stakeholders. These involved VET students, VET school managers and company managers. Furthermore, the lead trainers were interviewed. They were considered to have

a crucial role in developing and reflecting the entire experimentation process as they actually implemented the WBL tutor tandem trainings considered as the field trials.

THE FACTORS CONNECTED WITH THE IMPACT

Can it be said that the WBL tutor training has the expected impact? In order to answer the question, based on the analysis of data from different respondents, it is necessary to draw an overall view of the factors that are connected with the experienced impact.

Raivola, Valtonen & Vuorensyrjä (2000, 11–12) have analysed the concept of effectiveness of education and suggest that in most cases the effectiveness of education means the positive achievement of education and the fulfilment of its goals and functions. They point out, however, that effectiveness is not such a simple and unambiguous phenomenon. While Raivola et al. (2000) discuss the effectiveness of education in the broadest sense, Moon (2004, 4–5) addresses the impact of short courses and the aspects that contribute to their impact. In the following, we summarise the research findings by using the views of Raivola et al. and Moon as the basis for the designed model (below, figure 18), which forms a kind of unifying framework of the contextual and individual levels underlying the impact of WBL tutor training. The model enables reflecting the contexts of work-based learning, which differed between Estonia, Latvia and Lithuania, and accordingly to further analyse and reflect on the respondents' experiences and views. Indeed, Raivola et al. (2000) stress the process nature and complexity of the generation of educational effects. The model aims to visualise the several and diverse aspects that were connected with the impact of WBL tutor training.

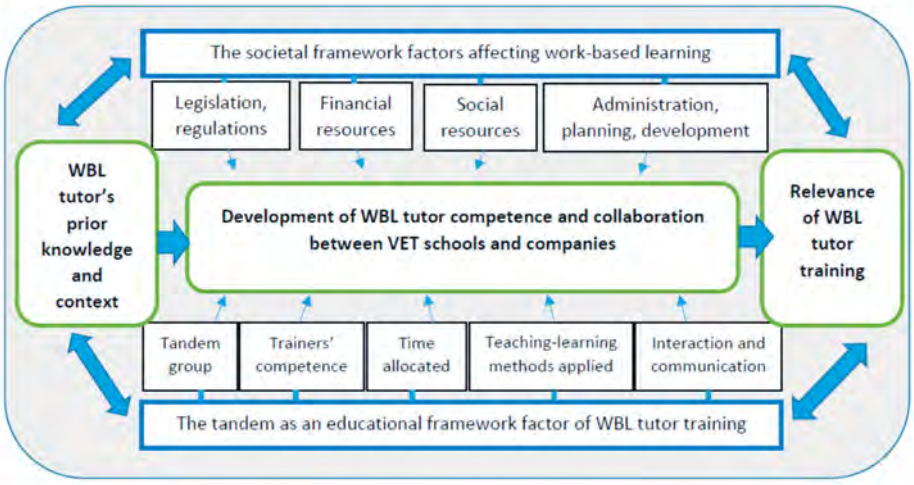

Figure 18. The model of impacting factors of WBL tutor training

The different parts of the framework are considered to be educational inputs of a kind that promote or inhibit learning (Raivola et al. 2000, 17). The societal framework factors consist of four elements: firstly, the legislation and regulations regarding work-based learning; secondly, financial resources for different parties; thirdly, administration and lastly, the governing quarter, which is responsible for overall planning and development. In addition, the societal framework includes social resources, which are commonly shared values, norms and ways of understanding and which facilitate collaboration within and between groups. In particular, the VET school managers and company managers highlighted the societal framework aspects as grounds for the work-based learning in general, and for the WBL tutor training. The lead trainers and WBL tutors in their tutor group interviews also commented on these factors. In addition, the lack of social resources became visible in the answers of the VET school and company managers, as they called for more public discussion about the work-based learning and campaigns in order to increase awareness about it. Thus, the meaning of the social resources is to create a WBL-friendly culture and atmosphere on the societal level, and encourage and motivate different parties to be involved in it.

Besides the wider societal framework factors, Raivola et al. (2000) and Moon (2002) describe the educational framework factors that shape the trainees' experience about the training. When analysing the data provided by the informants of this research, they turned out to be quite similar to

the perceptions of the factors by Raivola and Moon. In this research, the educational framework consists of the factors related to the WBL tutor training. They were the tandem trainee group; its size and other qualities; the lead trainers and their readiness, experience and effort; teaching and learning methods applied in WBL tutor training; the time allocated for the learning process; and the nature of the interaction and communication between lead trainers and WBL tutors as well as between workplace and VET tutors. The educational framework of the tandem training approach governed and was built into all these factors as can be seen in figure 18. In addition, Raivola et al. (2000) and Moon (2002) include in their conceptual framework the physical infrastructure, such as equipment and facilities, and support functions, such as administration, planning and development, which create the prerequisites for operations in the educational factors. However, the respondents in this research did not discuss these factors.

As the third element of the model, we consider the individual's potential of the person participating in the training. The individual's potential refers to educational resources that an individual possesses: knowledge, skills, competence, their expertise, and physical, cognitive and social resources. The educational framework factors provide possibilities to learn and make use of an individual's potential. The collective learning outputs and used potential of an individual cumulate interactively back to the framework factors (Raivola et al. 2000, 17). In this research, the WBL tutors' diverse educational and experiential backgrounds and work contexts were seen as dynamics that particularly influenced the development of their thinking and skills. Also, the joint way in which the WBL tutor trainings were implemented was experienced as a fundamental factor for the impact of the training. The tutors described this in their open responses and the group interviews.

In general, the relevance of education focuses on how education responds to, on the one hand, the expectations and needs of society, and, on the other hand, to individuals (Raivola et al. 2000, 17). Relevance is the appropriateness, usability, usefulness (in a broad sense) and meaningfulness of education. The relevance of the WBL tutor training can be approached from three aspects: individual, organisational and societal. The effects on an individual can be seen as, among others, the development of expertise, increasing ability to participate, merits and changing social status and the wage. The effects on organisation and community and on society can be e.g. the growth of production or international competitiveness (ibid). In this research overall, the WBL tutors found the training to be useful and meaningful. Those tutors who had guidance experience and students to guide at the time of the research

benefitted more from the training than those without. In addition, the relevance of the tandem training could be clearly seen in the fact that the training met the need to increase company-VET school cooperation in the Baltic countries. The tutors stated that the used active training methods and interaction possibilities supported the attainment of this aim.

THE IMPACTS OF THE TANDEM TRAINING

We can now go more in depth on discussing the impacts of the tandem training on the WBL tutors improving their competence and skills related to WBL, in addition to supporting the development of cooperation between VET schools and enterprises or any type of workplaces.

In the research, the tandem training's "tandem" appeared twofold: firstly, as the school and company backgrounds of the WBL tutors, who participated in the training, and secondly, as the co-trainer approach where two lead trainers with diverse backgrounds and competence worked together. The role and pedagogical insight of the lead trainers were crucial in bringing the two diverse worlds of company and school closer together and supporting the trainees in understanding each other's contexts while benefiting from their diverse backgrounds and experiences in their learning. The tandem training was the context for collaborative knowledge building in the tutoring of work-based learning. Singh et al. (2007, 91) bring up the idea about contradictions driving collaboration. According to Engeström (2001, 137), contradictions are "historically accumulating structural tensions within and between activity systems," which are, in this case, those of enterprises and schools. The findings of this research express the contradictions regarding WBL and tutoring and how the lead trainers addressed them in order to transform the contradictions and increase the common understanding. Turner & Turner (2001, 2) state that "contradictions seem to be a natural medium for mediating the connection between descriptions of (current) work and requirements on a new formulation of that work." Thus, the WBL tutor training, which is based on the tandem approach, makes it possible to connect two activity systems, use the contradictions as driving forces and facilitate the collaborative knowledge building.

The research results showed three important notions emerging from the data concerning the tandem approach. They point out the positive aspects for the appropriateness of the WBL tutor tandem training. Firstly, the tandem approach as such was seen as being valuable for forming interaction between people from the two parties involved. Secondly, the WBL tutors considered

training to be useful in supporting their awareness and own skills. And thirdly, the training was seen as contributing very positively in increasing collaboration between VET schools and companies or workplaces.

Overall, the trained WBL tutors considered the tandem approach to be valuable. They strongly recommended that the WBL tutor training implementations in the future be continued as such a joint approach. They stated that the tandem training had enabled them to understand work-based learning more widely when learning in a group where both workplaces and VET school tutors were represented. The active methods used had provided them with opportunities to see the other parties involved in WBL and share knowledge and experiences with them and to learn from them, in addition to becoming better aware of the expectations of the workplaces or VET schools. This all was felt to raise the collaborative capacity and improve the overall quality of the WBL in VET education.

Secondly, the trained WBL tutors considered the tandem training overall as useful. In their open responses, which they provided within the questionnaires and the tutor group interviews, the tutors said that the training had supported the development of their knowledge, pedagogical skills and ability to guide VET students at work-based learning. They considered their awareness of their own current skills as a tutor to have been raised, along with the demands to develop them. In particular, it was stated to be the result from the tandem approach, where they had had the possibility to interact with the other party. The tutors also said that their analytical and theoretical capacity had increased and they had learnt real practical skills, such as linking theoretical knowledge to practice. In addition, it gave them self-confidence and more understanding on pedagogical and guiding skills. They also mentioned a greater understanding of the learners' needs and communication with the students. It might be stated that the tandem training definitely worked as an eye opener for the WBL tutors, providing them knowledge, skills and experiences about work-based learning. It further provided opportunities for interaction and so opened the doors between the two parties, schools and workplaces, which is the key for further collaboration and development. So, in regards to the assumption that the tandem training can ensure the WBL tutors' skills in guiding students in WBL, it can be said to have happened.

When talking about the other assumption, that of the tandem training being able to support WBL tutors to improve their competences related to supervising WBL, it requires further consideration between the quantitative and qualitative results. For their part, the quantitative research tools for WBL tutors in the experimentation were developed, in line with EU-level approaches,

with the comprehension of competence as a wide and many-sided concept. This was following the definitions of understanding competences as part of a person's professionality consisting of a holistic synthesis of skills, knowledge, attitudes and behaviours required for effective performance in a real-world task or activity as described in figure 4 (see page 20). Thus, a competence was perceived as the ability of a person to show a particular behaviour in a particular context with a particular quality (Lehtonen et al. 2018; Mulder 2014; Competence oriented education and learning, 2010).

When evaluating their competences with the help of the provided questionnaires, the WBL tutors consider themselves to be at a good level in the four wide competence areas related to guiding students in work-based learning. However, with the used evaluation statements and questions in the questionnaires, the WBL tutors did not show much evidence of statistically significant changes happening in their overall competence from the point of participating in the WBL tutor training to the point six months after it. This was despite the fact that the respondents said that they had experienced changes as evidenced with the qualitative data gathered.

Considering the kind of mismatch between experienced and statistically significant changes, the reasons might emerge from various things. It might simply be due to the formulation of the questions and statements, but a certain level of reluctance to praise oneself or simply lack of time in responding are also relevant explanations, or some other heretofore unknown reason. One assumption arising with the data may be that the WBL tutors did not have the opportunity to put what they had learnt in the training into practice in the real-world situations in their work. Many of the tutors expressed through the questionnaires that they had not had a student to guide in work-based learning while they were in the training or after that. Therefore, if there had not been any opportunities to use and test the things learnt during the training it would not have led to a strong sense of improvement in one's own competence. It was felt that the tandem training had been useful in providing them with skills, knowledge and experiences for student guidance and arranging WBL. However, for there to have been wider or deeper development would have required possibilities to perform in real-life situations and through that reflect and reconceptualise their own skills and thinking. This assumption was further strengthened with the outputs of the quantitative data stating that the training was found to be particularly useful if the tutors had experience of guidance or they had a student to guide while being trained.

Further examination of the quantitative data also showed that the way in which the tutors evaluated their skills in the four competence areas related to

WBL to have changed did not affect how they thought about the impact of the training for them. In short, it can be said that, regardless of the experienced change in their own wider competence areas, WBL tutors considered the tandem training to have been useful. This was analysed further according to the grouping made with the cluster analysis on their skills. It showed that the higher the WBL tutors assessed their skills, the more useful they found the training to be.

Finally, the usefulness of tandem training was also supported with another very interesting output from the quantitative data. It asserted that if the tutors were trained in the real tandem group with an appropriate level of workplace and VET tutors present compared to being trained in a non-tandem one, the training was found to be useful.

Concerning the other area of the experimentation, that of collaboration between VET schools and workplaces, the trained WBL tutors felt very positive about it. As many as 68% of the WBL tutors stated that the collaboration had grown since they started the process. In Latvia, the progress was felt the most, with as much as 87% of the tutors stating so. Lithuanians were slightly more modest (66%). In Estonia, only a little less than half of the tutors felt the collaboration to have grown (42%). However, it should be remembered that in Estonia the amount of VET tutors in training overall was small, so it perhaps was not so beneficial for this development. In Latvia, the development was even better (92%) for the tutors who had been trained in real tandem groups than in those who were trained in more identical groups (83%). This kind of a comparison was not possible in Lithuania and Estonia due to a lesser number of real tandem groups. These statements were further strengthened with the responses in open questions where increased cooperation and interaction were considered as the main benefits of the tandem training.

The two elements of tandem, that of the school and the workplace, can also be observed from the point of view of the final beneficiaries of the WBL developments, that of the VET students, when they move in between these two contexts during their learning process and where they are guided by the VET and the workplace tutors. From the learning point of view, this raises questions on how learning at workplaces is pedagogically led and how the connection between these two learning contexts is organised. Griffiths and Guile (2001; 2003) state that there are diverse ways of organising WBL. Traditionally, the interaction between the VET school and workplace is rather modest and learning at the workplace is considered 'just simply to occur.' They state, however, that just having an experience in or of work is not enough for learning but instead it is needed to support the learner to connect different

types of knowledge, skills and experiences acquired in these different types of learning environments. The VET school and workplaces should together create learning environments which form interaction that promote learning. In this approach, the role of the teacher is to construct the close cooperation between the VET school and the workplaces. This type of a connective model of learning is a way of reformulating and addressing questions of learning and knowledge development in and between different contexts. They see this connection as a prerequisite for the knowledge production and learning to occur within and between the contexts of education and work (Griffiths and Guile 2003).

The planning phase of the work-based learning periods for the students forms the basis for students' transition between school and workplaces, also bridging school and workplace learning. For most of the students involved in the research this seemed to happen successfully. However, other types of experiences also arose to some extent from their responses. Presumably, there are diverse reasons as to why this happens. It could be the history behind the organisation of these processes, or administrative issues such as teachers' working conditions. However, this might also be a question of not knowing how to scaffold the students in taking the best out of their learning in both environments. In a similar way, as described above about the WBL tutors' performance and development, the students need support for deep learning to take place. According to Mikkonen et al. (2017), this requires diverse practices, such as guidance from more experienced persons, which support and assist young learners in reconceptualising their practical and theoretical knowledge in the new contexts. However, diverse ways of organising learning at workplaces, as well as different possibilities for learning and knowledge production, also rely on development taking place on a wider contextual level. Individual teachers and schools can proceed in their development, but the societal framework factors (like legislation and financial resources) have an influence on this.

THE LIMITATIONS OF THE RESEARCH

That having been said, there is still a need to analyse the limitations of our approach. The fact that the research was implemented in Estonia, Latvia and Lithuania by Finnish researchers brought up some challenges, namely language and methodological issues. The most notable limitation for the researchers was that they did not possess sufficient knowledge regarding the Estonian, Latvian and Lithuanian languages. This meant that the questionnaires and instructions

had to be translated from Finnish into English and then into Estonian, Latvian and Lithuanian. In the translation process, some of the information could be misunderstood and connotations could have disappeared. This is not only a question of language and translations but also a question of the used concepts being absorbed with diverse meanings in diverse countries along with their stages in the development of WBL. In addition, the open answers were translated from three languages into English in order to analyse them. The analysis of data was based on the data in English, which was not the mother tongue of the researchers. Furthermore, most of the answers were not perfect sentences and therefore the message could be misunderstood. Also, the issue of different languages influenced the qualitative data collection. The researchers could not implement the tutor group interviews because there was no common language.

Concerning the data collection tools, after the piloting phase the questionnaires for the WBL tutors were refined so that the open questions were excised from the first questionnaires used in the beginning of the tandem training but left in the six-months-after questionnaire. Concerning the quantitative data, it did not statistically demonstrate much significant differences in terms of the WBL tutors' competence before and after the training. However, the quantitative data, which was collected in the beginning of the training and six months after the trainings, provided the evidence of the tandem training having other types of impact. In retrospect, the open questions could have brought up the qualitative changes in the WBL tutors' knowledge, thinking and skills and helped to understand the WBL tutors' experiences concerning the tandem training and development of their competence. However, these were brought in through the tutor groups' interviews, which engaged approximately 10% of the trained tutors.

Furthermore, the collection of the data in the three countries was implemented indirectly so that the lead trainers and the project partners in charge of the WBL tutor trainings collected some of the qualitative data and gave instructions for the surveys. This solution appeared to dilute the nature of the data. In particular, this manifested in the tutor group interviews and students' questionnaires. There were, for instance, the answers of students who did not have any experience regarding work-based learning but who filled in the questionnaire, even though the collectors of the data should have found those students with WBL experiences. Therefore, some data could not be used. The research group provided written and video instructions to the collectors of data, but that was not enough.

CONCLUSIONS

In this research, we learned that the tandem training approach for training WBL tutors started and increased the collaboration between the workplaces and VET schools. The tandem training functioned as a forum for building relationships between the representatives of workplaces and VET schools. Hence VET tutor and company tutor collaboration was enhanced. Face-to-face interaction enabled the exchange of views and experiences and consequently increased the understanding about the needs, wishes and possibilities of different parties.

The research, in addition, showed that the tandem training generated learning experiences concerning the individuals' knowledge, skills and attitudes, and that the training was considered useful overall. However, the research did not demonstrate the significant impact of the participants' competence. Those who had experience in guiding students and their work-based learning benefitted more than those without such experience. This indicates that, for competence development, a real and sufficiently lasting working context is needed, one where it is possible to integrate learnt issues into real work, leading to more developed working practices and deeper understanding.

Based on the research, it is possible to demonstrate the strengths of the tandem training as well as the points of view on developing it. When developing the WBL tutor tandem training, it would be necessary to consider how it would be possible to display real WBL experiences for those participants who neither have nor have had students to guide in WBL. Genuine WBL experiences are possible to gain and support through developing the structures and learning assignments within the training. It can be claimed that short courses, like the tandem training described here, can also produce real impacts on professional development if and when the connections to real work and work tasks/practices are strong enough and pedagogically considered.

RECOMMENDATIONS

Based on the research results, the following focus areas for further development are suggested:

A recognisable competence profile and status for WBL tutors in the Baltic countries

The explicit requirements of the work-based learning tutors clarify the specific competence needed to guide the learning of the students in authentic work contexts. The competence profile increases the appreciation of the WBL tutors. Furthermore, the competence profile forms the foundation for the WBL tutor training.

Competence development of WBL tutors

It is important to support further the trained WBL tutors' professional development. In addition, there is a continuing need for training new workplace tutors and VET teachers for WBL.

The WBL tutor training system

In order to continue and develop the WBL tutor training further, the WBL tutor training system (responsible authority, training providers, finance, and evaluation of the system) should be in place. The training of the trainers for the WBL tutor training is a crucial part of the training system.

VET teachers' new role regarding work-based learning

Work-based learning brings changes into teachers' work as the emphasis moves from teaching to guidance and increasing collaboration with workplaces. Guiding the students involves innovative means, e.g. use of the possibilities of new technology, which demands new skills from the VET teachers. Furthermore, VET teachers could also guide the workplace tutors. All this requires a new mindset of the VET teachers. In teacher education and in-service education for qualified teachers, WBL should be included in the studies in order to build a common orientation and competence regarding WBL.

The concept of WBL and its role in vocational education

The concept of WBL and its role in vocational education needs to be clarified further. Accordingly, the role of WBL as a part of vocational education and its

overall goal should be discussed in order to enhance common understanding about it. Common understanding helps develop ways of organising WBL and fluent practices.

Pedagogy supporting WBL

Vocational pedagogy has to be renewed when the learning at school decreases and learning at workplaces increases. WBL changes pedagogical processes, calls for personalising the studies, emphasises guiding the students through different means and moves the focus to the assessment of the students' skills. The development of a new pedagogical culture takes time and requires pedagogical leadership.

The quality of work-based learning

Systematic gathering of feedback and monitoring the implementation of WBL serve the development of it. Evaluation models and indicators that aid the development of WBL support the providers of VET education. Thus, the providers of VET education can continue to develop their self-evaluation mechanism and process the results of feedbacks and evaluations.

Public campaigns and conferences to increase awareness about WBL

Public campaigns and conferences entrench and establish a positive image of WBL in society and among practitioners. They also inform people about different possibilities to study the professions and thus promote the attractiveness of VET.

Collaboration in and between the Baltic countries regarding work-based learning

Regional, national and international collaboration facilitate learning from others' good practices and solutions. Because the different professional fields differ from each other, the field-specific collaboration should also be focused.

All the suggested development areas require effort and time, and most of them are under continuing development while the matters connected with them develop. Lastly, we want to say, "If evidence-based educational practice is to be a success, the research story and the local-practice story must be brought together, and this is the practitioner's job. The researcher does not know what is relevant in the concrete context faced by the practitioner; that is for the practitioner to decide" (Kvernbekk 2017).

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FIGURES AND TABLES

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APPENDIXES

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APPENDIX 1.The tandem training programme (Vita Žunda and Diāna Krastiņa)				
Workshop for VET tutors and workplace tutors implementing WBL. 2 days "Pedagogy ABC for Implementation of Work-based Learning"				
Time	**Main Topics**	**Elaborated content**	**Learning outcomes**	**Methods**
Day 1	1.Getting to know each other	1.1. Welcome. Aims of the workshop 1.2. Getting to know each other 1.3. Tandem Training approach. Basic Vocabulary VET and WBL: what do we do right, where do we fail?	Understanding the background Learning about other participants Identifying problems in VET and WBL Identifying potential for peer learning and cooperation	Working in pairs
	2. Introduction to WBL, legislation, requirements, quality of WBL and traineeships	2.1. VET system and WBL in Latvia. WBL role in development of HR at a company. Benefits to WBL 2.2. Quality of WBL: What kind of enterprises can participate; matchmaking 2.3. Roles of workplace tutor and VET tutor in WBL, required competences	Understands concept of WBL; able to identify benefits of WBL system; able to analyse the readiness of company for WBL Understands the role and required competences of the VET and workplace tutor	Presentations Individual work SWOT Brainstorming Case study Discussion
	3. Stages of WBL or apprenticeship; Three main actors (key players)	3.1. Three key actors; their roles in 3 stages of WBL 3.2. Communication among/between 3 key players; cooperation between VET school and enterprise 3.3. The goals of the WBL, motivation of trainee, individualised approach 3.4. Competence-based approach, learning plan, assessment of the trainee	Understands the roles of VET school, workplace and trainee, the need for cooperation during each of the 3 stages of WBL Understands the role of motivation and how individual approach can be implemented Understands the concept of "competences"	Working in groups Brainstorming Presentation Discussion Case study

APPENDIX 1 continues				
Time	**Main Topics**	**Elaborated content**	**Learning outcomes**	**Methods**
Day 2	4. **Stage 1 Before WBL, before Traineeship: planning and preparation**	4.1. Planning WBL. Required documentation 4.2. Occupational standard, WBL curriculum, individual learning plan 4.3. Trilateral cooperation and communication before the traineeship (WBL) VET school – Trainee VET school – Enterprise Trainee – Enterprise	Is familiar with the qualification framework, occupational standard and is able to link it with the curriculum and learning outcomes Is able to plan the prep stage and other stages; is able to plan WBL at the enterprise Knows which decisions have to be made jointly. Is able to guide preparations of the apprentice and agree on an individual learning plan. Is able to use adequate communication strategies in cooperation with other actors	Individual work Discussion Presentation Role play or Simulation Working in groups Demonstration Case study
	5. **Stage 2: During Implementation of WBL or Traineeship**	5.1. Role of WBL tutor at enterprise, management styles 5.2. Learning styles, memory types 5.3. Practical training methods, importance of feedback 5.4. Motivation techniques, coaching principles in guidance 5.5 Trilateral cooperation and communication among key actors 5.6. Millenials and Generation Z, handling problems and conflicts	Understands the WBL process at enterprise Is familiar with practical training methods; is able to use different types of assignments and use individual approach Is able to use adequate communication strategies in cooperation with other actors	Individual work Discussion Presentations Role play or simulation Working in groups Working in pairs Demonstration

APPENDIX 1 continues				
Time	**Main Topics**	**Elaborated content**	**Learning outcomes**	**Methods**
	6. Stage 3: After Assessment of Trainee. Evaluation of WBL	6.1. Results/outcomes of WBL: assessment and validation of the trainee 6.2. Documentation 6.3. Communication among 3 key actors 6.4. Evaluation of WBL quality and evaluation of cooperation between VET school and enterprise 6.5. Experience of other countries 6.6. What makes an ideal WBL tutor (mapping competences) Evaluation of the workshop	Is able to assess the achievements/learning of the apprentice and recognise the outcomes at the personal and professional level Is able to carry out evaluation of WBL process and communicate with other actors	Individual work Discussion Presentations Role play or simulation Working in groups Case study Brainstorming
	Test	Written test or Presentation or a simulation of a situation in WBL		

The concept, methodology and content of **this training programme has the following sources**:

- Recommendations of working groups and social partners (Latvian Employer's Confederation, Ministry of Education and Science, National Centre for Education, German-Baltic Chamber of Commerce) for 72-hour and 32-hour programmes for workplace tutors developed and implemented with the help of ESF financing;
- EU projects "Baltic Training Programme", "HansaVET", "Q-Placements", "ECVET-Enterprise" and approaches in WBL tutor training in Germany, Finland and other EU countries, with adaptation for the Latvian WBL context;
- Work experience of V. Žunda and colleagues as WBL tutors/coaches of traineeships in "Baltic Training Programme" and own company;
- Experience of D. Krastina having been trained as WBL tutor in Germany;

Practical examples collected by trainers and based on interviews with trainees, workplace tutors, VET tutors and VET WBL coordinators, as well as examples from German-Baltic Chamber of Commerce experience in Latvia.

APPENDIX 2.

WBL TUTOR QUESTIONNAIRE FOR WP TUTORS AND VET TUTORS

Dear participant,

The WBL tutor training you will participate in is part of a larger EU-funded project called *Testing New Approaches to Training VET and Workplace Tutors for Work-Based Learning* (TTT4WBL). The project involves Estonia, Latvia and Lithuania.

With the support of this project, the three Baltic countries are committed to develop the training provided for WBL tutors. In order to monitor the appropriateness of the trainings, a follow-up research will be implemented of them. The Baltic countries have chosen JAMK University of Applied Sciences from Finland to implement the follow-up research.

Though participation in the research is voluntary, it is highly important. With regard to the coverage and reliability of the research, it is important that people with diverse approaches towards training workplace and VET tutors respond to the survey.

The data will be analysed by quantitative analysis methods, and thus a single person's answers cannot be recognised. Statistical tables and figures will be used when introducing quantitative research findings, and quotations when presenting qualitative findings.

Please take the time to read the questions carefully and respond with your honest thoughts.

Please also fill in the background information, as it is needed in order to get an overview of all the respondents. This information will be handled anonymously and confidentially, and your individual responses cannot be recognised.

For these reasons, we now turn to you and kindly ask you to contribute to this development and answer the following questions.

We thank you for your valuable contribution!

APPENDIX 3.

WBL TUTOR QUESTIONNAIRE 1 IN THE BEGINNING OF THE FIRST DAY OF WBL TUTOR TRAINING

Background

1. Country: Estonia, Latvia, Lithuania
2. Age: <20, 20 – 30, 30 – 40, 40 – 50, > 50
3. Gender: male, female
4. My professional field is: Technology sectors (construction, metal sectors, transport, information technology, etc.), Food industry, Clothing industry, Business administration, Hotel, restaurant and tourism, Social services, Health, sports and wellness, Natural resources, Hand and art industry, Culture, Other

5. I am a VET tutor/ workplace tutor
6. Workplace tutors: work experience: ____Years
7. Workplace tutors: do you have a student in your guidance at the workplace at the moment: Yes/no
8. VET tutors: experience of teaching: ____Years
9. Guidance experience (of on-the-job learning): __Years
10. Size of the company/VET school: ____number of employees

ALTERNATIVES: Not at all (1), satisfactorily (2), well (3), excellently (4)

11. My expertise in planning *students' learning at the workplace.*
    I have
    a. knowledge of the role and activities of the workplace tutor at the workplace
    b. skills in organising a visit at the workplace
    c. skills in informing the student about learning at work
    d. skills in informing the student about the key competences in the working life of my professional field
    e. knowledge of VET examinations in my professional field
    f. knowledge of the VET curriculum and the key competences in my professional field
    g. skills in planning the tasks for the student at the workplace according to the VET curriculum
    h. skills in informing other members of my workplace/VET school about WBL

12. My expertise *in guidance of work-based learning.*
    I have
    a. skills in guiding the student in work practices
    b. skills in interaction with the student
    c. skills in organising guiding discussions with the student
    d. skills in giving feedback to the student
    e. skills in guiding the student in self-assessment
    f. skills in handling problematic situations in workplace guidance
    g. knowledge of different kinds of guiding styles
    h. skills in guiding the student in cooperation with the VET school/workplace

13. My expertise *in assessing the student´s learning and competence at the workplace.*
    I have
    a. skills in observing the student´s practices at the workplace
    b. skills in organising systematic discussions with the student at the workplace
    c. skills in building a learning-friendly atmosphere at the workplace
    d. skills in organising an evaluation discussion as a means of guidance
    e. skills in organising discussions for the student at the workplace/VET school in cooperation with the workplace tutor/VET tutor (so that the student, VET tutor and workplace tutor are present in those discussions)
    f. skills in giving and receiving feedback
    g. skills in giving corrective feedback
    h. skills in student assessment according to the curriculum competences

14. My expertise in *developing WBL in cooperation with the VET school/ workplace.*
    I have
    a. skills in organising meetings with the VET school/workplace
    b. abilities to develop own abilities to act as an expert of WBL
    c. skills in coordinating work-based learning
    d. **VET tutors only:** skills in training workplace tutors
    e. **Workplace tutors only:** skills in developing workplace guidance in my workplace in cooperation with the VET school

APPENDIX 4.

TUTOR QUESTIONNAIRE 3 FOR WP TUTORS AND VET TUTORS
AFTER 6 MONTHS OF THE WBL TRAINING

Background

1. Country: Estonia, Latvia, Lithuania
2. Age: <20, 20 – 30, 30 – 40, 40 – 50, > 50
3. Gender: male, female
4. My professional field is Technology sectors (construction, metal sectors, transport, information technology, etc.), Food industry, Clothing industry, Business administration, Hotel, restaurant and tourism, Social services, Health, sports and wellness, Natural resources, Hand and art industry, Culture, Other
5. I am a VET tutor/ workplace tutor
6. Workplace tutors: work experience: Years
7. Workplace tutors: do you have a student in your guidance at the workplace at the moment: Yes/no
8. VET tutors: experience of teaching: ____Years
9. VET tutors: Guidance experience (of on-the-job learning): __Years
10. Size of the company/VET school: ____number of employees

After joint tutor training

11. My expertise in planning *students' learning at the workplace*
    I have
    a. knowledge of the role of the workplace tutor at the workplace related to VET students' learning at work
    b. organised visits at/to workplaces
    c. discussed with the student(s) about learning at work
    d. discussed with the student(s) about the key competences in the working life of my professional field
    e. knowledge of VET examinations in my professional field
    f. knowledge of the VET curriculum and the key competences in my professional field
    g. worked in planning the tasks for the student(s) at the workplace according to the VET curriculum
    h. informed other members of my workplace/VET school about WBL

12. My expertise *in guidance of work-based learning.*
    I have
    a. skills in guiding the student in work practices
    b. skills in interaction with the student
    c. skills in organising guiding discussions with the student
    d. skills in giving feedback to the student
    e. skills in guiding the student in self-assessment
    f. skills in handling problematic situations in workplace guidance
    g. knowledge of different kinds of guiding styles
    h. skills in guiding the student in cooperation with the VET school/workplace'

13. My expertise *in assessing the student´s learning and competence at the workplace.*
    I have
    a. skills in observing the student´s practices at the workplace
    b. skills in organising systematic discussions with the student at the workplace
    c. skills in building a learning-friendly atmosphere at the workplace
    d. skills in organising an evaluation discussion as a means of guidance
    e. skills in organising discussions for the student at the workplace/VET school in cooperation with the workplace tutor/VET tutor (so that the student, VET tutor and workplace tutor are present in those discussions)
    f. skills in giving and receiving feedback
    g. skills in giving corrective feedback
    h. skills in student assessment according to the curriculum competences

14. My expertise in *developing WBL in cooperation with the VET school/ workplace.*
    I have
    a. skills in organising meetings with the VET school/workplace
    b. abilities to develop own abilities to act as an expert of WBL
    c. skills in coordinating work-based learning
    d. **VET tutors only**: skills in training workplace tutors
    e. **Workplace tutors only**: skills in developing workplace guidance in my workplace in cooperation with the VET school

15. The benefits of the joint WBL tutor training are…
16. The cooperation with enterprises has increased after the joint training: yes /no

VET tutors:

17. After the joint training
    a. I have succeeded in raising the quality of the cooperation with in-company trainers
    b. I have succeeded in developing my professional and pedagogical skills
    c. I have succeeded in updating my vocational skills and knowledge in cooperation with in-company trainers
    d. I have succeeded in improving my knowledge of current work practices in cooperation with in-company trainers
    e. I have succeeded in improving my coaching competences to foster entrepreneurship and business awareness among students in cooperation with workplace staff

Workplace tutors:

18. After the joint training
    a. I have succeeded in raising the quality of the cooperation with VET trainers
    b. I have succeeded in developing my professional and pedagogical skills
    c. I have succeeded in updating my vocational skills and knowledge in cooperation with VET trainers
    d. I have succeeded in improving my knowledge of the current VET curriculum and practices in cooperation with VET trainers
    e. I have succeeded in improving my coaching competences to foster entrepreneurship and business awareness among students in cooperation with VET trainers

19. Please, give your suggestions for developing the joint WBL training contents, methods or organisation of the training…

APPENDIX 5.

QUESTIONNAIRE 4 – VET STUDENT QUESTIONNAIRE

Dear student,

Please answer these questions. Read each question and the instructions on it carefully. Choose the alternative that best fits you. In some questions there is an open space to write your own thoughts. Feel free to write them.

These questions are asked from a lot of students in Estonia, Latvia and Lithuania. Only the researchers will see all the answers and they handle them with care. Your individual responses cannot be recognised – so feel free to answer openly and honestly.

Your background

1. Country: Estonia, Latvia, Lithuania
2. Age: I am 14, 15, 16, 17, 18, 19, 20 years old, 21 years or older
3. Gender: male, female
4. My professional field of study is Technology sectors (construction, metal sectors, transport, information technology, etc.), Food industry, Clothing industry, Business administration, Hotel, restaurant and tourism, Social services, Health, sports and wellness, Natural resources, Hand and art industry, Culture, Other
5. I have studied in VET school; 1, 2, 3 , 4 years
6. I have had learning periods at the workplace; once, twice, three times, more than 3 times
7. My learning periods at the workplace have been; 1–2 days, 3–5 days, 2 weeks, 3 weeks, 1 month, something else/how long

ALTERNATIVES: I cannot say, not at all, satisfactorily, well, excellently / I cannot say, not at all, a little, quite much, a lot

My experience of learning at work

I BEFORE the learning at work period

8. I got information about the possibility of 'learning at the workplace'
   a. from my teacher(s)
   b. from my peers
   c. from my parents
   d. from somebody else, who? _____
   e. I heard or read from somewhere else, where?_____

9. My teacher(s) informed me about learning at work before the period by
   a. talking to the whole class
   b. talking with me individually
   c. giving me some information in writing
   d. in some other way, how? _____
   e. My teacher(s) did not talk about it at all

10. Before the learning at work period, my teacher(s) talked with me (told me)
   a. about the workplace where I was going to go
   b. about what I should do there
   c. about the skills needed at working life
   d. about the skills/competences I should learn at the workplace
   e. about how I should behave at the workplace
   f. about practicalities related to the learning period at the workplace (working hours, how to dress, where to eat, how to get there, etc.)
   g. about something else, what? _____

11. Before the study period, I got information from the workplace
   a. they sent some information to the school and I got it from there
   b. I made a preliminary visit to the workplace with my teacher before the learning period started
   c. I made a preliminary visit to the workplace on my own before the learning period started
   d. I used the internet to find information about the workplace
   e. I talked with some other student(s) who knew the workplace/company
   f. I got some other information, what?_____

II **DURING** the learning period at the workplace

12. **When** I was learning at the workplace my teacher(s) came to the workplace; yes /no

    If 'no' -> move to question 20 / if 'yes' continue to question 18

13. When my teacher visited the workplace, I talked with them
    a. about what I had done at the workplace
    b. about the skills/competences I had learnt
    c. about how things learnt at school are related with the work at this workplace
    d. about what I should still learn
    e. about how well I had learnt what I had learnt
    f. about how the tutor at the workplace had guided me
    g. about how the other people at the workplace had guided me
    h. about my interaction with others at the workplace
    i. about my activeness
    j. about something else, what?_____

14. When my teacher visited the workplace
    a. s/he observed me doing the work;
    b. s/he was doing the work with me;
    c. s/he gave me feedback about me doing the work
    d. we had a meeting with the teacher, my workplace tutor and me, where we talked about my learning at the workplace

15. At the workplace I talked with my workplace tutor about
    a. what I had done at the workplace
    b. the skills/competences I had learnt
    c. how things learnt at school are related with the work at this workplace
    d. what I should still learn
    e. how well I had learnt what I had learnt
    f. how the tutor at the workplace had guided me
    g. my interaction with others at the workplace
    h. my activeness
    i. something else, what?_____

16. My workplace tutor
    a. showed me how to do work tasks;
    b. observed me doing the work tasks;
    c. advised me about me doing the work;
    d. was doing the work tasks with me;
    e. gave me feedback while I was doing the work tasks;
    f. let me do many/diverse work tasks;
    g. talked with me about the skills I should have in this professional field;
    h. knew well their own work;

III AFTER the learning period at the workplace

17. My teacher(s)
    a. talked with me about my experiences in the workplace
    b. let me tell other students about my experiences at the workplace while learning at work
    c. made me assess what I had learnt at the workplace
    d. assessed my learning at the workplace
    e. talked with me about the next learning at work period
    f. talked with me about what I should learn next at the school
    g. encouraged me further in my learning
    h. asked me to write a report of my learning at the workplace
    i. did not talk at all about the learning at work period

18. I think that what I had learnt in school was useful for the tasks I did at the workplace(s) yes/no
19. My teachers know well what is needed at work yes/no
20. My teachers can do the work tasks at the workplaces themselves yes/no
21. In addition, I would also like to say regarding my experiences of learning at workplaces that_____

APPENDIX 6.

QUESTIONNAIRE 5 – VET SCHOOL MANAGERS

Please take the time to read each question carefully and respond with your honest thoughts.

Please also fill in the background information, as it is needed in order to get an overview of all the respondents. This information will be handled anonymously and confidentially, and your individual responses cannot be recognised.

Background information of your organisation

1. Country: Estonia, Latvia, Lithuania
2. Name of the organisation _____
3. Size of the organisation: number of employees

Background information of the respondent:

4. Position in the organisation: /principal/manager/ Assistant principal/ Head of department/ Other, which?
5. Years in the organisation: 0–1, 2–6, 7–10, 11–
6. Gender: male, female
7. Name:
8. In what way have you been involved in work-based learning issues? WBL coordination, Practical organisation, Management (contacts, financing, etc.), Tutoring

ALTERNATIVES: Not at all (1), satisfactorily (2), well (3), excellently (4), I cannot say

Work-based learning in companies

9. About students' learning at workplaces
    - How well do VET students reach learning objectives that have been set for work-based learning?
    - How well do companies support the students to attain the learning objectives set for them?
    - Companies are familiar with the education and the curriculum in which the students are studying.

- Companies ensure that the objectives of the curriculum are covered.
- Work tasks change during on-the-job learning so that the desired competence is achieved.
- Companies' operations are in line with the competence requirements of the profession that are described in the curriculum.
- Companies provide systematic and goal-oriented guidance for students.
- The company has trained staff for guidance.

Correspondence between education and working life

10. Correspondence between education and working life
    - How well do young people's professional skills that are learnt at school meet the demands of working life?
    - If you chose not at all or satisfactorily, we would like you to give a brief explanation of your opinion_____
    - How well do adults' professional skills that are learnt at school meet the demands of working life?
    - If you chose not at all or satisfactorily, we would like you to give a brief explanation of your opinion_____

11. What following general /key skills have to be learnt

	At school,	Before learning at work,	During learning at work
Ergonomics			
Knowledge management skills			
Learning skills			
Entrepreneurship			
Promoting capacity to work			
Time management skills			
Information technology skills			
Safety at work			
Skills to understand foreign cultures			
Skills to understand the company's financial performance			
Group work skills			
Flexibility			
Problem solving skills			
Ability to react to changes			
Interaction and communication skills			
Sense of responsibility			
Language skills			

Practical skills
Initiative
Sales skills
Skills to identify customers' needs
Customer service skills
Other skills, what?

Collaboration between companies and VET schools

12. The collaboration between companies and VET schools works
    There is no collaboration, Satisfactorily, Well, Excellently

13. Collaboration regarding work-based learning
    - VET schools inform companies about the objectives of work-based learning.
    - Companies and VET schools have agreed about guidance to the students.
    - Responsibilities between the companies and VET schools are agreed.
    - Assessment of the students' competences is discussed.
    - VET schools have a supportive role in work-based learning.

14. The staff of the companies
    - is willing to guide students
    - has skills in students' guidance and tutoring

15. When you consider the diverse forms of collaboration between companies and VET schools, which of them do you consider the most desirable and feasible? From the list below, choose three (3) you consider as the most important ones

    - Sponsorship of the VET schools, support for the economy
    - Scholarships to the students
    - Taking part in the assessment of students' competences
    - Giving topics for students' projects
    - Being a member in the VET school's working groups
    - Organising visits for the students in the company
    - Ordering projects and reports that are implemented by students from the VET schools
    - Providing introductory places to teachers and study counselors of VET schools
    - Giving expert lectures at VET schools
    - Recruiting new employees

- Apprenticeship collaboration
- Work-based learning / on-the-job learning to students
- Providing summer jobs to the students

16. How should collaboration regarding work-based learning / on-the-job learning be developed?

Please assess the training of workplace tutors and VET tutors jointly

17. Joint training of the workplace tutors and VET tutors
    Can't say, not at all, satisfactory, well, excellently
    - has increased understanding of the goals of the curriculum
    - has increased the development of the curriculum together with VET schools
    - has increased the assessment skills of professional competences in the company
    - has increased collaboration between the company and VET school in general
    - has strengthened guidance and tutoring skills in the company

How should training for workplace tutors and VET teachers be developed (length, contents, way of organising the training)?

18. What is the optimal length of the training?
19. What is the optimal way of organising the training?
20. Who should train?
21. How do you think work-based learning/training should be developed over the next four years in your country?

APPENDIX 7.

QUESTIONNAIRE 6 – COMPANY MANAGERS (OR ALIKE)

Background information of the company

1. Country: Estonia, Latvia, Lithuania
2. Name of the company
3. Field of business: Technology sectors (construction, metal sectors, transport, information technology, etc.), Food industry, Clothing industry, Business administration, Hotel, restaurant and tourism, Social services, Health, sports and wellness, Natural resources, Hand and art industry, Culture, Other
4. Size of the company: 1–9, 10–49, 50–100, 101–250, 251 or more

Background information of the respondent:

5. Position in the company: Owner, manager, superior, expert, craftsman
6. Years in the company: 0–1, 2–6, 7–10. 11->
7. Gender: male, female
8. Name:
9. Does the respondent have the role of trainer in the company at the moment? Yes, No

Learning of the profession in the company

10. What is the annual intake of VET students in the company? 0, 1–3, 4–6, 7 or more

11. Please assess the following points from the point of view of your company
    Can't say, not at all, satisfactory, well, excellently
    - How well do VET students reach learning objectives that have been set for work-based learning?
    - How well do companies support the students to attain the learning objectives set for them?
    - Companies are familiar with the education and the curriculum in which the students are studying.
    - Companies ensure that the objectives of the curriculum are covered.
    - Work tasks change during on-the-job learning so that the desired competence is achieved.
    - Companies' operations are in line with the competence requirements of the profession that are described in the curriculum.

- Companies provide systematic and goal-oriented guidance for students.
- The company has trained staff for guidance.

12. Correspondence between education and working life
    - How well do young people's professional skills that are learnt at school meet the demands of working life?
    - If you chose not at all or satisfactorily, we would like you to give a brief explanation of your opinion_____
    - How well do adults' professional skills that are learnt at school meet the demands of working life?
    - If you chose not at all or satisfactorily, we would like you to give a brief explanation of your opinion_____

13. What following general /key skills have to be learnt

    At school, Before learning at work (1), During learning at work (2)

    Ergonomics
    Knowledge management skills
    Learning skills
    Entrepreneurship
    Promoting capacity to work
    Time management skills
    Information technology skills
    Safety at work
    Skills to understand foreign cultures
    Skills to understand the company's financial performance
    Group work skills
    Flexibility
    Problem solving skills
    Ability to react to changes
    Interaction and communication skills
    Sense of responsibility
    Language skills
    Practical skills
    Initiative
    Sales skills
    Skills to identify customers' needs
    Customer service skills
    Other skills, what?

Collaboration between your company and VET schools

14. For how many years has your company collaborated with VET schools? No collaboration, 0–1, 2–3, 4–5, more than 6 years

15. The collaboration between our company and VET schools works Can't say, no collaboration, satisfactorily, well, excellently

16. Collaboration regarding work-based learning
    - VET schools inform companies about the objectives of work-based learning.
    - The company and VET schools have agreed about guidance to the students.
    - The responsibilities between the company and VET schools are agreed upon.
    - Assessment of the students' competences is discussed.
    - VET schools have a supportive role in work-based learning.

17. If you consider the diverse forms of collaboration between companies and VET schools, which of them do you consider to be the most desirable and feasible? From the list below, choose three (3) you consider as the most important ones

    - Sponsorship of the VET schools, support for the economy
    - Scholarships to the students
    - Taking part in the assessment of students' competences
    - Giving topics for students' projects
    - Being a member in the VET school's working groups
    - Organising visits for the students in the company
    - Ordering projects and reports that are implemented by students from the VET schools
    - Providing introductory places to teachers and study counselors of VET schools
    - Giving expert lectures at VET schools
    - Recruiting new employees
    - Apprenticeship collaboration
    - Work-based learning / on-the-job learning to students
    - Providing summer jobs to the students

18. Staff of the companies
    Not at all, satisfactorily, well, excellently
    - is willing to guide students
    - has skills in students' guidance and tutoring

19. How should collaboration regarding work-based learning / on-the-job learning be developed?

Training of workplace tutors (in-company tutors)

20. How many staff members of the company have got training regarding work-based learning?

21. Joint training of the workplace tutors and VET tutors
    Can't say, not at all, satisfactory, well, excellently
    - has increased understanding of the goals of the curriculum
    - has increased development of the curriculum together with VET schools
    - has increased the assessment skills of professional competences in the company
    - has increased collaboration between the company and VET school in general
    - has strengthened guidance and tutoring skills in the company

22. What are the good experiences of the joint workplace tutor training from the company's point of view?

How should the training for workplace tutors and VET teachers be developed (length, contents, way of organising the training)?

23. What should be the contents of the training?
24. What is the optimal length of the training?
25. Who should train?
26. What are the company's needs regarding the guidance of students at the workplace?

27. What meaning do VET students have for the company? (choose as many as necessary)
    - recruiting new employees
    - teaching a new employee for the company
    - increasing clientele through students
    - creating and maintaining a positive image
    - maintaining the staff's competences through guiding students
    - participating in VET education
    - collaborating with VET schools
    - smoothing backlogs with student work
    - getting a free workforce from the students

APPENDIX 8.

WBL TUTOR GROUP INTERVIEW

Instructions for the small group (=2 VET tutors and 2 workplace tutors)

You have 20 minutes for this task:

1. Discuss the themes/questions below in your group so that everyone's opinions are heard
2. Write down a summary in the table using a computer and send it to your trainer (or if you cannot do it with a computer, write down on the paper with clear handwriting)

You don't need to use perfect sentences, but try to formulate your responses so that your thoughts can be easily understood. Thank you for your contribution

Summary of group discussion	**Justify your answers**
What was good in the joint WBL training?	
What was unnecessary in the joint WBL training?	
What are the benefits of the joint WBL training?	
We need more training about these topics:	

APPENDIX 9.

PAIRED SAMPLES T-TEST OF VARIABLES PLANNING, GUIDANCE, ASSESSMENT AND DEVELOPING BY COUNTRIES

Country			Paired Differences					t	df	Sig. (2-tailed)
			Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
						Lower	Upper			
Estonia	Pair 1	Planning – Planning2	-,23810	4,24155	,53439	-1,30632	,83013	-,446	62	,657
	Pair 2	Guidance – Guidance2	-,76190	4,77802	,60197	-1,96523	,44142	-1,266	62	,210
	Pair 3	Assessment – Assessment2	,03175	4,73139	,59610	-1,15984	1,22333	,053	62	,958
	Pair 4	Developing – Developing2	,09836	4,25325	,54457	-,99095	1,18767	,181	60	,857
Latvia	Pair 1	Planning – Planning2	,38372	3,94422	,42532	-,46192	1,22936	,902	85	,369
	Pair 2	Guidance – Guidance2	-,23256	4,56244	,49198	-1,21075	,74563	-,473	85	,638
	Pair 3	Assessment – Assessment2	-,02353	4,47207	,48506	-,98813	,94107	-,049	84	,961
	Pair 4	Developing – Developing2	,83908	3,86960	,41486	,01436	1,66380	2,023	86	,046
Lithuania	Pair 1	Planning – Planning2	,30189	4,18599	,57499	-,85191	1,45569	,525	52	,602
	Pair 2	Guidance – Guidance2	,12963	3,87564	,52741	-,92822	1,18748	,246	53	,807
	Pair 3	Assessment – Assessment2	-,03636	4,69422	,63297	-1,30539	1,23266	-,057	54	,954
	Pair 4	Developing – Developing2	-,59184	3,95768	,56538	-1,72862	,54494	-1,047	48	,300

APPENDIX 10.

PAIRED SAMPLES T-TEST OF VARIABLES PLANNING, GUIDANCE, ASSESSMENT AND DEVELOPING BY COUNTRY

VET tutor/ Workplace tutor			Paired Differences					t	df	Sig. (2-tailed)
			Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
						Lower	Upper			
VET	Pair 1	Planning – Planning2	,60811	3,87764	,45077	-,29027	1,50648	1,349	73	,181
	Pair 2	Guidance – Guidance2	,13514	3,77201	,43849	-,73877	1,00904	,308	73	,759
	Pair 3	Assessment – Assessment2	,31081	4,53880	,52762	-,74074	1,36237	,589	73	,558
	Pair 4	Developing – Developing2	-,02778	4,18236	,49290	-1,01059	,95503	-,056	71	,955
Work-place	Pair 1	Planning – Planning2	,05512	4,11020	,36472	-,66665	,77689	,151	126	,880
	Pair 2	Guidance – Guidance2	-,46512	4,76977	,41996	-1,29607	,36584	-1,108	128	,270
	Pair 3	Assessment – Assessment2	-,10853	4,62034	,40680	-,91345	,69639	-,267	128	,790
	Pair 4	Developing – Developing2	,47200	3,84703	,34409	-,20905	1,15305	1,372	124	,173

APPENDIX 11.

PAIRED SAMPLES T-TEST OF VARIABLES PLANNING, GUIDANCE, ASSESSMENT AND DEVELOPING. TESTING HAS BEEN DONE BY ORGANIZATION OF TRAINING GROUPS, MEANING TANDEM, VET EMPHASIZED AND WORKPLACE EMPHASIZED TRAINING GROUPS.

Ryhma3			Paired Differences					t	df	Sig. (2-tailed)
			Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
						Lower	Upper			
Work-place	Pair 1	Planning – Planning2	-,00943	3,99880	,38840	-,77955	,76069	-,024	105	,981
	Pair 2	Guidance – Guidance2	-1,07547	4,78828	,46508	-1,99764	-,15331	-2,312	105	,023
	Pair 3	Assessment – Assessment2	-,05714	4,53157	,44224	-,93411	,81983	-,129	104	,897
	Pair 4	Developing – Developing2	,46154	4,02160	,39435	-,32056	1,24364	1,170	103	,245
Tandem	Pair 1	Planning – Planning2	,43939	4,43111	,54543	-,64991	1,52870	,806	65	,423
	Pair 2	Guidance – Guidance2	,76119	4,27498	,52227	-,28156	1,80394	1,457	66	,150
	Pair 3	Assessment – Assessment2	,30882	5,18107	,62830	-,94526	1,56291	,492	67	,625
	Pair 4	Developing – Developing2	,74242	4,07737	,50189	-,25992	1,74477	1,479	65	,144
VET	Pair 1	Planning – Planning2	,34375	3,64213	,64384	-,96938	1,65688	,534	31	,597
	Pair 2	Guidance – Guidance2	,27273	2,92909	,50989	-,76588	1,31134	,535	32	,596
	Pair 3	Assessment – Assessment2	-,12121	3,41648	,59473	-1,33264	1,09022	-,204	32	,840
	Pair 4	Developing – Developing2	-1,43333	3,55919	,64982	-2,76236	-,10431	-2,206	29	,035

THE CONSORTIUM OF THE PROJECT TTT4WBL

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Testing New Approaches to Training VET and Workplace Tutors for Work-Based Learning consisted of the nine partner institutions:

National Centre for Education (Latvia)

The Ministry of Education and Science of Latvia

The Latvian Chamber of Commerce and Industry

Baltic Bright (Latvia)

Qualifications and Vocational Education and Training Development Centre (Lithuania)

Vilnius Car Mechanics and Business School (Lithuania)

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JAMK University of Applied Sciences, School of Professional Teacher Education conducted the research in the Baltic countries on the impact of the work-based learning tutor training, in which the teachers from VET schools and the representatives of the companies were trained together.

According to EU guidelines, research on policy experimentations, like described here, need to depend on the collection and evaluation of evidence through large-scale field trials, and the related reports should consist of more descriptive findings than conceptual analysis. Accordingly, this report involves a lot of views of the diverse informants in the Baltic countries. The report describes how the participants of the tandem training assessed their competence before and six months after the training. In addition, the report relates the lead trainers' experiences regarding implementing the training and the views of the VET students, the VET school managers and the company managers about work-based learning and the tutor training.

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