

## Skills for Baltic Wood Industry – European Quality in Vocational Education and Training

### SUMMARY AND RECOMMENDATIONS BASED ON CASE STUDIES FROM ESTONIA, LATVIA, and LITHUANIA

#### 1. Preparation for module development

##### Identification of employers' needs via interviews and surveys

**Latvia:** Latvian project partners consulted with managers and experts from 36 wood processing companies in Latvia. As a result of the research, a survey of wood processing companies was prepared with the skills and skill groups identified. Respondents were asked to rate the importance of each skill on a scale of 1 to 10, where 1 is not important and 10 is very important. Each respondent was also able to add skills that are not on the list, but which they think should be there. Analysis of the results and discussions with company managers indicated that skills in these skill groups are important for companies in general, but not for a specific production manager - they are mainly covered by other specialists, and the production manager only needs general competence in these issues. It is important to note that even if a group of skills scored low in significance, they still had some skills that were rated as very important. The analysis of respondents' added skills identified one group of added skills: **energy efficiency, digitization, and robotics in woodworking.**

##### **Lithuania:**

The Lithuanian partners organised a roundtable discussion involving representatives of furniture and wood processing companies in Kaunas district, representatives of the VLMPEA Association, and Kaunas College lecturers. During the discussion, the competences that are most lacking in the modern workforce and that could meet the needs of the labour market were identified:

- The introduction of flexible production systems,
- Integrated information systems,
- Digital design,
- Rapid prototyping using 3D printing technologies,
- Robotics solutions,
- Virtual and Augmented Reality,
- Biotechnology and Nanotechnology.

Once the core competences have been identified, a plan of modules has been developed to acquire these competences.

**Estonia:** In cooperation with Kagu-Eesti Puiduklaster (South Estonian Furniture Cluster), employer survey was conducted in December 2018 among the managers of the companies belonging to the cluster. Managers of companies in 11 regions responded to the survey. The aim of the project was introduced to employers and they were asked what kind of specialists there is

a need for. 45.5% of the respondents were interested in the training of their employees and 9.1% were interested only if the curriculum meets the needs of these companies. 45, 5% of respondents were not interested in training and preferred to train the employees themselves. The entrepreneurs were also asked which topics they would like to train their employees on and which specialists they need according to a Level 5. In addition to the survey, partners interviewed the managers of the largest companies in the region (AS Barrus, AS Wermo, AS Empak). Based on the gathered information, it could be pointed out that companies want to provide additional knowledge primarily to first-level managers. The curriculum for first-level managers should increase knowledge in the field of wood and develop team management skills.

### **Establishment and work of expert groups**

**Latvia:** In Latvia, within the framework of the development of the content of the module, the competent specialists of the project partners were involved, as well as voluntary experts in the fields of various industrial technologies, labour, and environmental protection, as well as human resources management. Various forms of cooperation were combined in the development of the modules - some topics were developed by the specialists of the Woodworking Department of the Faculty of Forest of the Latvia University of Technologies and Life Sciences, some by experts from “Latvijas Finieris” and LKUEA. In other modules, the main initiative was taken directly by the employers' representatives, involving the educator side in clarifying the teaching methodology.

**Lithuania:** The Lithuanian partners organised a roundtable discussion involving representatives of furniture and wood processing companies in Kaunas district, representatives of the VLMPEA Association, and Kaunas College lecturers. Various forms of cooperation were combined in the development of the modules. During the module development phase, Kaunas UAS lecturers made several visits to companies to gain a better understanding of the working environment.

**Estonia:** Curriculum was prepared by teachers of VKHK and experts-entrepreneurs representing the South-East Furniture Cluster. There were several meetings where teachers and experts discussed the themes of the curriculum and training plan to be sure all subjects will support each other and not overlap.

VKHK has a long experience to provide adult courses for the employees, but this program was longer (1 year) and experimental. In some cases, there were no suitable teachers in VKHK so it was needed to find new teachers among experts in Cluster and in Tsender (unit of VKHK).

Experts and teachers worked through the project joint curriculum and adapted it into proposed time frames. The aims and expected learning outcomes were agreed upon in the meetings of the expert groups.

### **Determination of learning outcomes, quality assurance of curriculum development**

**Latvia:** Latvian partners used the information about current national sectoral qualifications and occupational standards and information from National Centre of Education for module development, so that after the end of the project the training programme can be certified by national authorities. Learning outcomes were defined and described in module templates.

**Lithuania:** The EQAVET framework and its key elements: design, development, response, communication, training, evaluation, have been used and applied to develop and successfully implement quality training content. In order to improve and enhance the qualifications of the staff, all training materials were developed in accordance with the WBL and PBL approach, where the training content and situations are realistic and the knowledge acquired is applicable. Moreover, when the template for the description of the modules of the training programme was developed, it was already explicitly foreseen that each module had an immediately predictable and clearly defined objective and learning outcomes. All stakeholder groups contributed to the development of the module descriptions. Employers were asked to say which skills they think are most lacking in their employees. Training materials were developed based on the recommendations. During the module development phase, Kaunas UAS lecturers made several visits to companies to gain a better understanding of the working environment. According to EQAVET, this helps to better understand the needs and requirements of the working environment. The development of the teaching materials and modules was also based on the LT Ministry of Education and Science the description of the Engineering group of fields of study and the description of the Technology group of fields of study, The Quality Assessment Centre for Studies assesses the quality of studies.

**Estonia:** In developing the curriculum, we primarily proceeded from the Estonian Qualifications Framework. In the case of level V curricula, we can talk about basic and continuing education. Prerequisites for continuing education are secondary education and the student's previous work or study experience in the field of study. VKHK has a long-term experience in teaching wood specialties at level II - V, there has been a lack of continuing education programs that would help a person working in the field to develop further in their work.

Based on the needs of the region's wood sector entrepreneurs, we concluded that advanced level curriculum is needed for the first-level managers. The first-level managers often grow within the company. Being already on the position of group leader, they need outside support and knowledge to do their job successfully. To determine the learning results of the curriculum we combined the national vocational standard requirement for the V-level curriculum advanced with the real needs of entrepreneurs.

After common discussions with the partners, we developed an initial version of the Level V advanced curriculum, which was supplemented by the entrepreneurs of wood processing and furniture sector were joining to the project as experts. We tested the operation of the curriculum on an ongoing basis. Working with the training group No 1, we collected feedback from both the learners and the teachers at the end of each subject module. We were constantly analyzing what could be done differently, so we could start with the 2nd training group much more confidently, because we knew where and how we wanted to get there.

The wood competence center Tsender as a subdivision of VKHK, organized the development of the curriculum for the first time, the work on curriculum development was monitored by the head of the school's education department and an adult education department, as well as business experts from the partner institution - Furniture Cluster.

## 2. Description of preparation for implementation

### Choosing and training teachers

**Latvia:** To inform the teaching staff of LLU Woodworking Department about the goals and tasks to be achieved in the pilot project, program structure and content, as well as employers' vision of industry development trends, training internship with the companies was organized in March 2019. The aim of the internship was to understand the possibilities of implementing the WBL form of study in the EQF level 5 vocational education program, in cooperation with the educational institution, the teaching staff, the learner and the employer.

**Lithuania:** To ensure the successful results of the project, great attention was paid to the selection of qualified teachers. Given that most participants are professionals with practical skills and applied in the workplace, the selection of project teachers focused on not only the theoretical level of theoretical and specialist knowledge, but also practical skills and experience. The main criteria applied were at least 3 years of pedagogical experience and at least 3 years of practical experience. Employers' recommendations were also taken into account. Almost 60 participants from different regions of Lithuania were invited to take part in the project: Kauno, Vilniaus, Jonavos, Klaipėdos, Plungės, Kėdainių, Šakių, Šiaulių, Alytaus, Karmėlavos, Šilutės. During the module development phase, Kaunas UAS lecturers made several visits to companies to gain a better understanding of the working environment.

**Estonia:** The teachers visited different companies before starting the curriculum development and the entrepreneurs came to Tsenter to share their ideas and expectations to the training. 2 of experts-entrepreneurs (through Furniture Cluster) were ready to run the trainings themselves.

Most of experts of Tsenter (6 persons) got an experience of curriculum development and teaching in the project. (Since the project the main role of Tsenter as an institution was to carry out practical implemental research and consult the furniture and wood manufactures, especially small and medium enterprises.) Wood experts were supported by adult learning experts to prepare and carry out the trainings. There were 4 experienced teachers from the training department were running the courses in the project as well. In total 15 different people were acting as teachers in 2 different groups.

Beside of knowledge about wood and producing sector and previous training experience we highly appreciated the readiness of the teachers not only to conduct the training, but also to participate in the development of curriculum and feedbacking training modules. Being open minded and creative were important criteria to select teachers to the project as well.

### **Choosing companies and participants**

**Latvia:** Latvian partners involved 36 companies in the woodworking sector in defining the curriculum, it was also decided to address these companies to attract learners - company management and potential learners clearly saw the opportunities that the program could provide. The first group of the pilot project enrolled 17 learners from 12 companies in the industry.

**Lithuania:** Project participants were attracted by communicating with the heads of Lithuanian furniture design and production and wood processing companies, disseminating the project in companies and in the public space. The most motivated and skilled employees were invited to the formed group of participants. Employers' recommendations were also considered.

**Estonia:** Before announcing the training, the idea of the training was presented at many meetings with entrepreneurs. Despite that, few weeks before the training was starting, there were not enough registrations for the course. Therefore, 8 people from one company (UPM Kymmene Otepää Plywood Factory) were admitted. The company showed high interest in the training and there were free places. By the start of the training there were exactly 20 participants - from a total of 8 different companies. After the first training days the interest to the training programme got up, so a backup list for potential participants was compiled. Dropping out rate from the course was very small, approximately after every big module 1 person was changed in the group. Finally, 20 people from 11 companies graduated the last part of the course. 14 participants completed the entire programme (all modules).

### **3. Description of the training program implementation**

#### **Aspects of Quality Assurance/ Improvement (improvement of quality of modules, methods, learning materials)**

**Latvia:** The total estimated duration of the education program was 3000 hours, of which 1/3 is full-time and 2/3 is work-based learning. This amount of training was planned to be implemented within 24 months (2 years), with full-time training 4-5 days a month (every other week, Thursdays, and Fridays), 10 academic lectures every day. The face-to-face training took place mainly in Jelgava, in the premises of the Woodworking Department of the Faculty of Forest, at LLU, with separate visits to companies elsewhere in Latvia. Of course, with the onset of the COVID-19 pandemic, curricula and implementation techniques were adjusted: from autumn 2020, face-to-face and remote trainings were combined.

**Lithuania:** Theoretical lectures were given to ensure the quality of the module teaching, teaching methods of brainstorming and discussions were used. Practical tasks and situations based on the examples of the furniture industry have been prepared to substantiate the theory. The final practical task of the module includes the evaluation of all the taught topics.

The greatest challenge in ensuring the quality of training was during teleworking. To improve telework, work tools should be considered that allow for the involvement of each participant. Because participants were not connected to the college system via their e-mails, teachers were unable to take advantage of some of the teleworking tools (remote whiteboard, software for drawing).

To improve the quality of the work, it is very important to have a teaching (learning) class (Moodle equivalent), where teachers could place material, assignments, lecture dates, other deadlines and receive participants' work, which would make the material accessible to all, freely changeable regardless of the need. This would improve both project communication and save time for teachers and participants.

**Estonia:** Estonian partners joined 10 modules from the joint curriculum into 3 bigger modules (parts). After every module, the feedback from the learners and teachers was asked to analyse – what was working and what should be changed.

**Communication aspects (with participants, with industry, with other project partners, with governmental institutions.)**

**Latvia:** In Latvia, the self-organization of the forest sector is at a high level, thus the internal communication channels of the professional organizations of the sectors were used to disseminate information about the progress of the project. Project partners participated in general meetings of members of industry associations, online meetings, as well as informed about current events in e-mail and whatsapp contact groups. Project news is widely described in the printed industry magazine "Baltijas Koks".

In order to guide the necessary decision-making in the regulatory environment, presentations were organized for leading officials of the Ministry of Education and Science, as well as project partners were regularly invited to participate in the Saeima Education and Science Commission meetings, submitting proposals.

The social network accounts of AHK and LLU Woodworking Department were used to inform the general public, the project experience was also informed in TV and radio programs dedicated to vocational education, as well as in various conferences and seminars.

Communication with students was organized in whatsapp groups and in the form of e-mails, study materials were stored in a freely available file storage cloud.

**Lithuania:** All information is sent to project training participants by e-mail. A closed group "Skilled UP Kaunas 2020" has been created on the social network Facebook, where both training participants and lecturers working on the project share all information related to training and learning achievements. Communication with companies is conducted directly or through training participants. Virtual meetings are organized with project partners.

**Estonia:** Before the start of the trainings, the project team had very active communication with the employers, through whom we were looking for the students at training groups. Most of students reached the project thanks to the information provided by their employers. Thereafter, communication with the members of the training group took place most actively. For both groups FB accounts were opened, for the communication the training issues e-mails and phone calls were used. Related to the COVID-19 crisis, we mainly used Moodle as a communication environment, but also Discord and Teams.

There was constant communication with the main partner of the project, less with other partners. Jelgava University of Life Sciences played a major role in the curriculum development process, the communication was more active in the curriculum designing period.

The communication of the project team with the Ministry of Education and Research as a governmental institution was not quite active during the project. We presumed that there was a straight contact to the ministry on the school management level, so we saw our role to provide updated information the school management regularly. We kept the Centre's partners - the Association of Local Governments of Võrumaa and the Furniture Cluster - constantly informed about the project achievements and activities as well. We used Tsenter`s and Furniture Cluster`s websites and FB accounts for spreading information about the project.

**How the applying EQAVET blocks “respond to learners’ needs” and “assess the learners” can be ensured? How was that done? Learning outcomes are particularly important here (instead of credit points or hours)**

**Latvia:** During the implementation of the modules 3 quality assessment levels were used. To provide operative information about the work of each lecturer, guest lecturer and expert, at the end of each **full-day study day** the learners filled in a questionnaire evaluating the performance of the training content and its implementers. To ensure the overall quality assurance of the content and implementation of the educational program, **at the end of the implementation of each module**, the learners also filled in a questionnaire evaluating the performance of the module content and its implementers.

Assessment of learners' learning achievements:

- a. At the beginning of the module, learners are informed about the learning outcomes, the final work of the module - the study of the content of the module topics in the student's work environment, formulating proposals for work environment and process improvements, as well as evaluation criteria.
- b. At the end of the module, the teaching staff involved in its implementation evaluates the work done with a mark within their competence.
- c. Within the last - 10th module of the educational program, the learners develop a final work that strengthens the competencies acquired in all previous modules.

**Lithuania:** Throughout the project, the training material was oriented towards the learners' market needs. The training materials were designed to reflect the importance of practical work and innovation and sustainability and the possibility of applying the acquired knowledge in the working environment. When the template for the description of the modules of the training programme was developed, it was already explicitly foreseen that each module had an immediately predictable and clearly defined objective and learning outcomes to achieve. This approach allows each learner to have a clear understanding from the outset of the skills, competences and knowledge that each module will provide. This information is particularly important for working participants and their employers, as they are typically investing their working and leisure time in professional development and training activities. Feedback from learners, employers and trainers

was also obtained to assess the quality of the programme and the content offered. This allowed for a systematic adaptation and improvement of the content, as well as of the teaching methods, materials and approach, to understand whether the knowledge acquired was applied in the work environment and had a positive impact on the worker.

**Estonia:** Feedback from participants and teachers was gathered after every module, to improve further training.

## 4. Evaluation of the Training Programme

### Evaluation by Participants

**Latvia:** The final survey of the modules consists of eight statement sentences about the training program, each of which must be assessed individually and the most appropriate answer on the scale must be marked: strongly agree, partially agree, neutral, partially disagree or strongly disagree.

1. Content and topics of the module were relevant for the labour market.
2. The topics of the module were broad enough and interesting for me.
3. The pace of training in this module was suitable for me (it was neither too fast nor too slow);
4. The ratio of theory to practical examples was optimal.
5. In the training module I expanded, gained new knowledge and competencies and / or refreshed knowledge.
6. In the training of the module, the lecturers were knowledgeable, experienced experts in their field.
7. The production plants and objects for visits were selected successfully, I gained new experience, good practice.
8. The conditions of the final work of the module were understandable and the implementation was useful (listening to presentations of other participants, participating in discussions)

Overall, for all questionnaires, 77% of responses strongly agree to the statement criteria, 21% responded with partial agreement and 2% with a neutral rating.

Surveys also invited students to express themselves freely and express their views on the learning process. Students have mentioned in their comments that they have improved their knowledge in calculations, operational costs, analysis. The operational cost module seemed complicated to some students, with a large amount of previously unknown information, but in general the module was appreciated as an insight into management accounting and financial calculations.

**Lithuania:** The project evaluation questionnaire was sent to 50 respondents. Responses were received from 33. The main purpose of the questionnaire was to find out participants' satisfaction with the quality of teaching, to identify aspects for improvement. The results obtained will be used

to improve and refine further training. The survey was anonymous using the Google Questionnaire form.

After the respondents evaluated the course content and the lecturers, it can be concluded that the training content met the expectations of most participants, the work of the lecturers included. Also, many either fully agree or agree that the training content is relevant to their work, the training material provided was informative and relevant. The duration of the training was sufficient.

The results of the course are evaluated by the participants in different ways. Most of the respondents have gained more knowledge of the subject being taught, most of them plan to apply the acquired knowledge and experience or are already applying it in the workplace. Although in general the participants are satisfied with the course, there are aspects that can be improved. Based on the results of the survey, we can conclude that the teachers did not always or insufficiently evaluate the previous knowledge of the participants, and there was no opportunity to share the experience with other participants of the course during the quarantine.

Most of the respondents apply or plan to apply the acquired knowledge at work. The participants liked the practical work the most, the systematic and clearly presented learning material, the work of the teachers and communication with colleagues from other cities. As aspects to be improved, respondents point to a clearer schedule of lectures, better communication of teachers during quarantine. All respondents would recommend courses to others.

**Estonia:** 15 participants filled in the online questionnaire. Most of the evaluated the program as useful and interesting and noted that the employers were supportive of their participation. 50% of respondents are interested in learning more about wood processing: LEAN production, sales trainings, teamwork, professional trainings, study trips, marketing, economics.

Suggestions for improvements:

- Some subjects should have more volume in hours. For example, drawing and design.
- More hours to the technical design and construction of the products.
- Budgeting, calculating the price of the product - this part was confusing.
- Involve more practitioners in teaching.
- On a practical side, the use of newer materials and finishing tools.
- The trainers already know how to make the training even better.
- 5 respondents thought that everything was OK.

### **Evaluation by Employers**

**Latvia:** The case study did not include any quantitative data, but feedback from “Latvijas Finieris” and LKUEA. “Latvijas Finieris” noted that training program has increased the involvement of the program participants in the processes in the work environment, and the further implementation of the study program is expected to be a valuable tool in training employees and increasing competitiveness. LKUEA noted that the implemented project accurately responds to the challenges of the labour market in Latvia, which is related to solving the issues of labour force availability and quality, including the industry's ability to move towards an even more innovative, digital, and climate-neutral production process.

**Lithuania:** An anonymous survey was sent to find out employers' views on training and participants' progress in the workplace. The survey was sent to 26 employers, responses were received from 11.

Employers note that while there has been no significant improvement in an employee's skills after the course, most still agree that the course has had a positive impact on the employee's performance. 8 out of 11 respondents say that employees were able to present their innovations, problem-solving methods, and ideas. While most employers do not consider employees to be promoted or pay increases, all agree that the courses were beneficial to the employee and would send other employees of the company to the course.

The courses met the expectations of many employers. The most frequently mentioned advantages are the introduction of new technologies and trends in the furniture industry, the improvement of economic knowledge, and the improvement of skills with design programs. A noticeable drawback is the distance learning courses. According to employers, the most necessary is more practical sessions, sharing of experience, focus on the most advanced companies and the latest technologies. All respondents agree that training for employees will have a positive impact on their work: some plan to increase their salary or promotion. Also, some believe that the knowledge acquired by the employee will allow for more confidence in the employee and assign more responsible tasks.

**Estonia:** In total 19 learners from 11 companies finished the course. At the same time 7 participants from 19 were employers for themselves, so they already answered to the feedback questions as the participants. 5 employers reacted to request fill the questionnaire positively.

One company representative was a quite new on his position and he was not informed enough to answer the questions about the training. One company did not react to proposal to fill in the questionnaire.

4 out of 5 respondents answered that course met their expectations as employers. All respondents agreed that they would recommend the course to others.

Advantages and disadvantages noted by employers:

- The employee will have a better understanding of entrepreneurship and the problems related to it.
- The advantage is the development of employees; in our case the disadvantage was the quite long distance from the training place.
  
- The employee got a very good overview of the legislation and could use it to his advantage (minus); the issues of health protection and employee-friendly work environment became clearer to employees (plus)
- The plus was flexibility from the side of organizers and activation of participants. As the disadvantage the duration of training could be mentioned. The schedule of the training put the company in a difficult situation due to the lack of employees.

Further improvements to the course mentioned by employers:

- Independent work with own employees in the company.
- The number of people participating in the training from one company could be more limited. In some cases, the whole attention was focused on one company.

- Maybe to handle business module more deeply.
- More flexibility to organise time.

### **Evaluation by Teachers**

**Latvia:** Within the framework of the project, the LLU Department of Woodworking was the everyday implementer of training modules, selection of lecturers, as well as training quality monitoring. LLU partners believe that the existing interaction in the project group of training and the quality of its results can be assessed as excellent. The compliance of the training module with the requirements of the industry and the needs of students always coordinated with partners, every 20 hours of student surveys, which allow to effectively identify crisis situations when quality indicators are declining, joint and quick problem solving - these have been the keys to success.

The total benefits so far for training providers after a training period of 1.5 years are as follows:

- Dropout is only 20%;
- The overall evaluation of the quality of the training module from students is very good in over 80% of cases;
- 80% of the involved teachers evaluated training process, technical support, interest and involvement of the training groups as excellent.

Advantages of this project:

- The organization of the training implemented within the project and the transfer of the applied teaching method is also possible in the classical education programs, which prepare the new specialists for the needs of the industry;
- Integration of companies' competence in the study process, improving the study content in accordance with the market demand;
- Introduction of a potential new program in the existing educational programs of the Department of Woodworking.

Existing shortcomings:

- The duration of the training at regular intervals, when there is theoretical training every 2 weeks, is too long and another solution should be found in the training schedule;
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The long duration of the training introduces differences between the competencies identified at the beginning of the project and the knowledge required from now on;

- The implementation of high-quality training in the current performance in the future must take into account that they will be at least 3-4 more expensive than the existing educational programs.

**Lithuania:** The questionnaire was sent to 8 teachers. Answers were received from 6 because two had just started teaching the course. The main purpose of the questionnaire is to find out the teachers' opinion about the work in the project. The results obtained will be used to improve and refine further training. The survey was anonymous using the Google Questionnaire form.

The aims and results of the project were clear to the teachers, the schedule of lectures was satisfactory, and there was enough time for most of them. Regarding the descriptions of the modules, one of the respondents emphasizes that working with 3D modelling programs was difficult because the participants' computer literacy was different: Teachers were not short of material resources, the only problem was the availability of e-books for participants.

Learning materials were sent to students via their e-mails. Prior to quarantine, arrangements were made live, at the start of remote quarantine, or students performed the work independently. One of the respondents explains: "The practical work done during the lectures was assessed with a cumulative grade. Students drew independent assignments at home / at work and sent the completed assignments to the teacher by e-mail, which were assessed with a cumulative grade. The individual project was completed one month after the industrial design training, providing students with additional in-depth consultations, and the completed project was graded. The final cumulative grade of the module consisted of 20% of the practical work cumulative grade, 30% of the independent work cumulative grade and 50% of the individual project grade in the ten-point grading system."

The problems faced by teachers working remotely, were the unclear lecture schedule, lack of communication between program coordinators and teachers regarding mailing lists and changes in participant lists.

**Estonia:** Most teachers mentioned in their feedback to project manager that more time should be planned for further topics and discussions, however it was hard to implement due to participants' schedules.

Estonian partners also conducted the evaluation of teachers. Project manager gave the participant feedback to the teachers personally. The average feedback to teachers was relatively high, but there is more room for improvement for those who made their debut as teachers within the project (experts and entrepreneurs whose main job is not teaching). The cooperation between the teachers, the interrelation of the subjects and tasks were highly evaluated.

### **Evaluation by partners themselves (cooperation + what have we gained + advantages + disadvantages + what could / should be done better)**

**Latvia:** By concretizing and providing conclusions, we can state that in assessing ourselves and the partnership in this project:

- 1 via experience and good practices exchange we gained useful insights
- 2 We learned from other partners that enhanced the quality of our operations.
- 3 We contributed to the international network broadening, improved our geographical visibility and spread.
- 4 We have been provided with a better understanding of the teaching process in other countries.

5. The participation in the international partnership brought better results than individual efforts would.

6. Participation provided strategy and tools to address skills shortages in wood processing sector

**Lithuania:** The project partners come from a wide range of backgrounds - higher education institutions, vocational training centres, associations. The diversity of the partners has allowed the project to be developed in a way that makes it relevant to as many participants as possible. It has also given an insight into the shortage of wood workers in other countries and how this problem is being addressed. The German partners were a great help to start short cycle studies in Lithuania, even if it was a pilot project. The cooperation was smooth, with all project partners being involved in the project activities at different times. A disadvantage that could be highlighted was the slow involvement of some partners in the project activities. In this case, the partners should take a more serious approach to the tasks assigned to them.

**Estonia:** The partnership of the project was the richness of the project, the presentations what we heard at the opening and closing conference and E-trainings gave a good overview of the developments in the field of wood in the Baltic States and Germany. The contacts established within the project will remain - Tsenter and Furniture Cluster have also decided to carry out a study trip for the representatives of the wood industry, which was canceled due to Covid19. Due to the special situation caused by Covid19, there was less direct communication than would have been. People's language skills and staff turnover in the institutions certainly played a role in communication.

## RECOMMENDATIONS

### **Recommendations for other industries or educational institutions regarding program development based on this model (based on the steps of preparing the program + acquiring participants + implementation)**

**Latvia:** During the two-year period, several trainees were unable to continue their training because they terminated their employment with the company and either did not continue working in the sector or the new employer was reluctant to support the employee's participation in the training.

Some examples showed that entering tripartite contractual obligations before the start of training between the educational institution, the employer and the learner would have served as an additional guarantee for the full acquisition of the educational program.

#### **Lithuania:**

- Assess participants' existing knowledge, allow participants to share and consider their experience.
- Provide a clear course schedule / plan. Make it accessible to everyone.
  
- Improve communication between individual project groups. Provide teachers with tools or platforms to reach students more effectively, to provide them with teaching materials, assessments, especially during teleworking.
- To inform employers more actively about students' achievements and training content.

**Estonia:** To consider the needs of employers and participant schedules and adapt the training content and schedule accordingly.

### **Recommendations for political decision-makers (national, European) (what and how could be improved to develop and implement more such international continuing education offers (e.g., at EQF5 level))**

#### **Latvia:**

- Looking at the Latvian situation, amendments to the Vocational Education Law must be approved and the needs of adult education must be considered when updating the package of documents related to the law. Taking into account the experience gained in the project, partners has taken the initiative in communicating with decision-makers, as well as provided official proposals during the review of the laws on vocational education and higher education in the parliament (Saeima). These proposals stressed the need of a regulatory framework for a work-based form of study in higher vocational education programs. WBL training requires investment from the three parties involved - educators, learners and employers, the interests of all parties must be reconciled in the regulatory framework.

- Sufficient resources must be devoted to in-company mentor training. It is particularly challenging for small and medium sized employers to provide mentors who are willing to take part in the division of responsibilities for the learning process. The requirements for mentors should not be too restrictive to enable industry to find such people in the work environment (for example – requirement of having pedagogical education), in the same time we need to have a mentor who knows how to operate within the training process and in the evaluation of the results achieved. Educators (university lecturers) also need to prepare for the implementation of WBL studies if this form of learning will be implemented in other industry sectors, for example forestry.
- Strengthen the competence of the Sectoral Expert Councils to enable them to constantly work on updating professional standards, devote experts for content development of modules and programs and quality assurance activities.

**Lithuania:** Recommendations will be made available to other industries and policy makers after the end of the project and the full implementation of the activities.

**Estonia:** In the curriculum development process, we saw that the current governmental funding of curricula which basis on the number of study weeks does not support work-based learning. The system, 1 credit point corresponds to 1 week of study, does not work well for work-based learning. It is difficult to combine learning, work, and family life. As part of the project, we were able to test a schedule that considered people's needs much more. We consider this was a key to the success of the trainings.

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