



Result 3.3

Curricula, teaching materials and examination regulations for specific dual vocational training

Part B

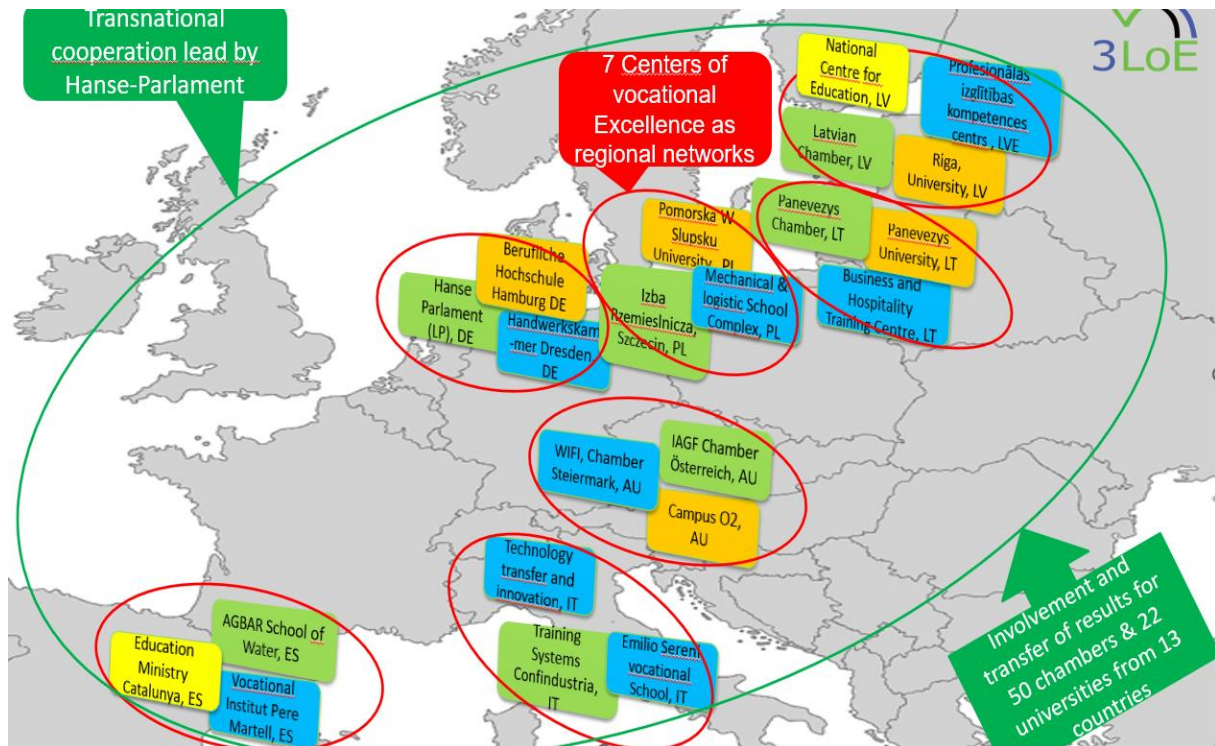
Implementation and Evaluation



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Partner



Language

English

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1 Project Summary and Introduction

1.1 About the 3LOE project

Around 99% of all EU businesses are SMEs, creating up to 70% of all jobs. In general, SMEs have good growth prospects for the future and are particularly well equipped to solve environmental problems and to enhance the green economy. However, in most of the project countries, SMEs are confronted with a shortage of skilled workers and young entrepreneurs. This shortage of skilled workers is even more alarming taking into account that due to aging of current entrepreneurs, a large and growing number of companies will have to be handed over to the next generation. Furthermore, young specialists and entrepreneurs often lack the qualifications and skills needed in order to respond to contemporary developments in the fields of energy, climate and environmental protection. The following problems have been identified in SMEs working in the fields of green economy, energy and environmental protection:

- Blatant and growing shortage of skilled workers.
- Large qualification deficits, especially in the Green Economy.
- Loss of attractiveness and low qualification of school-based VET.
- Low rates of further training and insufficient orientation of offers to SME needs.
- Ageing of entrepreneurs and increasing shortage of young people (demographic change).
- Failure of business transfers and low rates of business start-ups.
- Low innovation rates and insufficient productivity.
- Not enough cooperation between universities and SMEs and a lack of teaching geared to SME needs.
- Comparably low internationalization of SMEs and vocational training providers.
- Lack of national level support for SMEs”.

To meet these challenges, work-based learning and new paths in vocational training must be provided through cooperation between educational institutions, economic chambers and SMEs. University graduates are often well-qualified in theory, but lack practical knowledge, skills and abilities that are crucial for SMEs. For this reason, VET reforms must also involve higher education, and should implement dual bachelor's degree programs that combine a bachelor's degree with vocational training and on-site work in companies.

In the 3LOE project, an innovative and complex project structure with 22 project partners from 7 countries as well as 60 associated partners from 13 countries was designed. In each country, centers of vocational excellence (COVEs) in Green Economy will be established, managed and their permanent continuation ensured. A transnational cooperation of the centers will be developed, extended to 60 education stakeholders from 13 countries and operated permanently in an institutionalized form. The centers will offer a wide range of dual education measures in vocational training, further education and higher education, that are being developed, tested and evaluated in the project. These educational measures on EQF levels 3-7 focus on Green Economy, Digitalization and Entrepreneurship. Furthermore, vocational and educational consulting and innovation support for SMEs will be developed and implemented. In total, seven Train-the-Trainer programs will be developed and implemented permanently by

the project partners. All results will be transferred to the 60 associated partners together with implementation advice.

The objectives and aimed outcomes of the 3LOE project can be summarized as following:

1. Foundation of a three-level Center in each project country

1.1 Building the "Green Economy" skills alliance for qualifications in SMEs with educational and economic actors from the 7 project countries; development of information and cooperation tools.

1.2 Expansion of the skills alliance to the 60 associated partners from 13 countries, comprising chambers of commerce, SME associations, as well as universities of applied sciences/colleges.

1.3 Development, testing and evaluation of a curriculum and teaching materials for Train the Trainer courses for personnel and center management (vocational school-teachers, trainers in SMEs and lecturers in further and higher education institutions).

1.4 Evaluation of the construction and operation of the seven centers of Excellence and of the transnational cooperation.

1.5 Development of business and financing plans and ensuring the long-term continuation of the seven centres and transnational cooperation.

1.6 Development, consulting and introduction of political strategy program.

2. Implementation and realization vocational training

2.1 Development and implementation of a tool for vocational and qualification counseling as well as a training for consultants and teachers to use the tool.

2.2 Implementation of the dual system, so that work-based learning is put into practice in the project countries.

Preparation and transfer of curricula and examination regulations for dual vocational training for different professions and implementations in Poland, Lithuania, Latvia and Spain.

Development, test and implementation Trainings for teachers to conduct dual vocational training as well as Training of trainers in SMEs.

2.3 Development political concept for the training and integration of young people with learning difficulties for young people with learning difficulties (EQF level 3).

Development, test and implementation of a dual vocational training "Specialist for Building Insulation".

2.4 Development, testing and evaluation of education programme, teaching materials and examination regulations for the provision of sector-specific qualifications already during the initial vocational training for stronger learners. Implementation in the dual system, so that work-based learning is put into practice in the project countries.

2.5 Development and implementation five-year technician training „Ecologic Solutions in Logistics”.

3. Implementation and realization of further vocational training



3.1 Development and implementation of concepts and instruments for the management of continuing vocational training.

3.2 Development, test and implementation of a Train-the-Trainer program for teachers to conduct further training.

3.3 Development and implementation of a concept "SME-fair digitalization" as well as development, test and implementation of two train the trainer programs "Basic and advanced digital skills".

3.4 Transfer and implementation of four further trainings Energy Saving and Renewable Energies.

3.5 Preparation, transfer and implementation of six further trainings in the Green Economy.

3.6 Development, testing and evaluation of different training programs and teaching material for owners, managers and qualified workers of SMEs (EQF level 5 and 6). The trainings are specifically tailored to SME needs and different qualification levels and combine the transfer of technical, professional and management know-how.

- Training Enterprise and Entrepreneurship in Green Economy
- Training Energy Service Manager
- Trainings vocational Master Carpenter and Electric
- Training Construction Technician
- Training Service Technician
- Training Sustainability in foodservice industry

3.7 Development of regulations for new continuing education occupational profiles with a focus on the green economy.

3.8 Development of an integration programme for the unemployed (EQF level 4) in order to be able to place the unemployed in permanent jobs through further training seminars and a further training qualification.

4. Implementation and realization of higher education

4.1 Preparation and transfer of curricula, evaluation and examination regulations for two existing dual Bachelor degree programmes "Management of Renewable Building Energy Technology" and "Business Administration for SMEs".

4.2 Development and beginning of implementation of new dual Bachelor degree programs

- Business Administration & Sustainable Management of SMEs
- Entrepreneurship and Innovation in Green Economy
- Logistics - Green Supply Chains
- Service technician
- Tutorial "Sustainable management Climate neutrality for companies"



4.3 Development, test and implementation of four study modules (EQF level 6) on SME management in the Green Economy sector, which will be carried out in the dual study system and integrated into existing Bachelor degree programmes.

4.4 Development and implementation of concept for innovation promotion Solutions for manageable R&D tasks of SMEs and conducting manageable R&D projects for SMEs-

4.5 Development, testing and implementation of Training program for university lecturers and SME advisors.

5. Dissemination, transfer and use of the project results

5.1 Development of a concept and summary evaluation of the dissemination results of all partners

5.2 Transfer of all educational measures to 60 educational institutions in 13 countries and needs-oriented implementation consultations as well as realization of a bundle of measures for further dissemination of the project results.

5.3 Further dissemination activities such as presentations online, at third-party events, press releases and conferences.

5.4 Book with all results of the project and distribution via book trade.

For each of the three levels of educational measures there will be:

- Target-group-specific educational programs.
- Curricula, teaching materials, etc. developed in a leading role by the educational institutions of the respective level, whereby the educational institutions of the other levels (in particular universities) participate in an advisory and supportive manner.
- Representatives of the participant target groups involved in the development work.

All educational measures will be tested with the respective target groups under different national conditions in the countries, evaluated and completed on the basis of the evaluation results with application notes.

1.2 About the transfer and implementation of dual vocational training systems

As part of the 3LOE project, dual vocational training was to be implemented in all seven partner countries. The basis for this was the German dual system, which was adapted to the respective national conditions and implemented.

The German dual system was analyzed and described in detail. Strategies were developed for the organization of vocational education and training in the federal states as well as recommendations for transfer and implementation in countries where school-based vocational education and training has been predominant to date. Comprehensive presentations were also developed to enable the partners to independently present, communicate and explain the dual system in their countries. The results of this work are summarized as Result 3.3 Curricula, teaching materials and examination regulations for specific dual vocational training, Part A Preparation and transfer of the German dual vocational training systems.



A train-the-trainer seminar for management and teaching staff at vocational schools was developed, trialed, evaluated and implemented to ensure that qualified staff are available in the implementing countries.¹

In accordance with the focus of the 3LOE project in the Green Economy and the needs of the project partners, framework curricula for the school part and training regulations for the company part of vocational training as well as examination regulations for the following professions were prepared and transferred:

- Electronics technician for industrial engineering
- Vehicle mechatronics engineer
- Plumber
- Sewage engineering technician
- Environmental technology

These extensive documents were transferred electronically to all COVEs in German and in English translation, made available in Goggle drive and published on the project website for permanent use. Based on the German curricula, the international working groups developed country-specific curricula for dual vocational training for various occupations.

The Polish partner Izba Rzemieslnicza Malej i Sredniej Przedsiębiorczosci wanted to realize a dual vocational training program "Fitter of fixtures and fittings in building industry" in accordance with national conditions and regional needs. As such a profession does not exist in Germany, the German vocational training programs "painter and varnisher" and "tiler and panel layer" were transferred. On this basis, the Polish partner developed and implemented a dual vocational training program "Fitter of fixtures and fittings in building industry" with comprehensive advice from Partner 1 Hanse-Parlament.

The Lithuanian partner Verslo ir svetingumo profesinės karjeros centras wanted to realize a two-year dual vocational training program "Cook" in accordance with national conditions and regional needs. As there is no such training program in Germany, the German vocational training programs "Cook" and "Ordinance in the hospitality services industry" were transferred. On this basis, the Lithuanian partner has developed and implemented a two-year dual vocational training program "Cook" with comprehensive advice from Partner 1 Hanse-Parlament.

As part of the further project implementation, dual vocational training programs were developed, implemented and evaluated for the following professions in the following countries:

- Poland: Electrician
- Poland: Fitter of fixtures and fittings in building industry
- Lithuania: Cook
- Latvia: Motor vehicle mechanic/Car mechanic
- Spain: Electromecanico

¹ See Result 3.2 Training programs for teachers to conduct dual vocational training



The implementation reports as well as an evaluation concept and evaluation reports are summarized as Result 3.3 Curricula, teaching materials and examination regulations for specific dual vocational training, Part B Implementation and Evaluation.

The entire Result 3.3 Curricula, teaching materials and examination regulations for specific dual vocational training consists of two parts:

- Part A Preparation and transfer of the German dual vocational training systems
- Part B Implementation and Evaluation

The German curricula for dual vocational training in five occupations have been published in German and English on the project website <https://3-loe.eu/>.

The Polish Curricula for dual vocational training for the professions “Electrician” and “Fitter of fixtures and fittings in building industry” were published on the project website <https://3-loe.eu/>.

The curriculum for the vocational training program “Motor vehicle mechanic/car mechanic” for Latvia is also published on the project website <https://3-loe.eu/>.

Part B is reproduced below.



2 Implementation Reports

2.1 Poland

2.11 Introduction

In Poland, a law came into force in 2017 that enables the realization of three-year dual vocational training. As part of the 3LOE project, COVE Poland realized dual vocational training in three vocational schools:

1. dual vocational training for the professions 'Electrician' and 'Fitter of fixtures and fittings in building industry' were successfully developed and implemented in two state-recognized vocational schools 'Mazewo' and 'Kamienny Most', which are supported by project partner Izba Rzemieslnicza Malej i Sredniej Przedsiębiorczosci.

2. project partner Tadeusz Tanski Mechanical and Logistics School Complex in Slupsk has successfully developed and implemented the dual vocational training program 'Ecologic Solutions in Logistics technician'.

On the basis of German curricula, specific curricula for realization in Poland were developed with the advice of the German and Austrian partners and implemented and evaluated during the project period.

Vocational training programs 'Electrician' and 'Fitter of fixtures and fittings in building industry'

The curricula and syllabuses for both professions are published in Polish on the project website <https://3-loe.eu/>. Brief implementation reports are listed below.

During the project period, 57 young people took part in the 'Electrician' training program and 14 companies carried out the practical training in cooperation with the vocational schools.

107 young people took part in the 'Fitter of fixtures and fittings in building industry' training program during the project period and 37 companies carried out the practical training in cooperation with the vocational schools.

During the course of the project, both the number of young people taking part and the number of companies involved increased significantly. After the end of the project period, both vocational schools will

- the dual vocational training programs in both professions will be intensively continued.
- in line with these successful examples, dual vocational training programs will be developed and implemented for all other professions.



2.12 Electrician²

Legal basis

- Qualifying vocational courses are covered by the regulations of the Ministry of National Education of May 16, 2019.
- Regulation of the Ministry of National Education of February 15, 2019 on the general objectives and tasks of education in vocational education professions and the classification of vocational education professions,
- Regulation of the Minister of Education and Science of October 6, 2023 on continuing education in non-school forms (Journal of Laws item 2175),
- Regulation of the Ministry of National Education of May 16, 2019 on the core curriculum for vocational education professions and additional professional skills in selected vocational education professions,
- Regulation of the Minister of Family, Labor and Social Policy of August 7, 2014. on the classification of professions and specialties for the needs of the labor market and the scope of its application based on the International Standard ISCO.

Introduction and Objective of the Education

In the project took part students from two vocational schools from Maszewo and Kamienny Most, for which the Chamber is the leading body.

The aim of the education in the electrician profession was to prepare students for work in the electrical industry, with particular emphasis on electrical installations, device maintenance, and work safety. The program included both theory and practice to ensure that participants acquired the necessary skills and professional qualifications. An additional goal was to develop professional competencies such as diagnosing faults and solving technical problems. Another important element was introducing students to new technologies that are increasingly used in the electrical industry.

Scope of the Program

The curriculum covered key areas of knowledge and skills, including electrical installation and assembly, anti-shock protection, the operation and repair of electrical devices, emergency power systems, renewable energy sources, safety and health at work (BHP), as well as the basics of electronics and industrial automation. This scope was developed in line with the labor market requirements and current technical standards. Students also gained knowledge about principles of sustainable development and energy efficiency. The curriculum was regularly updated to reflect the latest changes in the electrical industry.

Course of Theoretical Lessons

² Prepared by Izba Rzemieslnicza Malej i Sredniej Przedsiębiorczosci



The theoretical lessons were conducted in the form of lectures and seminars, covering topics such as electrotechnics, energy law, and technical standards and norms. Emphasis was placed on understanding the principles of electrical devices, installation diagrams, and safety regulations. The lectures were supplemented with modern multimedia materials, which helped to clarify complex technical issues. Additionally, individual consultations were organized to help students better absorb the material and clarify difficult topics.

Implementation of Professional Internships

Students had the opportunity to gain practical experience during workshop sessions and professional internships at electrical companies. The internships involved cable installation, the assembly of electrical equipment, device repair and maintenance, and fault diagnosis. Collaboration with local businesses allowed students to get familiar with real-world industry conditions and learn how to use professional tools. Students were also exposed to various technologies, including renewable energy sources and modern building automation systems.

Skills acquired

As a result of the education, students acquired practical skills in the areas of electrical installation assembly and operation, diagnosing and troubleshooting electrical system faults, using diagnostic tools and equipment, working in compliance with safety and health regulations (BHP), and reading and creating electrical diagrams. Additionally, students learned teamwork and work planning. A significant part of the program also focused on developing competencies related to technical problem analysis and independent decision-making. This ensures that graduates are well-prepared for independent work and handling everyday professional challenges.

Evaluation of the Program Implementation

The education program was implemented according to schedule and met the educational goals. Both teachers and students showed commitment, which resulted in a high quality of knowledge and skills acquired. Throughout the program, regular surveys were conducted among students to monitor their progress and satisfaction with the learning process. The results of final exams and practical tests confirm that most students achieved a high level of technical competence.

Summary and Recommendations

The education process in the electrician profession concluded successfully, and students were well-prepared to enter the electrical industry workforce. It is recommended to continue professional internships and introduce additional classes focused on modern technologies, such as smart installations or photovoltaic systems, to better align the education with labor market demands. It would also be beneficial to increase the number of hours devoted to developing skills related to the operation of modern energy



management and control systems. Furthermore, broader cooperation with local companies should be considered to organize thematic workshops and share experiences.

Future Prospects for Participants

Participants in the electrician training have numerous opportunities for professional growth and future benefits. Due to the dynamic development of technology and the increasing demand for specialists in the electrical field, graduates of this course will enjoy a wide range of job offers, both domestically and internationally. The growing interest in renewable energy, electromobility, and building automation opens up additional career paths in areas related to modern technologies. Moreover, the technical skills gained during the training, along with knowledge of health and safety regulations, will provide flexibility and the possibility of running their own business, which is an attractive future option.

2.13 Fitter of fixtures and fittings in building industry³

Legal basis

- Qualifying vocational courses are covered by the regulations of the Ministry of National Education of May 16, 2019.
- Regulation of the Ministry of National Education of February 15, 2019 on the general objectives and tasks of education in vocational education professions and the classification of vocational education professions,
- Regulation of the Minister of Education and Science of October 6, 2023 on continuing education in non-school forms (Journal of Laws item 2175),
- Regulation of the Ministry of National Education of May 16, 2019 on the core curriculum for vocational education professions and additional professional skills in selected vocational education professions,
- Regulation of the Minister of Family, Labor and Social Policy of August 7, 2014. on the classification of professions and specialties for the needs of the labor market and the scope of its application based on the International Standard ISCO.

Scope of the Completed Curriculum

In the project took part students from two vocational schools from Maszewo and Kamienny Most, for which the Chamber is the leading body. During the vocational training, students were introduced to both theoretical and practical aspects related to interior installation and finishing in construction. The curriculum covered topics such as installation work, plastering, flooring, tiling, and painting. Practical classes were closely linked to construction work, allowing participants to acquire the knowledge and skills required for the profession of a drywall installer and finishing specialist.

³ Prepared by Izba Rzemieslnicza Malej i Sredniej Przedsiębiorczosci



Implementation of Vocational Internships

The program also included vocational internships at construction companies, where students had the opportunity to apply the knowledge they gained. During these internships, students performed finishing tasks such as installing drywall, laying tiles, plastering walls, wallpapering, and painting interiors. These internships helped to reinforce their skills and provided insight into the specifics of working in real construction environments.

Achieved Learning Outcomes

Students acquired extensive theoretical knowledge of the technologies used in finishing works, as well as practical skills related to performing these tasks. The key outcomes included: correctly identifying building materials, using appropriate tools, executing tasks in compliance with safety standards, and the ability to work effectively as part of a team. The effectiveness of the training was confirmed through competency tests and the evaluation of practical work.

Challenges and Difficulties

During the implementation of the program, certain challenges were encountered, primarily related to access to modern materials and construction technologies. Some students initially struggled with mastering more advanced techniques, such as laying tiles on uneven surfaces. However, additional consultations and individualized support helped to overcome these difficulties.

Summary and Conclusions

The vocational training for the profession of drywall installer and finishing works specialist in construction was carried out according to plan, and the students acquired the necessary competencies to prepare them for work in the profession. The practical classes, combined with theoretical preparation, provided a solid vocational foundation. In the future, it would be beneficial to increase access to modern technologies and tools, which will better prepare graduates for the rapidly evolving construction market.

Future Prospects and Benefits for Training Participants

Participants in the training program for the profession of drywall installer and finishing works specialist in construction have promising career prospects, both in the domestic and international markets. This profession is highly valued in the construction industry due to the growing demand for specialists in finishing works. Graduates will have the opportunity to find employment in various construction companies, as well as the possibility to run their own business, offering services as independent professionals.

Moreover, the development of technology in the construction sector opens up opportunities for continuous professional development and skill enhancement, such as training in new materials and finishing techniques (e.g., dry construction systems,



installation of smart interior systems). Having solid practical skills also enables advancement to managerial positions, such as foreman or finishing works supervisor, which come with higher salaries and greater professional responsibility.

Additionally, sustainable development and eco-friendly technologies are gaining increasing importance in construction. Graduates will be able to adapt to market demands in terms of ecological materials and energy-efficient building solutions, which will further increase their competitiveness in the job market.

2.2 Lithuania⁴

2.21 Introduction

The dual training program „Cook“ is designed to prepare a qualified employee who would be able to independently prepare, design and serve dishes, assess the quality of dishes, and manage documentation.

The aim of the training program is to develop highly skilled, competent, and adaptable culinary professionals through a combination of theoretical education and practical, on-the-job training. This program aims to meet the demands of the culinary industry by ensuring that graduates possess the necessary skills, knowledge, and experience to succeed in various culinary settings, from restaurants and hotels to catering and institutional kitchens.

2.22 Organisation of the training

Business and Hospitality Training Centre „VESK“ offered the dual training “Cook” for young people aspiring for their 1st qualification. In total 15 participants piloted and completed the training in the period September 2021 – June 2023.

A dual training program combined theoretical instruction with hands-on practical experience, ensuring that graduates acquire a comprehensive set of competencies that prepare them for successful careers in the culinary industry. The total duration of the course was 2420 hours and included compulsory and optional modules. The training was composed of 70% practice (in-company training) and 30% theory (delivered at VESK). Practical and theoretical training was implemented alternately following the prepared training plan (see Annex 1). The training was organized in blocks when during a two-week period (10 working days) a student would spend 3 days at VESK and 7 days in a company.

A three-party agreement was signed between school, company and student. The school designated a responsible vocational teacher to manage the apprentice's on-the-job practical vocational training and the company appointed the person(s) responsible for organizing and coordinating the apprentice's work placement and practical training. The employer was obliged to pay the apprentice at least the minimum hourly

⁴ Prepared by Verslo ir svetingumo profesinės karjeros centras / VESK



wage based on the number of hours worked. After about six months, all employers increased the salaries considering the students' competences and performance.

The companies that were involved in the training:

- Restaurant „Devyni drakonai”
- Restaurant „Ertlio namas“
- Artis Centrum Hotel;
- Courtyard by Marriott Hotel.

2.23 Competences acquired

A dual training program „Cook“ equipped the graduates with a well-rounded set of competencies that blend technical culinary skills, theoretical knowledge, professional soft skills, and practical experience. These competencies prepare them for immediate employment and career advancement in the culinary industry, ensuring they can meet the demands of employers and customers alike.

The set of knowledge and skills acquired by training participants:

Theoretical Knowledge

1. **Food Science and Nutrition:**

- **Nutritional Values:** Understanding the nutritional content of ingredients and meals.
- **Dietary Needs:** Knowledge of special dietary requirements and allergen management.

2. **Food Safety and Hygiene:**

- **Sanitation Practices:** Proper sanitation techniques to prevent contamination.
- **Regulatory Compliance:** Adherence to local, national, and international food safety regulations.

3. **Kitchen Management:**

- **Inventory Control:** Efficient management of kitchen inventory and supplies.
- **Cost Control:** Techniques for controlling food costs and minimizing waste.

Technical and Culinary Skills

1. **Basic and Advanced Culinary Techniques**, including proficiency in various cooking methods, knowledge of and ability to prepare international and regional cuisines.
2. **Recipe Development and Modification**, including recipe execution and creativity in cooking.



Professional and Soft Skills

1. Communication and Teamwork:

- **Effective Communication:** Clear communication with team members, supervisors, and customers.
- **Collaboration:** Ability to work efficiently as part of a culinary team.

2. Time Management and Organization:

- **Prioritization:** Prioritizing tasks to ensure timely preparation and service.
- **Multitasking:** Managing multiple tasks simultaneously in a fast-paced environment.

3. Customer Service:

- **Guest Interaction:** Providing excellent service and handling customer feedback professionally.
- **Adaptability:** Adapting to changing customer preferences and special requests.

Managerial and Leadership Skills

1. Kitchen Supervision:

- **Leadership:** Leading and motivating kitchen staff to achieve high performance.
- **Training:** Training junior staff and apprentices.

2. Menu Planning and Development:

- **Menu Design:** Creating balanced, appealing menus that meet customer needs and preferences.
- **Seasonality and Sourcing:** Using seasonal ingredients and managing supplier relationships.

Practical Experience

1. Work-Based Learning:

- **Real-World Application:** Applying theoretical knowledge in real-world culinary environments through internships and apprenticeships.
- **Problem-Solving:** Handling practical kitchen challenges and problem-solving on the job.

2. Industry Exposure:

- **Diverse Settings:** Gaining experience in various culinary settings such as fine dining restaurants, hotels, catering services, and institutional kitchens.
- **Cultural Competence:** Working in diverse culinary environments to understand global cooking practices and cuisines.

2.24 Content of the training

Module title	Module type	No of Credits
Introductory module (2 credits)		
Introduction into profession	Compulsory	2
General modules (8 credits)		
Occupational Health and Safety	Compulsory	2
Safe behavior in emergencies	Compulsory	1
Regulation of physical activity	Compulsory	5
Modules for the acquisition of competencies that make up a qualification (80 credits)		
Maintaining order in the kitchen	Compulsory	5
Preparatory work	Compulsory	5
Managing paperwork	Compulsory	5
Preparation, serving and quality assessment of soups, hot dishes and sauces	Compulsory	20
Preparation, serving and quality assessment of sweet dishes and desserts	Compulsory	10
Preparation, serving and quality assessment of salads, cold dishes, garnishes and appetizers	Compulsory	15
Preparation and serving dishes for the banquets	Compulsory	20
Optional modules (10 credits)		
Preparation of flour confectionary	Optional	10
Cooking dishes for healthy eating	Optional	5
Cooking dishes of Lithuanian national cuisine	Optional	5
Final module (10 credits)		
Introduction into the labour market	Compulsory	10



The content of the modules was composed in a way that imparted all the necessary professional competences including the ability of learners to plan, implement and control their activities.

At the end of the program, all participants of the dual training Cook were assessed following the formal procedure of the examination and assessment. The theoretical part (knowledge) assessment test was performed by electronic means at the facilities of VESK. The practical part (skills) assessment was organised at VESK laboratories equipped with the necessary technical equipment and tools.

The average assessment for theoretical part was 8.24. The average assessment for practical performance was 9.41.

All the trainees were awarded a graduation certificate issued by the training provider and recognized by the employers. In addition to the graduation certificate, the trainees received a certificate, justifying the activities that were carried out during the project.

2.25 Impact and Continuity

The dual training course "Cook" has been successfully implemented and is suitable for Lithuanian VET system. The overall opinion and feedback received from the involved trainees, trainers and companies' staff are quite positive. The content and organisation of the training fully met expectations of 89% of participants. 12 apprentices have been offered to stay on in the companies after graduation.

From September 2024 VESK is going to apply certain aspects and elements of dual training that proved to be very successful during piloting, in a range of its training programs, e.g. workplace integration, mentorship and supervision, studying in blocks, etc.).

2.3 Latvia⁵

2.31 Main information about course

The 3LoE project has developed a very good and broad curriculum on "Motor vehicle mechanic/car mechanic".

Liepaja State Technical school has an accredited programme "Car mechanic", which already includes some of the modules foreseen in the 3LoE project. Therefore, the decision was taken from the outset not to accredit a similar programme, but to complement the existing one. This was a pilot programme.

The project conditions state that "the number of hours of continuing training in the school should be adapted to the number of hours set out in the national school curriculum framework for continuing training, while maintaining the minimum number of hours for achieving the learning outcomes indicated in the table: common to all

⁵ Prepared by Liepaja State Technical School, Latvia



professions and common to professions which form the basis for training in a profession or group of professions and are appropriate to the qualifications defined in the profession. Minimum number of hours of continuing training:

1) 350 h - Learning outcomes common to all professions and learning outcomes common to professions in the mechanical, mining and metallurgical sectors, forming the basis for training in a profession or group of professions

2) 650 h - M.17 Installation and operation of machinery and equipment " Which was also done.

In the first school year, the models developed within the project were integrated by the school teachers into the already existing curriculum. However, as the Latvian legislation on teachers' remuneration changed, so did the conditions for teachers' participation in the project. Consequently, in the following school year, a contract was signed with a company to recruit specialists for the project activities, who were responsible for a part of these trainings:

1. Focus on Modern Technologies:

- **Hybrid Technology Diagnostics:** Training on troubleshooting hybrid vehicle systems and complex mechatronic components.
- **Network System Diagnostics:** Analysis of interconnected systems (e.g., data flow between ECU systems).
- **High-Voltage Systems and Batteries:** Handling components in electric vehicles and ensuring safety during repairs.

2. Comprehensive Social and Ecological Competencies:

- **Social Responsibility:** Emphasis on solidarity and sustainability in society.
- **Ecological Thinking:** Courses on the ecological impact of vehicles and resource conservation.

3. Detailed Service Modules:

- Planning and working with safety systems (e.g., brake system service).
- Customizing vehicles to client requirements (adding additional equipment and modifications).

4. Methodological and Communication Competencies:

- Focus on **methodological and learning skills:** The ability to adopt new technologies and strategies for lifelong learning.
- **Integrated Learning:** Based on real-world work situations to develop both technical and interpersonal skills.

The draft rules require that a school training mechanics - machine and plant fitters must have certain training facilities. LSTS provides all these requirements, and they are:

1) a technical drawing workshop equipped with a teacher's computer table connected to a local network with Internet access, printer and scanner and multimedia projector, computer tables (one student station), all computers connected to a local network with Internet access, office software package, technical drawing programme,



didactic aids for spatial imagination, norms on technical drawing principles, documentation on the design of machinery and equipment.

2) a technology laboratory equipped with models, sections, machines and equipment, hydraulic and pneumatic components, samples of construction and operating materials, tools and measuring instruments, machine and equipment components, assembly tools, technical documentation and catalogues of machines and tools, manuals for the use of machines and equipment;

3) school workshops equipped with: machines and appliances, locksmith tables (one table per student), assembly work equipment and appliances, lifting and transport equipment, tools and equipment for washing and maintenance, assembly press and tools (one press table for four students), drill press, shredder sharpener, marking tools, measuring tools, hand tools and machine tools, assembly tools, machinery and equipment manuals, professional manuals, technical documentation for machinery and equipment, personal protective equipment. Practical training can take place in: laboratories and school workshops, lifelong learning institutions, practical training institutions and potential workplaces for vocational school graduates.

The pilot programme trained 22 students in the first year and 20 students thereafter. The programme runs for 6 semesters or 3 academic years, and training is still ongoing.

2.32 Curriculum topics

The programme will run for 6 semesters or 3 academic years. As part of the project, LSTS has integrated the topics covered in the training modules developed under the project, such as high voltage systems, which is covered in Module 1, into its own developed and accredited curriculum.

As the integration of these modules started with the 2022/2023 academic year, the two curricula - the LSTS accredited and the project-developed curricula - were accordingly compared from the outset. Given that the LSTS curriculum did not and does not include a number of topics that are in the modules of the project curriculum, the modules in the LSTS accredited curriculum were accordingly considered for inclusion at the start of this academic year. It should also be noted that there are topics in the modules of the LSTS-accredited curriculum that are not covered in the modules of the curriculum developed as part of the project.

There are differences in the structure of the two training programmes, as the LSTS programme has modules divided by title, e.g. "Engine Repair", whereas the project programme has modules based more on activities, e.g. "Service and Inspect Vehicles and Systems to Specification".

A more detailed comparison of the two programmes is presented below. The first programme is a project-developed training programme, while the second is an LSTS - accredited training programme.

1. Focus and Qualification

First programme (Vehicle Mechatronics Engineer):



Broader Vision: This program has a forward-looking approach, aiming to prepare **mechatronics engineers** with a strong grasp of both **mechanical and electronic systems** in modern vehicles, particularly hybrid and electric systems. The program recognizes the growing demand for interdisciplinary skills in the automotive sector.

Qualification Level: Advanced, bridging practical training in companies with theoretical learning in vocational schools. It reflects **dual vocational education** common in Germany, where students gain **hands-on industry experience alongside classroom-based instruction**.

Sustainability Priority:

Heavy emphasis on aligning with the “green economy,” including the ecological aspects of maintenance, repair, and diagnostics.

Encourages environmentally conscious decision-making in automotive services, such as efficient use of resources and minimizing waste.

European Context: Focuses on preparing students for a globalized job market, with mobility across **European labour markets** through the development of transferable competencies.

Second programme (Auto Mechanic):

Narrower Scope: This program focuses on producing **skilled auto mechanics** proficient in performing **diagnostics, repairs, and maintenance**, primarily targeting **conventional vehicles**. Electric vehicles and hybrid technologies receive less emphasis.

Qualification Level: Standard vocational training designed for quick entry into the job market, providing practical and technical knowledge for **entry-level roles**.

Safety and Reliability:

Strong focus on compliance with safety standards in the workplace, including fire safety, electrical safety, and ergonomics.

Graduates are trained to supervise less experienced staff, fostering leadership at a basic level.

Immediate Employability: While sustainability is mentioned, the emphasis is on building foundational skills for immediate use in workshops and garages.

2. Competence Development

First programme:

Comprehensive Competence Framework:

Technical Expertise: Students acquire high-level diagnostic skills for **interconnected automotive systems**, including modern mechatronics technologies (e.g., electronic control units, hybrid vehicle components, and networked systems).



Methodological Competence: Problem-solving is at the core, with an emphasis on structured, analytical approaches to diagnosing faults and implementing solutions.

Ecological Awareness: Integration of sustainability in problem-solving processes, focusing on reducing environmental impacts through informed decisions.

Personal Development:

Self-Competence: Builds independence, confidence, and adaptability, encouraging students to continuously **improve their skills through lifelong learning**.

Social Competence: Teaches teamwork, collaboration, and leadership through practical group activities and real-world case studies.

Focus on Adaptability:

Designed to adapt to **technological advancements**, ensuring that graduates can handle the increasing complexity of vehicle systems, particularly with the rise of **electromobility**.

Second programme:

Targeted Technical Skills:

Training is designed to ensure proficiency in **basic mechanical and electrical repairs**, reading schematics, and troubleshooting faults.

Core competencies include performing diagnostics, understanding manufacturers' repair protocols, and working with **standard automotive tools**.

Client and Workplace Interaction:

Emphasis on **customer service skills**, ensuring mechanics can clearly explain issues and solutions to clients.

Includes leadership skills for supervising less-qualified workers in a team.

Personal Growth:

Encourages basic self-directed learning and the development of **professional ethics**, though it is less detailed compared to the first program.

Includes modules on **communication in multiple languages**, which is important for workplaces serving diverse clients.

3. Program Structure and Modules

First programme:

Modular Structure:

Divided into **four core areas**: Service, Repairs, Diagnostics, and Customization.



Modules increase in complexity over time, starting with fundamental tasks (e.g., basic maintenance) and progressing to high-level diagnostics and independent decision-making.

Progression by Year:

Year 1: Focus on basic maintenance and learning vehicle system fundamentals.

Year 2: Intermediate repair skills and diagnostics of simple mechanical and electrical faults.

Year 3: Advanced fault-finding, including troubleshooting hybrid and interconnected systems, and applying knowledge to **real-world problem-solving scenarios**.

Integration of Practice and Theory:

Practical lessons are paired with theoretical concepts, such as integrating ecological concerns when performing diagnostics or repairs.

Key Learning Outcomes:

Graduates are expected to **independently plan, execute, and evaluate** complex maintenance tasks while adhering to safety and environmental standards.

Second programme:

Structured Around Modular Cards:

Divided into **A, B, and C modules**:

A: General subjects (math, physics, languages).

B: Core professional skills (repair basics, diagnostics).

C: Additional optional competencies (welding, hydraulics, and technical service management).

Detailed Module Examples:

“Automotive Construction Basics” covers vehicle components, material properties, and assembly techniques.

“Diagnostics” focuses on interpreting fault codes, understanding system diagrams, and repairing basic issues.

Practical Focus:

Workshops account for a significant part of the curriculum, with 16% dedicated to internships and hands-on training.

For example, students practice assembling and disassembling vehicle components to familiarize themselves with key processes.

Steady Learning Path:



Core competencies (like reading technical drawings or diagnosing faults) are introduced early and refined through repetitive, practical application in later stages.

4. Teaching Methods

First programme:

Project-Based Learning:

Students work on real-world tasks, such as diagnosing hybrid systems or resolving multi-system faults.

Encourages experimentation, critical thinking, and **interdisciplinary collaboration**.

Cutting-Edge Tools:

Heavy use of **advanced diagnostic systems**, such as ECU analyzers and high-tech equipment for hybrid or electric vehicles.

Blended Learning:

Combines classroom-based theory with hands-on workshops in companies, offering a **realistic learning environment**.

Second programme:

Practical Workshops:

Heavily focused on mastering tools, following repair protocols, and completing tasks efficiently.

Group Work:

Promotes collaboration through activities like repair planning and team-based problem-solving.

Structured Curriculum:

Offers a systematic approach where students learn foundational skills before progressing to advanced applications.

5. Integration of Safety and Sustainability

First programme:

Holistic Approach to Safety:

Safety protocols are incorporated into every module, especially when handling complex systems like **high-voltage batteries** or hazardous fluids.

Sustainability Focus:

Promotes environmentally friendly practices like **material recycling** and efficient resource usage.

Students are trained to evaluate the ecological impact of their decisions in the workplace.



Second programme:

Compliance-Oriented Safety Training:

Modules focus on meeting safety regulations, such as fire safety, electrical safety, and accident prevention.

Environmentally Responsible Repairs:

Emphasizes waste reduction and safe disposal of automotive materials, aligning with industry standards.

6. Innovation and Career Development

First programme:

Future-Proof Training:

Students are prepared for evolving roles in the industry, particularly in emerging areas like electric vehicles and autonomous systems.

Strong focus on lifelong learning ensures adaptability to future technological advancements.

Leadership and Integration:

Graduates are equipped to take on leadership roles, bridging technical and managerial responsibilities.

Second programme:

Direct Industry Relevance:

Designed for immediate employability, producing graduates ready to work in repair shops or garages.

Optional Upskilling:

Offers pathways to additional qualifications, such as advanced welding or heavy machinery repair.

Trainings included in the second programme but not in the first:

General Education Subjects:

Mathematics, physics, chemistry, literature, Latvian and world history.

Language studies (Latvian, first and second foreign languages).

Social and civic competencies.

Cultural and language understanding.

Specific Practical Modules:

Basics of Welding: Skills in welding for vehicle repairs.

Vehicle Body Repair and Glazing: Restoration of body parts and glasswork.



Tire Replacement and Repair: Technical work related to chassis and tires.

Technical Service Organization: Organizing and managing work in car service centres.

Workshop Practice for Auto Mechanics: Hands-on experience in workshop tasks focused on mechanics.

Green Skills: Training in sustainable practices to reduce the environmental impact of vehicle repairs.

Basics of Technical Drawing:

Measuring parts using calipers, reading schematics and blueprints, and sketching simple components.

Material Science and Automotive Materials:

Information on the properties of metals, non-metals, and composites used in automotive manufacturing.

Material processing techniques (thermal, chemical) and methods for producing components.

Trainings included in the first programme, but not in the second:

Focus on Modern Technologies:

Hybrid Technology Diagnostics: Training on troubleshooting hybrid vehicle systems and complex mechatronic components.

Network System Diagnostics: Analysis of interconnected systems (e.g., data flow between ECU systems).

High-Voltage Systems and Batteries: Handling components in electric vehicles and ensuring safety during repairs.

Comprehensive Social and Ecological Competencies:

Social Responsibility: Emphasis on solidarity and sustainability in society.

Ecological Thinking: Courses on the ecological impact of vehicles and resource conservation.

Detailed Service Modules:

Planning and working with safety systems (e.g., brake system service).

Customizing vehicles to client requirements (adding additional equipment and modifications).

Methodological and Communication Competencies:

Focus on **methodological and learning skills:** The ability to adopt new technologies and strategies for lifelong learning.



Integrated Learning: Based on real-world work situations to develop both technical and interpersonal skills.

The main or key differences:

The second programme offers a broader scope of general education subjects and practical skills training, focusing on traditional aspects of vehicles (mechanics, body-work repair, welding).

The first programme is more specialized in modern technologies (hybrid and electric systems) and diagnostics for interconnected systems while offering deeper ecological and methodological competency development.

2.33 Evaluation report

Consultations with employers and those working in the engineering sector helped to find the best solutions for implementing the training. The trainers are practising experts in the field to provide both theoretical and practical examples.

At the end of the course, a questionnaire was administered, and the evaluation summarised. The pilot programme trained 22 students in the first year and 16 students thereafter.

In the final survey were 21 questions (some of them are in Excel file below). Some of the answers shows that students aren't thinking in the same way, for example, to the question "Necessary academic literature and access to information sources is provided".

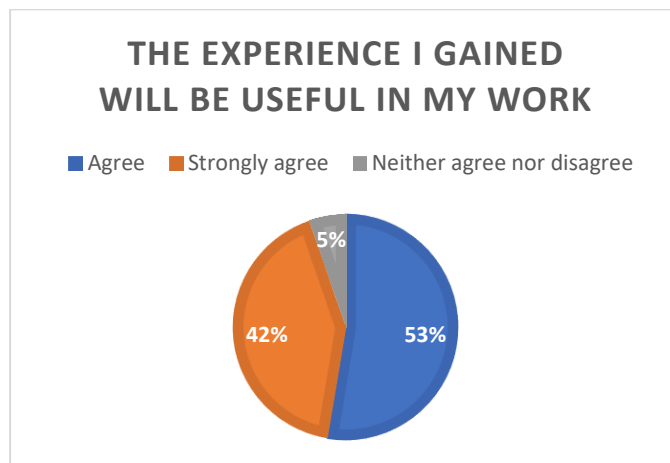
The questionnaires are a good way to find out. The table above shows that learners may have completely opposite answers to the same question, e.g. "The content was organised and easy to follow", but may also answer very similarly, e.g. "The experience I gained will be useful in my work" As shown in the figure below, the percentage split between agree and strongly agree is very similar, totalling 95%.

1. table

Answers to the student survey



Results and objectives of study programme are clearly defined	The content was organized and easy to follow	The content of the subjects of the study programme was not repetitive	The materials distributed were helpful to achieve study programme results	The training process was flexible	While studying I gained enough theoretical knowledge	There are enough practical / laboratory classes	The study programme content is in line with the latest technological trends	The environment required for studies (auditoriums, computerized auditoriums, laboratories) is comfortable and properly equipped	Necessary academic literature and access to information sources is provided	There are enough spaces in the educational institution where it is possible to study individually after lectures	I have a possibility to submit suggestions for improving this study programme	The study programme prepares me for the future in the working life	The experience I gained will be useful in my work	I will recommend this study programme to others
Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree
Neither agree nor disagree	Neither agree nor disagree	Neither agree nor disagree	Neither agree nor disagree	Neither agree nor disagree	Neither agree nor disagree	Neither agree nor disagree	Neither agree nor disagree	Neither agree nor disagree	Neither agree nor disagree	Neither agree nor disagree	Neither agree nor disagree	Neither agree nor disagree	Neither agree nor disagree	Neither agree nor disagree
Agree	Neither agree nor disagree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Agree
Strongly agree	Strongly agree	Strongly agree	Agree	Agree	Agree	Neither agree nor disagree	Agree	Neither agree nor disagree	Agree	Strongly agree	Strongly agree	Agree	Agree	Agree
Agree	Agree	Strongly agree	Agree	Agree	Agree	Disagree	Neither agree nor disagree	Neither agree nor disagree	Agree	Agree	Agree	Agree	Agree	Neither agree nor disagree
Strongly agree	Agree	Strongly agree	Agree	Strongly agree	Agree	Agree	Agree	Agree	Agree	Strongly agree	Strongly agree	Strongly agree	Agree	Strongly agree
Agree	Agree	Strongly agree	Agree	Neither agree nor disagree	Agree	Strongly agree	Neither agree nor disagree	Neither agree nor disagree	Neither agree nor disagree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Agree
Strongly agree	Agree	Strongly agree	Agree	Strongly agree	Agree	Neither agree nor disagree	Agree	Agree	Agree	Strongly agree	Agree	Agree	Agree	Agree
Neither agree nor disagree	Neither agree nor disagree	Agree	Agree	Strongly agree	Agree	Agree	Agree	Agree	Agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Agree
Strongly agree	Strongly agree	Strongly agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree
Strongly agree	Neither agree nor disagree	Strongly agree	Agree	Agree	Agree	Disagree	Disagree	Disagree	Neither agree nor disagree	Strongly agree	Agree	Agree	Agree	Neither agree nor disagree
Neither agree nor disagree	Agree	Agree	Agree	Strongly agree	Agree	Agree	Agree	Agree	Agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Agree
Strongly agree	Strongly agree	Strongly agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree
Strongly agree	Agree	Agree	Agree	Strongly agree	Agree	Neither agree nor disagree	Neither agree nor disagree	Neither agree nor disagree	Agree	Strongly agree	Strongly agree	Agree	Agree	Strongly agree
Neither agree nor disagree	Neither agree nor disagree	Strongly agree	Strongly agree	Strongly agree	Agree	Disagree	Disagree	Disagree	Agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Neither agree nor disagree
Neither agree nor disagree	Neither agree nor disagree	Agree	Agree	Agree	Agree	Agree	Neither agree nor disagree	Agree	Agree	Strongly agree	Strongly agree	Agree	Agree	Agree
Neither agree nor disagree	Strongly agree	Strongly agree	Neither agree nor disagree	Strongly agree	Agree	Strongly agree	Agree	Strongly agree	Agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree
Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree
Strongly agree	Neither agree nor disagree	Agree	Agree	Strongly agree	Agree	Disagree	Neither agree nor disagree	Neither agree nor disagree	Neither agree nor disagree	Strongly agree	Strongly agree	Agree	Agree	Agree
Strongly agree	Strongly agree	Strongly agree	Agree	Strongly agree	Agree	Agree	Agree	Agree	Agree	Strongly agree	Agree	Agree	Agree	Agree



1.picture. Answer to the question “The experience I gained will be useful in my work”.

The survey also included questions for students to answer by providing their answers. As can be seen in Table 2, one of the most interesting answers is to the question "Which specific difficulties you encountered during the studies?"

2. table

Answers to the student survey

What you liked most in this study programme?	Which specific difficulties you encountered during the studies?	If the training was repeated, what should be left or changed?
That i can work on my car	Way to many classmates, far too little space, but i managed	Make more workplaces with proper tools.
My classmates.	To find good internship.	would like to work on my own more
That we have to work with rusted cars, not just some new equipment.	Rust	Really could use some specific pullers
it was quite straight forward.	Motivation	Some of the specific tasks should be replaced with something that is actually done in a regular workshop.
Teacher Jaunciems	There were a lot of assignments.	They should learn how to code car computers.
That it teaches about specific problems in our work environment.	Lack of materials and literature.	School should invest more in materials.
Ability to learn after classes	My classmates picking on me	It would be nice to have necessary tools for the job.
Got an oportunitie to work on motorcycles	Tooling	Tooling
My collegues at internship	Lack of individual workspaces and some tools.	Would like that my classmates clean up after them.
Resourcefull teachers	School lacks funding	Invest in tools and literature.
Chiptuning after classes	I had a lot of skills beforehand, a lot of tasks were just timeconsuming.	I dont know
To work on interesting cars, not some boring old golf.	Theory was hard.	More space and more cars
That you can also work on real cars.	Had limited opportunities to work on my own.	More workplaces are needed.
Teachers	Lack of proper equipment	Bigger facility with more cars.
They taughted how to work around problem with things that you have	I needed more time in lectures to finish my tasks.	Less math more wrenching.
working on cars	asignment due dates	there should be more wrenching and less talking
My internship	English language	More literature in native language.
I learned a lot of new skills.	Lack of tools, materials and literature	Either we should be divided in smaller groups or there must be more workplaces.

The project included not only surveys, but also interviews with students and teachers. Although the project required both to submit their answers in writing, the interviews were conducted face-to-face, and the answers were recorded during the conversation.

Both the teacher and the student found it important to learn something new that was not part of their daily routine. For example, the LSTS programme does not include a module on new equipment such as electric cars, as the school does not have such equipment, so it is necessary to attract companies that could allow the use of their premises and equipment so that students can practice.

As the programme is still ongoing, the students will take the exam and obtain their diploma in 2025.

Conclusion. In order to introduce a completely new curriculum and be accredited, it must be different from the existing ones. The best option adopted in this pilot was to compare the two programmes and to integrate into the existing programme topics that are not already covered by the existing programme. Although the main comparisons are presented in Chapter 2, the teachers involved in the project also recognise that the two programmes are different - and what will definitely be taken from the proposed programme are the different topics that are not in the LSTS programme, such as



"Emerging technologies", "Gas powered systems", "Hybrid systems", "Control of control subsystems and electronic machines".

2.4 Spain⁶

2.41 Introduction

The Camp de Tarragona is one of the most dynamic regions in Catalonia in terms of economic activity. This area includes the counties of Tarragonès, Baix Camp, Alt Camp, and part of Terres de l'Ebre, standing out for its diversity of productive sectors and a strategic location that fosters economic development.

One of the fundamental pillars of the economy in the Camp de Tarragona is the chemical industry. The Tarragona petrochemical complex is the largest in southern Europe, with internationally renowned companies producing a wide range of chemical products. This industry not only provides direct employment to thousands of people but also generates significant indirect economic activity in the region.

Tourism is another key sector. The beautiful beaches of the Costa Daurada, along with cultural attractions such as the Roman amphitheatre of Tarragona, the Cistercian Route, and the PortAventura theme park, attract millions of visitors each year. This drives the growth of associated services, such as hospitality, restaurants, and commerce.

Agriculture also plays a significant role, especially with the cultivation of vineyards, olive trees, and hazelnut trees. The wine appellations, such as DO Tarragona and DOQ Priorat, are recognized worldwide, adding value to the export of agri-food products.

Finally, the port of Tarragona is a key element in logistics and international trade. This port is one of the most important in the Mediterranean, facilitating the export and import of goods and significantly contributing to the local economy.

Overall, the economic activity of the Camp de Tarragona is rich and varied, with well-established sectors working in synergy to maintain the region as an economic engine of Catalonia.

The Pere Martell Institute in Tarragona is a reference center for vocational training. It offers a wide range of intermediate and advanced vocational training cycles in various specialties. Noteworthy among these are the fields of automotive, electricity and electronics, mechanical manufacturing, renewable energy, construction, and graphic arts. Additionally, the institute also provides continuous training for professionals and preparatory courses for vocational training entrance exams. This diversity of educational offerings allows students to acquire the necessary skills to successfully enter the labor market.

⁶ Prepared by Aitor Lallana & David Millet, Institut Pere Martell, Spain



The adaptation of the intermediate vocational training cycle in Electromechanical Maintenance to the needs of the comprehensive water cycle management sector is essential to face the current and future challenges of this vital sector. Water management is crucial for sustainable development, requiring an efficient and safe supply, as well as proper treatment of wastewater.

The water sector demands professionals with specific skills in electromechanical equipment maintenance technologies, as well as knowledge in pumping systems, water treatment, automation, and process control. Adapting the training program would allow students to acquire more specialized training, incorporating relevant content such as the installation and maintenance of purification systems, hydraulic installations management, and emerging technologies in remote control and water monitoring.

This adaptation would foster collaboration with companies in the sector, offering internships in real environments and joint projects that facilitate students' entry into the labor market. With specialized training, future technicians will be better prepared to meet the demands of the job market, thereby contributing to the improvement of water management services.

Moreover, this initiative not only responds to a growing market demand but also promotes sustainable development and the protection of water resources. In summary, adapting the Electromechanical Maintenance training program to the needs of the comprehensive water cycle management sector is a necessary and beneficial investment for society, the economy, and the environment.

The objective of this activity has been to implement the intermediate vocational training cycle in Electromechanical Maintenance, in DUAL mode, adapting it to the needs of companies in the water sector. This adaptation is a proposal created within the framework of the 3LoE project.

As part of this proposal, a study was conducted on the existing relationship between the Electromechanical Maintenance training cycle and the needs of companies in the water sector to create and design activities that, without departing from the established regulatory framework of this cycle, adapt to the specific profile of a maintenance technician in a comprehensive water cycle management company. An agreement for DUAL training has also been established, allowing a student of the training cycle to undertake DUAL training at SGAB (Sociedad General de aguas de Barcelona), which is part of the AGBAR group and therefore a partner company in the 3LoE project. Additionally, a DUAL training agreement has been established with AQUALIA (a company in the water sector).

To understand the level of implementation of this DUAL study, it must be considered that the Pere Martell Institute cannot independently create a new professional title. Therefore, the proposed adaptation must always comply with the applicable legislation, both regional and national. The annexes to this document provide this regulatory information. Thus, all teaching-learning activities must comply with the learning outcomes,



assessment criteria, and content established by the Royal Decree that regulates the professional title.

It is also important to highlight that, starting from the 2024/25 academic year, a new regulation for vocational training will be implemented in Spain, which will bring significant changes to the studies that have been developed in this project.

2.42 Realisation

The implementation of the Electromechanical Maintenance Intermediate Vocational Training Cycle (in DUAL mode) is conducted in person at the Pere Martell Institute. The training combines classroom lessons, practical sessions in the institute's workshops, and finally, training in a company.

The cycle is designed for students who meet a series of prerequisites to qualify for DUAL training:

- a) High level of attendance in theoretical and practical classes at the institute (at least 90% of the scheduled hours).
- b) Academic record: students must pass a sufficient number of modules to ensure they have completed at least 80% of the scheduled hours in the first year.
- c) Successful completion of specific training in occupational risk prevention (UF2 of the FOL module).

Students who pursue their studies in DUAL mode can start their relationship with the company at the end of the third term of the first year (or at the beginning of the second year) and continue throughout the second year. At the Pere Martell Institute, the cycle is structured so that second-year students in the DUAL mode attend the training center for two days and the company for three days a week.

In the case of the Electromechanical Maintenance Intermediate Vocational Training Cycle, second-year students (who are enrolled in the DUAL mode) go to the company on Mondays, Tuesdays, and Wednesdays, and receive training at the institute on the remaining days (Thursdays and Fridays). Students who do not meet the requirements for DUAL training or do not wish to participate in DUAL training go to the company on Mondays and Tuesdays and receive training at the institute from Wednesday to Friday.

The implementation of the DUAL cycle began in September 2022 (first year 2022-23) and will conclude in May 2024 (second year 2023-24).

Selection of participants, possible admission requirements

The students of the Intermediate Vocational Training Cycle in Electromechanical Maintenance primarily come from compulsory secondary education (E.S.O - Educación Secundaria Obligatoria). However, there are also students who come from P.F.I (Programs of Training and Insertion), which are programs aimed at students who have not completed compulsory secondary education. Additionally, there are students who



enroll in a vocational training cycle with the goal of improving their employment situation.

Organisation of the implementation

The contents and exercises have been developed in an online platform (Moodle1), but it was done 100% face-to-face.

Brief notes on counsellors and teachers, their qualifications and experience

Jordi Castells: A teacher specializing in Mechanization and Machine Maintenance in the Installation and Maintenance Department at the Pere Martell Institute, with extensive teaching experience. He is the pedagogical tutor of the group and the tutor responsible for managing the FCT/DUAL internships.

Òscar Ferrer: A teacher specializing in Mechanization and Machine Maintenance in the Installation and Maintenance Department at the Pere Martell Institute, with extensive teaching experience.

Jaume Garcia: A teacher specializing in Mechanization and Machine Maintenance in the Installation and Maintenance Department at the Pere Martell Institute, with extensive teaching experience.

Santi Megías González: A teacher specializing in Mechanization and Machine Maintenance and the head of the Installation and Maintenance Department at the Pere Martell Institute, with extensive teaching experience in both the Electromechanical Maintenance cycle and the Industrial Mechatronics cycle, among others.

Vicent Anfos Aznar: A teacher specializing in Organization and Projects of Mechanical Manufacturing in the Installation and Maintenance Department at the Pere Martell Institute, with extensive teaching experience.

Júlia Ferrando González: A teacher specializing in Organization and Projects of Mechanical Manufacturing in the Installation and Maintenance Department at the Pere Martell Institute, with extensive teaching experience.

Andrea Navarro Godina: A teacher specializing in Organization and Projects of Mechanical Manufacturing in the Installation and Maintenance Department at the Pere Martell Institute, with extensive teaching experience.

Òscar Pujadas: A teacher specializing in Mechanization and Machine Maintenance in the Electricity and Electronics Department at the Pere Martell Institute, with extensive professional experience in the field.

Anna Grau: An English teacher and the head of the Languages Department at the Pere Martell Institute, with extensive teaching experience.

Almendra: A teacher in the Training and Career Guidance Department at the Pere Martell Institute, teaching the Entrepreneurship and Entrepreneurial Initiative module.



Victòria Ismael Biosca: A mechanical Industrial Engineer with over 15 years of experience as a teacher and pedagogical coordinator at the Pere Martell Institute.

Adolf Iglesias Estradé: An Industrial Technical Engineer specializing in electrical engineering, with over 12 years of experience as a vocational teacher and 10 years at the Renewable Energy CFGS, where he is a pedagogical tutor and the DUAL coordinator of the institute. He has helped manage the DUAL agreement with companies within the framework of the 3LoE project.

Participants profile

The participants considered are the students from the cohort of 2022-2024 (first year during the academic year 2022/23 and second year during the academic year 2023/24).

29 male students started the first year of the Intermediate Vocational Training Cycle in Electromechanical Maintenance in the academic year 2022/23, of whom only 14 progressed to the second year. In the second year, there were also 5 repeating students.

2.43 Profile of the electromechanical maintenance technician

The general competence of the training cycle is related to assembling and maintaining industrial machinery and automated production lines in accordance with established regulations and standards, following quality protocols, safety, occupational hazard prevention, and environmental respect. The professional, personal, and social competences associated with the title are as follows:

- a) Obtain necessary data from technical documentation to perform operations associated with the assembly and maintenance of installations.
- b) Prepare the budget for the assembly or maintenance of installations.
- c) Procure the necessary resources and means to undertake the execution of the assembly or maintenance of installations.
- d) Propose modifications to installations according to technical documentation to ensure the viability of assembly, resolving issues within their competence and reporting other contingencies.
- e) Assemble mechanical, hydraulic, pneumatic systems, and other auxiliary elements associated with electromechanical installations.
- f) Install electrical, regulation, and control systems associated with electromechanical installations under conditions of quality and safety.
- g) Manufacture and/or join mechanical components for the maintenance and assembly of electromechanical installations.
- h) Perform functional and regulatory tests and verifications of installations to check and adjust their operation.



- i) Diagnose malfunctions of equipment and elements of installations using appropriate means and applying established procedures with required safety.
- j) Repair, maintain, and replace equipment and elements in installations to ensure or restore operating conditions.
- k) Start up the installation, performing safety and operation tests of machines, automations, and safety devices after assembly or maintenance of an installation.
- l) Complete technical and administrative documentation associated with assembly and maintenance processes of installations.

- m) Adapt to new work situations arising from technological and organizational changes in production processes, updating their knowledge, using existing resources for lifelong learning, and information and communication technologies.
- n) Act responsibly and autonomously within their competence, organizing and developing assigned work, cooperating or working in teams with other professionals in the work environment.
- o) Responsibly resolve incidents related to their activity, identifying the causes within their competence and autonomy.
- p) Communicate effectively, respecting the autonomy and competence of the different individuals involved in their work environment.
- q) Apply occupational risk prevention protocols and environmental protection measures during the production process to prevent harm to individuals and the workplace environment.
- r) Apply quality procedures, universal accessibility, and "design for all" in professional activities included in production processes or service provision.
- s) Perform basic management for the creation and operation of a small business and demonstrate initiative in their professional activity.
- t) Exercise their rights and fulfill the obligations arising from their professional activity, in accordance with established legislation.
- u) Interpret simple technical documents and basic communications in English within the circuits of a company in the electromechanical maintenance sector.

Furthermore, the teaching staff must enhance the acquisition of professional, personal, and social competencies and key skills through activities scheduled to implement the curriculum of this training cycle. These include autonomy, innovation, work organization, responsibility, interpersonal relationships, teamwork, and problem-solving abilities.

The general objectives of the cycle are as follows:



- a) Identify relevant information, interpreting plans, diagrams, and technical sheets to obtain necessary data.
- b) Evaluate materials and labor, consulting manufacturer catalogs, price lists, and hourly rates to prepare estimates.
- c) Select tools and equipment, using assembly diagrams and maintenance instructions to procure resources.
- d) Document identified problems within their competence, creating necessary plans or sketches to propose modifications to installations.
- e) Identify hydraulic, pneumatic components, and auxiliary elements of an electromechanical installation, interpreting technical documentation to assemble mechanical systems.
- f) Fasten and connect hydraulic, pneumatic components, and auxiliary elements of an electromechanical installation, handling tools and applying assembly techniques to assemble mechanical systems.
- g) Identify electrical components and control and regulation systems, interpreting technical documentation to assemble electrical systems.
- h) Connect and link electrical and control components, using appropriate tools and instrumentation to assemble electrical systems.
- i) Select machines and tools, interpreting blueprints and process sheets to manufacture and join mechanical components.
- j) Apply machining and joining techniques, operating machines and tools to manufacture and join mechanical components.
- k) Choose measurement equipment and devices, correlating parameters to be measured with the equipment and devices for testing and verification.
- l) Apply measurement and verification techniques, considering the parameters to be measured and evaluating the results obtained for testing and verification.
- m) Identify and locate the cause of dysfunction, relating it to the effects produced to diagnose malfunctions.
- n) Determine the operating procedure to be carried out, interpreting equipment instruction manuals or procedure manuals for repair and maintenance.
- o) Analyze the operation of installations, identifying blocks and functions to diagnose malfunctions.
- p) Apply repair, maintenance, and replacement techniques for elements, using tools and equipment and interpreting technical documentation for repair and maintenance.



- q) Adjust regulation, control, and safety elements of the installation, using appropriate tools, equipment, and measurement devices and considering reference parameters to commission the installation.
- r) Verify the operation of the equipment, machine, or installation, applying the operating procedure to commission the installation.
- s) Analyze and utilize existing resources for lifelong learning and information and communication technologies to learn and update their knowledge, recognizing professional and personal improvement opportunities to adapt to different professional and work situations.
- t) Develop teamwork and assess its organization, participating with tolerance and respect, and making collective or individual decisions to act with responsibility and autonomy.
- u) Adopt and evaluate creative solutions to problems and contingencies that arise in the course of work processes, to responsibly resolve incidents in their activity.
- v) Apply communication techniques, adapting to the content to be transmitted, its purpose, and the characteristics of the recipients, to ensure the effectiveness of the process.
- w) Analyze environmental and occupational risks associated with professional activity, relating them to their causes, to justify preventive measures that will be adopted, and apply the corresponding protocols to prevent harm to oneself, others, the environment, and the surroundings.
- x) Analyze and apply techniques necessary to address universal accessibility and "design for all".
- y) Apply and analyze techniques necessary to improve quality work procedures in the learning process and in the relevant productive sector.
- z) Use procedures related to entrepreneurial culture, business, and professional initiative to manage a small business or undertake a job.
- aa) Recognize their rights and responsibilities as an active agent in society, considering the legal framework regulating social and labor conditions, to participate as a democratic citizen.
- ab) Recognize and select basic technical vocabulary and common expressions in English to interpret simple technical documentation and communicate in everyday situations in the workplace.

Students engaging in DUAL training at Institut Pere Martell can initiate their company placements towards the end of the third trimester of the first year or at the beginning of the second year, continuing throughout the second year. For the Maintenance Electromechanical Vocational Training Course (CFGM), second-year students in the DUAL program attend the company on Mondays, Tuesdays, and Wednesdays, and receive

training at the center on Thursdays and Fridays. Students who do not meet the requirements for DUAL training or choose not to pursue it attend the company on Mondays and Tuesdays and receive training at the center from Wednesday to Friday.

One of the most important tasks carried out within the framework of the 3LoE project has been the creation of two DUAL agreements with two major companies in the integrated water cycle management sector.

1st. Agreement

Company	FCC AQUALIA, SA https://www.aqualia.com/
Student	CARLOS OLVER DENGRA
Hours in FCT modality	98 hours (03/07/2023 - 20/07/2023)
Hours in DUAL modality	810 hores (09/10/2023- 27/05/2024)
Total hours	908 hours

Aqualia is one of the leading specialized operators seeking efficient responses and solutions to the needs of water supply, sanitation, and purification. The company applies as criteria achieving reasonable profitability and integrating all its capabilities in all areas of the water cycle value chain.

2nd Agreement:

Company	Sociedad General de Aguas de Barcelona (SGAB - Grup AGBAR)
Student	Marçal Pérez León
Hours in FCT modality	98 hours (26/06/2023 - 13/07/2023)
Hours in DUAL modality	816 hours (09/10/2023- 27/05/2024)
Total hours	914 hours



This agreement, in particular, has been carried out within the framework of the Project 3LoE, as the company is part of the CoVE and therefore one of the priorities is to promote cooperation among the different members of the CoVE.

The experience has been highly valued by both students and companies, and therefore it seems that it will be able to continue and even expand the number of students who can participate in DUAL training with water sector companies in future editions. Attached as an annex are the DUAL reports submitted by the students.

2.44 Main Findings and Conclusions

The assessment has been conducted through a combination of theoretical and practical activities in the classroom, practical tasks in workshops, and training in the workplace. Each professional module (and each training unit) has been assessed individually.

The training received by the participating students has been highly valued.

The training has opened their eyes and awakened their interest in the possibilities of working as maintenance professionals within companies in the integrated water cycle management sector.

The development of the curriculum should be more flexible so that training centers can better adapt to the social and labor reality of each territory.

We hope that this training can be integrated as far as possible in the contents of the corresponding degree, thus allowing all students to be trained in the topics covered.

We hope that this adaptation can be integrated, as far as possible in the contents of the degree, thus allowing all students of the training cycle of electromechanical maintenance to know the needs of the sector of integrated management of the water cycle. On the other hand, we will continue with the DUAL practices with the companies of this sector.

All participating students have been provided with the course evaluation forms, and we have confirmation that 12 students have completed them. The evaluation form has also been sent to the trainers involved in the course.

Additionally, interviews have been conducted with 3 students, 3 teachers, and 2 companies.

The results of the satisfaction survey carried out both by the teachers and the students, are not available to our organization for in-depth analysis, as another organization within the 3LoE project is responsible for analysing the survey data. Nevertheless, we know from personal interviews with the course participants that the level of satisfaction with the content and usefulness of the course has been very high for the majority of attendees.



3 Evaluation Concept⁷

3.1 The Aim of the Evaluation

The general aim of the study is to evaluate the effectiveness of the implementation of dual vocational trainings (first centre level), realized within the Project titled “Three-level Centres of Professional Excellence: Qualification, Entrepreneurship and Innovation in the Green Economy” (3LoE). The total of five dual vocational trainings are implemented by four project partners from Poland (2 trainings), Lithuania (1 training), Latvia (1 training), and Spain (1 training). The conclusions of the evaluation research will contribute to improving the quality, and especially the effectiveness of trainings, show the limitations of the training model, and indicate the direction for further activities and curriculum revision (if necessary).

A training management cycle can be divided into three major steps: curriculum design (planning), implementation, and evaluation. The evaluation is the final step of the training management cycle. Evaluation of any training is one of the main components of a training programme/ curriculum. The results of the training evaluation are reflected in the next phase of training planning to improve future training programmes/ curricula. Training evaluation provides useful information for:

- trainers – to gain insight into the effectiveness of activities, with a view of improving activities planned throughout the training course.
- management – to gain insight into the effectiveness of the training, with a view of improving curricula.

What is an Evaluation?

Several definitions of evaluation have been offered, and the following are some of those most commonly used:

An evaluation is the systematic and objective assessment of an ongoing or completed project, program or policy, its design, implementation and results. The aim is to determine the relevance and fulfillment of objectives, development efficiency, effectiveness, impact and sustainability.

A program evaluation is the systematic collection of information about the activities, characteristics, and outcomes of programs to make judgments about the program, improve program effectiveness, and/or inform decisions about future programming.

There are many different types of evaluations depending on the object being evaluated and the purpose of the evaluation.

Perhaps the most important basic distinction in evaluation types is that between formative and summative evaluation. Formative evaluations strengthen or improve the object being evaluated - they help form it by examining the delivery of the program or technology, the quality of its implementation, and the assessment of the organizational context, personnel, procedures, inputs, etc. Summative evaluations, in contrast, examine the effects or outcomes of some object - they summarize it by describing what happens subsequent to delivery of the program or technology; assessing whether the object can be said to have caused the outcome; determining the overall impact of the

⁷ Developed by Pomeranian University in Słupsk



causal factor beyond only the immediate target outcomes; and, estimating the relative costs associated with the object.

Formative evaluation includes several evaluation types:

- needs assessment determines who needs the program, how great the need is, and what might work to meet the need.
- evaluability assessment determines whether an evaluation is feasible and how stakeholders can help shape its usefulness.
- structured conceptualization helps stakeholders define the program or technology, the target population, and the possible outcomes.
- implementation evaluation monitors the fidelity of the program or technology delivery.
- process evaluation investigates the process of delivering the program or technology, including alternative delivery procedures.

Summative evaluation can also be subdivided:

- outcome evaluations investigate whether the program or technology caused demonstrable effects on specifically defined target outcomes.
- impact evaluation is broader and assesses the overall or net effects -- intended or unintended -- of the program or technology as a whole.
- cost-effectiveness and cost-benefit analysis address questions of efficiency by standardizing outcomes in terms of their dollar costs and values secondary analysis reexamines existing data to address new questions or use methods not previously employed.
- meta-analysis integrates the outcome estimates from multiple studies to arrive at an overall or summary judgement on an evaluation question.

3.2 Five Steps of Training Evaluation

The processes of dual vocational training evaluation can be divided into five steps:

1. identification of the purposes of evaluation.
2. selection of the evaluation methods.
3. design of the evaluation tools.
4. data collection data.
5. analysis of results and drafting of the results report. and analyze and report results.

Step 1: Identification of the Purposes of Evaluation

Before developing evaluation systems, the purposes of evaluation must be determined. These will affect the types of data and the data collection methods. The most common reason for evaluating dual vocational trainings is to determine their effectiveness. Evaluation can help one learn from experience of past trainings. Evaluations also help to learn which elements of the program/ curriculum, i.e. activities and methods in a training were successful, and which were not, and whether the pro-program/curriculum



as a whole fulfils its goals. It also sets the ground for improvement, including all necessary changes to program/curriculum and training methods.

The following purposes of evaluating trainings are:

- To determine whether the objectives of the training were achieved.
- To assess the degree to which the training met the expectations of participants.
- To see how the knowledge and skills learned in the training are put into practice.
- To assess the results and impacts of the training programs/ curricula.
- To assess the effectiveness of the trainings and individual activities, in particular as regards professional qualifications of participants and the skills acquired by trainees that can be used by them in their work.
- To assess whether the training programs/ curricula were properly implemented.
- To identify the strengths and weaknesses of the trainings in general.
- To assess whether the training programs/ curricula were suitable in terms of the training contents, timing, participants and other aspects.
- To find the weak points of the training programs/ curricula and suggest solutions for improvement.

Step 2: Selection of the Evaluation Method

One of the most commonly used methods for evaluating training programs is the four levels of evaluation by D. L. Kirkpatrick. According to his concept, capacity development is realized by the four sequential steps:

1. Reaction - evaluation on this level measures how participants react to the training program. It is important to get a positive reaction. Although a positive reaction may not ensure learning, if participants do not react favorably, they probably will not be motivated to learn.

2. Learning - evaluation on this level measures the extent to which participants change attitudes, improve knowledge, and/or increase skills as a result of attending the training program. One or more of these changes must take place if a change in behavior is to happen.

3. Behavior - evaluation on this level measures the extent to which change in participants' behavior has occurred because of attending the training program. In order for change to take place, four conditions are necessary:

- The person must have a desire to change.
- The person must know what to do and how to do it.
- The person must work in the right climate.
- The person must be rewarded for changing.

4. Results - evaluation on this level measures the final results that occurred because the participants attended the training program. Examples of the final results include increased production, improved quality and decreased costs. It is important to recognize that these results are the reason for having some training programs. (Source: Kirkpatrick (2006) Evaluating Training Programs)



In the present setting, the evaluation is extended beyond the program/curriculum assessment to also include the implementation and the effects of the implementation of dual vocational trainings at vocational schools participating in the 3LoE project. Therefore, the evaluation also includes the assessment of the outcomes important for teachers/ instructors, school managers (headteachers) and companies involved in the dual vocational trainings. Since different parties perform different roles in the trainings, the evaluation methods and scope will differ accordingly.

Step 3: Design of the Evaluation Tools

Various evaluation tools can be selected depending on the purposes and methods of evaluation:

- Questionnaires
- Surveys
- Tests
- Interviews
- Focus group discussions
- Observations
- Performance records

From the perspective of the evaluation of the implementation of dual vocational trainings, the most suitable evaluation tools include: the written questionnaire and the half-standardized interview. The two tools are seen as complementary, as each provides insights into different aspects of the training or effects of the training. Also, the two tools used together ensure a wider picture and fuller assessment of the trainings.

The questionnaire is probably the most common form of evaluating training programs to evaluate the expectations (initial evaluation) as well as reactions of participants and trainers who took part in the training (final evaluation). It is also one of the tools that can provide necessary feedback information from other stakeholders, if necessary.

In the current project, in order to evaluate dual vocational trainings at first centre level, the questionnaire tool will be used:

- at the beginning of the training (initial evaluation),
- at the end of the training (final evaluation).

The parties involved in the evaluation using the questionnaire tool are:

- the participants (trainees),
- the trainers (teachers).

Initial evaluation is mainly aimed at analyzing the expectations of participants, their motivation, and their educational background, while on the part of trainers, it mainly assesses their preparedness level and their evaluation of the program/ curriculum to be applied.

Final evaluation aims at the assessment of the training, including the program/ curriculum and the training methods applied. In particular, the evaluation focuses on the



appropriateness of the content and methods used, usefulness of the training a whole and the effectiveness of training activities/ tools in gaining new knowledge/ skills.

Initial evaluation questionnaires set the point of reference for the overall evaluation of the trainings, undertaken once the final evaluation is completed.

Interviews can be used especially when qualitative information is needed about the impact of the training. The feedback gathered by way of interviews paints a more comprehensive (and general) picture of a training and its outcomes.

In the present project, interviews will be conducted towards the end of the training period (or at the end of evaluation period if the training is still in progress on the date of project conclusion).

The parties interviewed include:

- participants (trainees),
- trainers (teachers),
- representatives of companies in which dual vocational training is carried out.

Interviews have the following advantages and disadvantages that should be considered when selecting them as the data collection method.

Advantages of interviews:

- Good for uncovering feelings and hidden causes.
- Non-verbal signals can indicate key issues.
- Spontaneity – follow the unexpected issues.

Disadvantages of interviews:

- Time-consuming and labor intensive.
- An unrepresentative sample can skew the results.
- Very dependent on the skills of the interviewer.
- Can be difficult to quantify.

Interviews have three types from which a suitable one was selected for each survey.

1. Structured interview: the questions are set in advance.
2. Semi-structured interview: the general content is predetermined but additional exploration is allowed. This form of interview is particularly useful in situations where there are key issues to be investigated, but there is less certainty about the range of respondents' reactions to them.
3. Unstructured interview: free-flowing conversation rather than a specific set of questions.

In the current project, semi structured interviews are applied as a means of ensuring more freedom on the part of interviewees to express their opinion.

Step 4: Data Collection

QUESTIONNAIRES



To improve the effectiveness of questionnaire data collection, the following recommendations should be followed:

- Choose the appropriate form of the questionnaire. It is suggested that the electronic form of the questionnaire is used. This will allow automatic summary of closed questions and will gather answers to open-ended questions in one database.
- Keep responses anonymous, as it allows the participants to feel open and comfortable to give comments that can help gather more reliable data, which in turn may be used to improve future programs/ curricula.
- Distribute questionnaire forms in advance – Depending on the object of analysis/ review and the scope of evaluation, questionnaires should be distributed a few days in advance so as to allow participants to familiarize themselves with the questions and to provide more in-depth answers to open-ended questions. Final assessment questionnaires should be distributed, if possible, in the final weeks of the training. This will allow for more generalized review of the entire training process.
- Explain the purpose of the questionnaire and how the information will be used - This will help improve the response rate and encourage participants to make comments that can be useful to improve future trainings.
- Allow enough time for completing the questionnaire – While initial evaluation does not require much time to complete, since it measures the initial state and the expectations, the final evaluation is more thorough and focuses on the training that has been completed throughout a period of three years. Therefore, participants need more time to acquaint themselves with the questions, and to recall essential information in the form of a feedback on the content, the methods applied and the effectiveness of the training in general.
- Provide assistance. If translation is necessary, questionnaires should be translated into the mother tongue of the participants. In the case of participants with disabilities, all necessary forms of support should be provided.

INTERVIEWS

In order to achieve more reliable results, the following steps should be followed.

- Select appropriate interviewers. Interviewers should be knowledgeable about the training details (training process, methodology applied, and the outcomes foreseen). They should have some skill in conducting interviews (as evaluation means) and have ease at establishing positive rapport. Preferably, they should not be teachers who conducted the training or superiors (in the case of interviews of trainers). Interviewers must stay neutral throughout the interview.
- Select respondents. Depending on the size of the group, either a random sample or the entire group can be evaluated. In the current project, the minimum number of respondents is three for each of the groups interviewed, i.e. participants (3), trainers (3), and representatives of companies (3). The choice of individual interviewees should be as random as possible, especially in highly homogeneous groups. Respondents must expressly agree to being interviewed and recorded (if applicable).
- Explain the purpose of the interview and how the information will be used. Similarly to the questionnaire, explaining the aim of the interview will help improve the



response rate and encourage participants to make comments that can be useful to improve future trainings. Participants should be ensured about full confidentiality.

- Select appropriate time and venue. Since interviews are time-consuming, enough time should be allowed to gather feedback. Interviewers must allocate as much time as is necessary to fulfil the goals of the interview, no rush is advised. However, participants need to be notified about the approximate time that the interview may take. It is therefore advised to pretest the interview to assess the amount of time necessary for its completion. There are no specific guidelines as to where interviews should be conducted. However, the place should ensure privacy and appropriate conditions if audio recordings are taken in the process. Tele-interviews, e.g. by means of phone call or video-conferencing systems, are allowed. Please note that audio/ video recordings require consent on the part of the participants. Appointments for interviews should be made with each participant.
- Develop the questions of the interview. One of the features of semi-structured interviews is that it is a flexible and interactive tool. Interviewers develop the interview (i.e. questions, hints) as it progresses, on basis of the baseline (general) questions outline in this document (see below). In this context, interviewers should list potential topics and additional questions, taking into account the specific conditions in which dual vocational training in their Centre was taking place. Interviewers should avoid asking self-explanatory questions. Close-ended questions may provide a gateway to open-ended ones, deepening the issue investigated. For example, the question Do you think dual vocational training has advantages over traditional training? may be followed by a question of Why? /Why not? or a question focusing on the actual list of advantages (What are the advantages of dual vocational training?). The list of tentative questions should allow interviewers to organize the interview, allowing them to re-direct the discussion back on track if it has diverted from the draft outline. Start with positive feedback questions (e.g. advantages) before turning to negative feedback ones (e.g. disadvantages). The content of the interview is subject to change, depending on the development / progression of the training itself and other circumstances that may influence the list of possible questions.
- Provide assistance. If participants find it difficult to understand a question or issue discussed, interviewers should rephrase or explain the contents of the question. If translation is necessary, interviewers should conduct the interview in the mother tongue of the participants. In the case of participants with disabilities, all necessary forms of support should be provided.

Step 5: Analysis of results and drafting of the results report.

The analysis of the data gathered may progress in a variety of ways. There are a number of statistical software programs available for such analyses. However, any analysis should be as simple as possible and limited to what is necessary to draw the required conclusions from the data. After knowing what kind of information will be relevant and useful to the primary users, the last step in the evaluation process is to develop an evaluation report.



Figures should be used to present statistical and complex data fairly quickly and easily. Pie charts and bar charts are among the commonly used figures. Bar charts work better when many categories are compared, and relative magnitude is to be shown.

Evaluation report outline

After knowing what kind of information will be relevant and useful to the primary users, you can develop an evaluation report outline.

Summary

- Purpose of Evaluation
- Addressees of the Evaluation
- Major findings and recommendations

Training Description

- Training background
- Training goals/objectives
- Training participants
- Training activities (general overview)

Evaluation Design and Methods

- Purpose of the Evaluation
- Evaluation designs
- Data collection methods

Findings and Results

- Description of how the findings is organized (e.g., by evaluation questions, themes/issues)
- Results of analyses of quantitative and/or qualitative data collected.

Recommendations

- Recommendations for action based on these conclusions, in particular in relation to the training program/ curriculum, methods used, etc.

Appendices

- Questionnaires pre/post tests
- Interview questions (including additional questions developed by each partner participating in the evaluations).

3.3 Data Sources

The conclusions of the evaluation research will contribute to improving the quality, and especially the effectiveness of training, show the limitations of the training model and indicate the direction for further activities.

Dual vocational trainings usually last two or three years, with a varying training program depending on national requirements. For example, the Lithuanian partner en-



visages 2,420 contact hours (110 credits), 717 of which is the theoretical training, and the remaining 1,703 constitute practical training (at a company). Education ends with professional qualifications acquired by participants.

According to the methodology presented above, two questionnaires and three interviews will be prepared:

Two written surveys (questionnaires) of participants:

- one at the beginning of the training (initial evaluation – see Appendix 1), and
- one at the end of the training (final evaluation - see Appendix 2)

Participants will be asked to fill out questionnaires in the first weeks of the training, and towards the final weeks of their in the last week of the training in which they will be able to assess the quality of training in its various aspects.

The current evaluation constitutes quality control of the training and the level of satisfaction of its participants. Satisfaction with the course and program content, activities, and thus the efficiency on the "level of response" is a prerequisite for proper motivation to learn and consequently to high efficiency to the next level.

The initial evaluation questionnaire is divided into two parts:

- (1) evaluation of motivation to participate in the training,
- (2) evaluation of the expectations of the participant.

The final evaluation questionnaire is divided into three parts:

- (1) evaluation of the motivation after the conclusion of the training,
- (2) evaluation of satisfaction with the training content,
- (3) evaluation of the trainers and the organization of the training.

Two written surveys (questionnaires) of all trainers (teachers) participating in the training:

- one at the beginning of the training (initial evaluation – see Appendix 3)
- one at the end of the training (final evaluation – see Appendix 4).

All trainers will be asked to fill out questionnaires in the first weeks of the training (initial evaluation), and in the last weeks of the training (final evaluation).

The initial evaluation is divided into two parts:

- (1) evaluation of the training program/ curriculum,
- (2) evaluation of the preparedness to carry out training activities.

The final evaluation is divided into three parts:

- (1) evaluation of the training program/ curriculum,
- (2) evaluation of the trainee's participation in the training,
- (3) evaluation of the cooperation between the school and companies.



NOTE: All questionnaires will be administered in the online form. All partners must ensure timely distribution of the questionnaires (see table above), providing assistance to participants, if necessary (see above Step4: Data collection).

Personal half-standardized interviews with 3 participants - (Appendix 5)

Personal interviews with 3 participants will be carried out in the final weeks of the training. The interviews aim to assess the quality of the training in its various aspects.

Interviews will be conducted by respective partners at their premises or other venue. A special digital answer sheet will be created to help all partners send the feedback information.

Personal half-standardized interviews with 3 teachers (Appendix 6)

Personal interviews with 3 teachers will be carried out in the final weeks of the training. The interviews aim to assess the effectiveness of the training and its program/ curriculum in its various aspects.

Interviews will be conducted by respective partners at their premises or other venue. A special digital answer sheet will be created to help all partners send the feedback information.

Personal half-standardized interviews with 3 representatives of companies on the importance and effects of dual vocational training (Appendix 7).

Personal interviews with 3 companies will be carried out in the final week of the training in which they will be able to assess the usefulness and quality of training in its various aspects.

Interviews will be conducted by respective partners at company's premises or other venue, A special digital answer sheet will be created to help all partners send the feedback information.

3.4 Appendix

3.41 SURVEY 1 OF PARTICIPANTS

(INITIAL EVALUATION QUESTIONNAIRE)

Dear Participant,

The objective of the study is to evaluate your motivation and expectations related to dual vocational training you have enrolled in. The training is realized within the Project "Three-level Centres of Professional Excellence: Qualification, Entrepreneurship and Innovation in the Green Economy (3LoE)".

Please, take a few minutes and fill this his evaluation form. Your comments and suggestions will help us to improve the training. The questionnaire is anonymous. To fill out it takes you only a few minutes.

Please indicate your institution.



- PP4 – Poland – Izba Rzemieślnicza Małej i Średniej Przedsiębiorczości
- PP7 – Lithuania – Professinio Makymo Centras Zirmunai
- PP20 – Spain – Institut Pere Martell
- PP23 – Latvia – Profesionālās izglītības kompetences centrs

I Evaluation of motivation to participate in the dual vocational training.

Q1: Please indicate your level of agreement with the statements listed below.

1=Strongly Disagree; 2= Disagree; 3= Neither agree nor disagree; 4=Agree; 5=Strongly Agree

I feel motivated to participate in the training	1	2	3	4	5
I want to acquire new theoretical knowledge	1	2	3	4	5
I want to learn new practical skills	1	2	3	4	5
I am happy that a large part of the training will happen in companies	1	2	3	4	5

Q2: Please indicate why you have enrolled in dual vocational training. Please indicate three main reasons.

- (a) I want to get a new job,
- (b) I want to earn more money,
- (c) I want to secure my position in my current job,
- (d) I want to get promoted in my current job,
- (e) I want to establish my own business,
- (f) I want to do something new in my current job,
- (g) I want to improve for my own satisfaction,
- (h) I want to acquire new skills,
- (i) I want to attain recognized qualifications,
- (j) I want to gain more job satisfaction,
- (k) other (please, specify what motivated you to enroll in dual vocational training).

Q3: Please indicate what/ who influenced your decision to enroll in dual vocational training. Please indicate a maximum of three answers.

- (a) My partner/ guardian asked me to continue education,
- (b) My employer asked me to improve my skills,
- (c) My friend encouraged me to take up the training,
- (d) The training is legally required in my job,



- (e) I had to continue education because it is compulsory till the age of 18,
- (f) I followed the advice of job counsellor/ career adviser,
- (g) The school has a good reputation,
- (h) The training program is interesting,
- (i) other (please specify what/ who motivated you to enroll in dual vocational training).

Q4: Do you have any other comments regarding your motivation to participate in dual vocational training?

II Evaluation of the expectations about the dual vocational training for the participant

Q5: Please indicate your level of agreement with the statements listed below.

1=Strongly Disagree; 2= Disagree; 3= Neither agree nor disagree; 4=Agree; 5=Strongly Agree

The training objectives meet my expectations	1	2	3	4	5
The content seems well organized and easy to follow	1	2	3	4	5
The topics seem relevant to me	1	2	3	4	5
The training process is flexible	1	2	3	4	5
The training will improve my theoretical knowledge	1	2	3	4	5
The training will improve my practical skills	1	2	3	4	5
The training experience will be useful in my work	1	2	3	4	5
The training in the company will be beneficial	1	2	3	4	5
Overall, dual education system will be effective	1	2	3	4	5

Q6: Do you have any comments about your expectations about the dual vocational training you enrolled in?

IV General information

(1) Please indicate your gender



- Male
- Female
- Prefer not to answer

(2) Please indicate your age

- Younger than 18
- 18 - 24
- 25 - 34
- 35 – 44
- 45 - 54
- Prefer not to answer

(3) Please indicate your professional experience

- no professional experience
- 0-6 months
- 6-12 months
- 1-3 years
- 3-5 years
- 5-10 years
- more than 10 years

(4) Please indicate your educational background

- no formal education
- primary school
- junior high school
- vocational school
- high school
- technical high school
- college/ university (Bachelor's Degree/ Engineering Degree)
- college/ university (Master's Degree)

(5) Did you attend any additional courses/ trainings before you enrolled in this course?

- YES



- NO

(6) What additional courses/ trainings did you attend before you enrolled in this course?

(7) Did you know anything about dual vocational trainings before you heard about this training?

- YES
- NO

Thank you for your answers!

3.42 SURVEY 2 OF PARTICIPANTS

(FINAL EVALUATION QUESTIONNAIRE)

Dear Participant,

The objective of the study is to evaluate your satisfaction with dual vocational training. The training has been realized within the Project “Three-level Centres of Professional Excellence: Qualification, Entrepreneurship and Innovation in the Green Economy (3LoE)”.

Please, take a few minutes and fill this his evaluation form. Your comments and suggestions will help us to improve future trainings. The questionnaire is anonymous. To fill out it takes you only a few minutes.

Please indicate your institution.

- PP4 – Poland – Izba Rzemieślnicza Małej i Średniej Przedsiębiorczości
- PP7 – Lithuania – Professinio Makymo Centras Zirmunai
- PP20 – Spain – Institut Pere Martell
- PP23 – Latvia – Profesionālās izglītības kompetences centrs

I Evaluation of motivation to participate in the training

Q1: Please indicate your level of agreement with the statements listed below.

1=Strongly Disagree; 2= Disagree; 3= Neither agree nor disagree; 4=Agree; 5=Strongly Agree



I was motivated to participate in the training	1	2	3	4	5
Participation and interaction were encouraged	1	2	3	4	5
My creativity was encouraged	1	2	3	4	5
My initiative was highly evaluated	1	2	3	4	5

II Evaluation of the usefulness of training for the participant

Q2: Please indicate your level of agreement with the statements listed below.

1=Strongly Disagree; 2= Disagree; 3= Neither agree nor disagree; 4=Agree; 5=Strong

The training objectives met my expectations	1	2	3	4	5
The content was well organized and easy to follow	1	2	3	4	5
The topics were relevant to me	1	2	3	4	5
The facilities for the training were suitable	1	2	3	4	5
The training improved my theoretical knowledge	1	2	3	4	5
The training improved my practical skills	1	2	3	4	5
The training experience will be useful in my work	1	2	3	4	5
The training in the company was beneficial	1	2	3	4	5
Dual education system was effective	1	2	3	4	5
I will recommend dual vocational training to others	1	2	3	4	5

Q3: Do you have any comments regarding the usefulness of dual vocational training?

Q4: Please, answer these additional questions.

1=Strongly Disagree; 2= Disagree; 3= Neither agree nor disagree; 4=Agree; 5=Strongly Agree

After the completion of the training, I...

will try to get a new job	1	2	3	4	5
will earn more money	1	2	3	4	5
will feel more secure in my current job	1	2	3	4	5
will get promoted	1	2	3	4	5



will try to establish my own business	1	2	3	4	5
will ask superiors to entrust me with new responsibilities	1	2	3	4	5
have attained recognized qualifications	1	2	3	4	5
will do my job with greater satisfaction	1	2	3	4	5
other...					

III Evaluation of the trainers and the organization of the training

Q5: Please indicate your level of agreement with the statements listed below.

1=Strongly Disagree; 2= Disagree; 3= Neither agree nor disagree; 4=Agree; 5=Strongly Agree

The lecturers were knowledgeable about training topics	1	2	3	4	5
The lecturers were good communicators	1	2	3	4	5
The feedback received from the trainers was useful	1	2	3	4	5
The content (i.e. tasks, activities) was well organized and easy to follow	1	2	3	4	5
The topics were relevant to me	1	2	3	4	5
The duration of training was relevant	1	2	3	4	5
The teaching materials were presented in an organized manner	1	2	3	4	5
Practical training in companies was compatible with the theoretical content taught at school	1	2	3	4	5
The materials distributed were helpful	1	2	3	4	5
The training process was flexible	1	2	3	4	5
The overall atmosphere of the training was encouraging	1	2	3	4	5

Q6: Do you have suggestions as to how the training could be improved (in terms of content, organisation, etc.) in the future?

IV General information



(1) Please indicate your gender

- Male
- Female
- Prefer not to answer

(2) Please indicate your age

- Younger than 18
- 18 - 24
- 25 - 34
- 35 – 44
- 45 - 54
- Prefer not to answer

(3) Please indicate your professional experience

- no professional experience
- 0-6 months
- 6-12 months
- 1-3 years
- 3-5 years
- 5-10 years
- more than 10 years

(4) Has your position changed in the organisation where you work?

- YES
- NO

(5) Did your position change because of the training?

- YES
- NO

What is your position in the organization where you work?



How do you evaluate the organisation of the training? 1 2 3 4 5

How do you evaluate the availability of materials for the training? 1 2 3 4 5

How do you evaluate the degree of flexibility of the training? 1 2 3 4 5

Q2: What challenges do you envisage as regards the application of the program/ curriculum of the dual vocational training? How could these challenges be mitigated?

II Evaluation of the trainers' preparedness to run the trainings

Q3: Please indicate your level of agreement with the statements listed below.

1 = very dissatisfied; 2=somewhat dissatisfied; 3= Neither satisfied nor dissatisfied; 4=somewhat satisfied; 5=very satisfied

How do you evaluate your understanding of the objectives of the training? 1 2 3 4 5

How do you evaluate your pedagogical skills to work with trainees? 1 2 3 4 5

How do you evaluate your subject-related competence to teach selected subjects/ supervise activities? 1 2 3 4 5

How do you evaluate your motivation to instruct trainees in the dual vocational training? 1 2 3 4 5

How do you evaluate the assistance on the part of your colleagues in relation to the training? 1 2 3 4 5

How do you evaluate the assistance on the part of your school management in relation to the training? 1 2 3 4 5

Q4: What other issues would you like to raise in relation to your preparedness as a trainer in the training?



Background information

(1) Please indicate your gender.

- Male
- Female
- Prefer not to answer

(2) Please indicate your age

- 18 - 24
- 25 - 34
- 35 - 44
- 45 - 54
- 55 - 64
- 65 or older
- Prefer not to answer

(3) Please indicate how long have you worked as a trainer?

- 6 months to less than 1 year
- 1 year to less than 3 years
- 3 years to less than 5 years
- 5 years to less than 10 years
- 10 years to less than 15 years
- 15 years or more
- Other

(4) What is the highest level of education you have completed?

- Vocational secondary education
- Professional higher education
- Bachelor's degree or equivalent qualification
- Master's degree or equivalent qualification
- Other



and practical classes/activities?	1	2	3	4	5
How do you evaluate the organization of the training?	1	2	3	4	5
How do you evaluate the availability of materials for the training?	1	2	3	4	5
How do you evaluate the facilities available for the training?	1	2	3	4	5
How do you evaluate the degree of flexibility of the training?	1	2	3	4	5

Q2: What challenges did you encounter while realizing the training? How did you mitigate those challenges?

II Evaluation of trainees' participation in the training.

Q3: Please circle the appropriate number to indicate your level of satisfaction

1 = very dissatisfied; 2=somewhat dissatisfied; 3= Neither satisfied nor dissatisfied; 4=somewhat satisfied; 5=very satisfied

How do you evaluate the trainees' knowledge at the beginning of the training?	1	2	3	4	5
How do you evaluate the trainees' knowledge at the end of the training?	1	2	3	4	5
How do you evaluate the progress made by the trainees in terms of the practical skills acquired?	1	2	3	4	5
How do you evaluate the trainees' engagement in the training?	1	2	3	4	5
How do you evaluate cooperation between trainees?	1	2	3	4	5
How do you evaluate trainees' work and learning organization?	1	2	3	4	5
How do you evaluate the readiness of trainees to work in the profession?	1	2	3	4	5



Q4: What methodological and/or organizational changes should be made to improve the training so that it better answers the needs of trainees?

III Evaluation of the cooperation between the school and companies.

Q5: Please indicate your level of agreement with the statements listed below.

1=Strongly Disagree; 2= Disagree; 3= Neither agree nor disagree; 4=Agree; 5=Strongly Agree

The company was engaged in the preparation of the program/ curriculum.	1	2	3	4	5
The company was fully engaged in the realization of the training.	1	2	3	4	5
The company followed the program/ curriculum closely.	1	2	3	4	5
Cooperation with the company was smooth.	1	2	3	4	5

Q6: What improvements could be made in terms of cooperation between the school and the company while realizing dual vocational training?

Background information

Please indicate your gender.

- Male
- Female
- Prefer not to answer

Please indicate your age

- 18 - 24
- 25 - 34
- 35 - 44
- 45 - 54



- 55 - 64
- 65 or older
- Prefer not to answer

Please indicate how long have you worked as a trainer?

- 6 months to less than 1 year
- 1 year to less than 3 years
- 3 years to less than 5 years
- 5 years to less than 10 years
- 10 years to less than 15 years
- 15 years or more
- Other

What is the highest level of education you have completed?

- Vocational secondary education
- Professional higher education
- Bachelor's degree or equivalent qualification
- Master's degree or equivalent qualification
- Other

Thank you for your answers!

3.45 PERSONAL INTERVIEW FOR PARTICIPANTS

Dear Participant,

The objective of the study is to evaluate the dual vocational training, realized within the Project "Three-level Centres of Professional Excellence: Qualification, Entrepreneurship and Innovation in the Green Economy (3LOE)".

We would appreciate you taking your time to answer the questions. Your comments and suggestions will help us to improve the training.

Please, ask your interviewer for clarification, if necessary.

Please indicate your institution.

- PP4 – Poland – Izba Rzemieślnicza Małej i Średniej Przedsiębiorczości
- PP7 – Lithuania – Professinio Makymo Centras Zirmunai



- PP20 – Spain – Institut Pere Martell
- PP23 – Latvia – Profesionālās izglītības kompetences centrs

1. What did you like the most participating in dual vocational training program?

2. Which specific difficulties did you encounter while participating in dual vocational training program? Did the trainers try to help you with your difficulties? How?

3. Which theoretical knowledge you mostly lacked during the studies? Did you try to gain the missing knowledge? How?

4. Which part of the training was the most useful for you? Why?

5. Was the whole training consistent, i.e. was the knowledge gained at school expanded and translated into practical skills in the company?

6. How does participating in dual vocational training program prepare you to become a highly skilled and highly-valued employee?

7. What would you change in the training?



8. How satisfied were you with the training?

Thank you for your answers!

3.46 PERSONAL INTERVIEW WITH TRAINERS

Dear Trainer,

The objective of the study is to evaluate the dual vocational training, realized within the Project “Three-level Centres of Professional Excellence: Qualification, Entrepreneurship and Innovation in the Green Economy (3LOE)“.

We would appreciate you taking your time to answer the questions. Your comments and suggestions will help us to improve the training.

Please, ask your interviewer for clarification, if necessary.

Please indicate your institution.

- PP4 – Poland – Izba Rzemieślnicza Małej i Średniej Przedsiębiorczości
- PP7 – Lithuania – Professinio Makymo Centras Zirmunai
- PP20 – Spain – Institut Pere Martell
- PP23 – Latvia – Profesionālās izglītības kompetences centrs

1. Please indicate the strong elements of the dual vocation training realized in your school. To what degree did these strengths translate into the motivation/knowledge/ skills of participants?

2. Please indicate the weak elements of the dual vocational training realized in your school? What measures were undertaken to improve the training? Were they satisfactory?

3. How would you evaluate the program/ curriculum of the dual vocation training realized in your school? What worked well? What needs to be improved?



4. Please indicate knowledge, skills, and abilities that trainees need the most to be successful in the training?

5. What main difficulties did you encounter during the training process? How did you solve the problems encountered?

5. What kind of support would you expect from your school management/ country government?

6. In what way is dual vocational training beneficial for trainees in their future professional life? Explain.

7. How satisfied were you with participating in this project?

Thank you for your answers!

3.47 PERSONAL INTERVIEW WITH REPRESENTATIVES OF COMPANIES

Dear Interviewee,

The objective of the study is to evaluate dual vocational training, realized within the Project “Three-level Centres of Professional Excellence: Qualification, Entrepreneurship and Innovation in the Green Economy (3LOE)“.



We would appreciate you taking your time to answer the questions. Your comments and suggestions will help us to improve the training.

Please indicate the institution with which you cooperate within the framework of dual vocational training.

- PP4 – Poland – Izba Rzemieślnicza Małej i Średniej Przedsiębiorczości
- PP7 – Lithuania – Professinio Makymo Centras Zirmunai
- PP20 – Spain – Institut Pere Martell
- PP23 – Latvia – Profesionālās izglītības kompetences centrs

1. Please indicate the main benefits of dual vocational training from the perspective of your company?

2. How would you evaluate content of the program/ curriculum of the dual vocational training realized in your company?

3. Please indicate knowledge, skills, and abilities that trainees need to be successful in your company.

4. What were the main difficulties you encountered during the training process? How did you try to mitigate the difficulties?

5. How would you evaluate cooperation with the school during the realisation of the dual vocational training? For example, where you provided pedagogical support by school train-ers?



6. What kind of support would you expect from your local authorities/ country's government/ etc. in relation to dual vocational training?

7. How and why is the dual vocational training more beneficial than traditional in-school training for trainees in their future working life? Explain.

8. How satisfied were you with participating in this project?

Thank you for your answers!



4. Evaluation Report⁸

4.1 Overview

The 3LoE project aims to promote work-based learning through the introduction of dual vocational training at various educational levels, including at first stage (EQF 3-4), especially in countries that have used school-based vocational training until this point in time. In the case of dual vocational education up to 75% of the entire training period is spent in companies.

Dual vocational training in the current Project is implemented in

1 Poland by Izba Rzemieślnicza w Szczecinie (PP4)

- (1) Electrician
- (2) Fitter of fixtures and fittings in building industry;

2. Lithuania by VESK (formerly: Professinio Makymo Centras Zirmunai (PP7)

- (3) Cook;

3. Latvia by Profesionālās izglītības kompetences centrs (PP23)

- (4) Car mechanic;

4. Spain by Institut Pere Martell (PP20): profession

- (5) Electrical mechanic (Electromecanico).

4.2 Evaluation concept: dates, addresses, design

The evaluation concept was submitted in 2021 as part of the evaluation cycle that aimed at providing a solid assessment tool for the evaluation of the programmes implemented at the first level of vocational training. The conclusions of the evaluation research will contribute to improving the quality, and especially the effectiveness of training, show the limitations of the training model and indicate the direction for further activities.

The evaluation calendar fully depended on the implementation of dual vocational trainings, which usually lasted two or three years, with a varying training programme depending on national requirements. For example, the Lithuanian partner envisages 2,420 contact hours (110 credits), 717 of which was theoretical training, and the remaining 1,703 constitute practical training (at a company). Education ends with professional qualifications acquired by participants.

Evaluation of dual vocational training is realised according to the following calendar:

⁸ Developed by Pomeranian University in Słupsk (Uniwersytet Pomorski w Słupsku

Partner/ Evaluation	Initial evaluation (questionnaire)	Final evaluation (questionnaire)	Interviews with: - participants - teachers - companies	All results sent to PP6 by:
PP4 CHSZ	September 2022	March 2024	January-March 2024	30 April 2024
PP7 PMCZ	October 2021	May/ June 2023	April-June 2023	31 August 2023
PP20 IPM	October 2021	May/ June 2023	April-June 2023	31 August 2023
PP23 LVT	September 2022	March 2024	January-March 2024	30 April 2024

According to the methodology presented in the Evaluation Concept document, four questionnaires and three interviews were prepared:

Two written surveys (questionnaires) of participants:

- one at the beginning of the training (initial evaluation – see Appendix 1), and <https://forms.gle/Y5tRWPf7T7fyLAim7>
- one at the end of the training (final evaluation - see Appendix 2) <https://forms.gle/UXCKXdxnbDex3Mzc9>

The initial evaluation questionnaire is divided into two parts:

- (1) evaluation of motivation to participate in the training,
- (2) evaluation of the expectations of the participant.

The final evaluation questionnaire is divided into three parts:

- (1) evaluation of the motivation after the conclusion of the training,
- (2) evaluation of satisfaction with the training content,
- (3) evaluation of the trainers and the organization of the training.

Two written surveys (questionnaires) of all **trainers (teachers)** participating in the training:

- one at the beginning of the training (initial evaluation – see Appendix 3)
- <https://forms.gle/uQsrjatvPcHw29rd6>
- one at the end of the training (final evaluation – see Appendix 4).
- <https://forms.gle/A1D27RZ3UHd2pcc5A>

All trainers will be asked to fill out questionnaires in the first weeks of the training (initial evaluation), and in the last weeks of the training (final evaluation).

The initial evaluation is divided into two parts:

- (1) evaluation of the training program/ curriculum,
- (2) evaluation of the preparedness to carry out training activities.



The final evaluation is divided into three parts:

- (1) evaluation of the training program/ curriculum,
- (2) evaluation of the trainee's participation in the training,
- (3) evaluation of the cooperation between the school and companies.

Personal half-standardised interviews with 3 participants - (Appendix 5)

Personal interviews with 3 participants were supposed to be carried out in the final weeks of the training. The interviews aimed to assess the quality of the training in its various aspects. A special digital answer sheet was created to help all partners send feedback information to PP6.

<https://forms.gle/VdpegTfMd97Hktvu5>

Personal half-standardised interviews with 3 teachers (Appendix 6)

<https://forms.gle/Ye55D2bvoc2jcn8M8>

Personal half-standardised interviews with 3 representatives of companies on the importance and effects of dual vocational training (Appendix 7)

<https://forms.gle/oxdVBS7LxyttgHYt9>

All questionnaires were administered in the online form. An example of an online questionnaire is shown in **Appendix 8**. The respective links to questionnaires are provided next to their description above.

4.3 Summary

This evaluation report assesses the implementation of dual vocational training programs conducted under the 3LoE Project. The training was introduced to enhance work-based learning by combining theoretical education with hands-on practical experience in companies.

Dual vocational training in the current Project is implemented in:

1 Poland by Izba Rzemieślnicza w Szczecinie (PP4)

- (1) Electrician
- (2) Fitter of fixtures and fittings in building industry;

2. Lithuania by VESK (formerly: Professinio Makymo Centras Zirmunai (PP7)

- (3) Cook;

3. Latvia by Profesionālās izglītības kompetences centrs (PP23)

- (4) Car mechanic;

4. Spain by Institut Pere Martell (PP20): profession

- (5) Electrical mechanic (Electromecanico).

Participants and teachers from all training programs completed initial and final surveys. In addition, interviews were conducted with participants, teachers, and company representatives where practical training took place. These evaluations provided a



comprehensive overview of how the training was perceived and the impact it had on both theoretical knowledge and practical skills development.

Purpose of Evaluation

The evaluation aimed to assess the effectiveness of dual vocational training programs in aligning with participants' expectations, improving their skills, and preparing them for employment in various industries.

The focus was on evaluating:

- The relevance and quality of the curriculum.
- The effectiveness of combining classroom instruction with practical experience.
- The level of satisfaction among participants, teachers, and companies involved.
- Identifying challenges and areas for improvement to enhance future vocational training efforts.

Addressees of the Evaluation

This evaluation report is intended for:

1. Project partners and institutions involved in vocational training programs, including Izba Rzemieślnicza w Szczecinie (PP4), VESK (PP7), Profesionālās izglītības kompetences centrs (PP23), and Institut Pere Martell (PP20).
2. National and regional educational authorities are interested in improving vocational education standards.
3. Company representatives and industry stakeholders collaborated in providing practical training opportunities for participants.
4. Policy makers and government agencies focus on enhancing vocational training and work-based learning systems in Europe.

Major Findings and Recommendations

Findings:

Participant Motivation and Satisfaction: Most participants were highly motivated, particularly in acquiring practical skills. The majority expressed satisfaction with the training, especially the practical components provided in real companies.

Curriculum and Training Structure: The balance between theory and practice was generally well-received, although there were some discrepancies between theoretical content and practical application, particularly in certain fields.

Teacher and Company Feedback: Teachers appreciated the dual structure but highlighted challenges in coordinating theoretical and practical components. Companies noted that while students developed necessary technical skills, more focus on soft skills and work readiness was needed.

Recommendations:

Strengthen the integration between theoretical learning and practical application by improving communication and collaboration between schools and companies.



Address gaps in soft skills training, especially in areas like communication, teamwork, and problem-solving.

Increase the flexibility of training programs to better accommodate participants' learning paces and needs.

4.4 Training description

Electrician by Izba Rzemieślnicza w Szczecinie (PP4) Poland

Training Background:

The training is based on the curriculum for the "Technik Elektryk" (Electrician Technician) qualification course, ELE.05, which focuses on the operation of electrical machines, devices, and installations. This program has been developed in accordance with the Ministry of National Education's regulation on vocational education, addressing the skills required for the growing electro-energy sector. As the job market experiences a deficit in qualified electricians, this training aims to equip participants with practical and theoretical knowledge essential for career advancement in the field of electro-technology.

Training Goals/Objectives:

To enable participants to install, operate, and maintain electrical machines and systems based on technical documentation.

To develop skills in diagnosing and repairing electrical systems and installations.

To ensure participants understand and can apply safety standards in electrical work.

To prepare students for the vocational qualification exam through comprehensive knowledge and skills in machine and electrical system operations.

Training Participants:

The training is targeted at individuals seeking to gain or enhance qualifications in the field of electro-technology, specifically those pursuing certification as an electrician technician. This includes students at technical schools, second-level vocational schools, and participants of qualification courses, aiming for careers in electrical machine operation and maintenance.

Training Activities (General Overview):

The training will encompass both theoretical and practical components. Participants will:

Attend lectures and workshops covering the fundamentals of electrical systems, safety regulations, and the operation of electrical machines.



Engage in hands-on practice to install, operate, and troubleshoot electrical installations.

Utilize technical documentation to plan and execute tasks related to electrical maintenance.

Participate in evaluations, such as written tests and practical assignments, to assess understanding and readiness for professional certification.

COOK by VESK (formerly: Professinio Makymo Centras Zirmunai (PP7) Lithuania

Training Background

The **Dual Training Program for Cooks** was created to prepare participants to become highly skilled culinary professionals. The program integrates theoretical education and practical on-the-job training, ensuring that graduates acquire essential skills, knowledge, and experience to meet the demands of various culinary settings such as restaurants, hotels, and catering services. The training program was designed to meet the growing needs of the culinary industry for adaptable and competent professionals.

Training Goals/Objectives

The primary goal of the training is to develop well-rounded culinary professionals who:

Can independently prepare, design, and serve a variety of dishes.

Understand food safety and hygiene standards.

Possess skills in kitchen management, including inventory and cost control.

Are capable of working effectively in a team and providing excellent customer service.

Acquire both practical and theoretical knowledge that supports long-term career advancement in the culinary industry.

Training Participants

The participants of this training program consisted of **15 young individuals** aspiring to receive their first qualification in the culinary field. The training took place from **September 2021 to June 2023**. It was aimed at people seeking to build a career in cooking and hospitality, specifically focusing on developing hands-on culinary skills combined with relevant theoretical knowledge.

Training Activities (General Overview)

Training Structure: The dual training program involved a mix of theoretical instruction (30%) and practical, in-company training (70%) over a total of **2420 hours**.



Schedule: Participants alternated between theoretical classes and practical work experience, with 3 days spent at the training center and 7 days at a partnering restaurant or hotel during each two-week block.

Practical Training: Participants received hands-on experience in renowned establishments like "Devyni Drakonai," "Ertlio namas," Artis Centrum Hotel, and Courtyard by Marriott Hotel.

Modules: The curriculum covered a wide range of topics, from occupational safety and kitchen management to specialized areas such as the preparation of soups, salads, desserts, and national cuisine.

Examination & Certification: Participants were assessed through both theoretical and practical exams, with successful trainees receiving certificates recognized by the culinary industry

Electrical mechanic (Electromecanico) by Institut Pere Martell (PP20) Spain

This training focuses on developing skills related to the maintenance and assembly of industrial machinery and automated production lines. The curriculum is designed to cover both theoretical knowledge and practical skills, with a special emphasis on mechanical, hydraulic, pneumatic, and electrical systems. The training includes a variety of modules that aim to ensure students are well-prepared to handle technical responsibilities in maintenance tasks across a wide range of industries. The total number of training hours is 2,000 hours, divided into various modules.

Training Background

The training is aligned with vocational educational standards set by the Generalitat of Catalunya. It follows a structured approach to meet the needs of the industry for qualified professionals who can maintain and assemble complex mechanical and automated systems. The training is developed in response to identified professional qualification needs in Catalonia and is part of the integrated qualification and professional training system. It also incorporates European standards for vocational education and qualification.

Training Goals/Objectives

The main objectives of the training are to:

Equip participants with the skills to interpret technical documents and carry out assembly and maintenance of electromechanical installations.

Develop the ability to diagnose, repair, and maintain various mechanical, electrical, and automation systems.

Promote the application of safety standards and environmental protection in industrial environments.



Prepare participants for the professional and personal competencies needed to adapt to technological and organizational changes in the industry.

Foster teamwork, problem-solving abilities, and effective communication skills in the workplace.

Training Participants

This training is targeted at individuals pursuing a medium-level vocational qualification in electromechanical maintenance. Participants may include students who have completed basic education and are seeking to enter the workforce as qualified technicians in the industrial maintenance sector. It is also suitable for those looking to upgrade their skills in maintaining industrial machinery and production systems.

Training Activities (General Overview)

The training activities are structured around both theoretical learning and practical applications. Key components of the activities include:

Practical Workshops. Hands-on experience with the assembly and maintenance of mechanical, electrical, and automation systems.

Technical Modules. Courses covering manufacturing techniques, assembly procedures, automation systems, and maintenance of machinery.

Safety Training. Modules focused on the prevention of workplace accidents and adherence to environmental protection standards.

Project Work. Collaborative tasks that involve real-world problem-solving and the application of acquired knowledge in practical scenarios.

Language Integration. Some activities include the incorporation of English language skills, particularly in understanding technical documentation.

This structure ensures participants develop both the practical and theoretical knowledge needed for a career in industrial maintenance.

4.5 Findings and results

4.5.1 Initial survey for participants - results

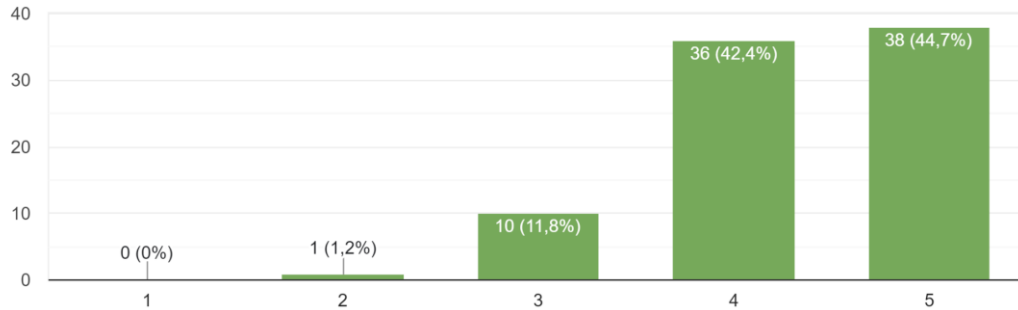
Q1: Please indicate your level of agreement with the statements listed below.

1=Strongly Disagree; 2= Disagree; 3= Neither agree nor disagree; 4=Agree; 5=Strongly Agree

1) I feel motivated to participate in the training

I feel motivated to participate in the training

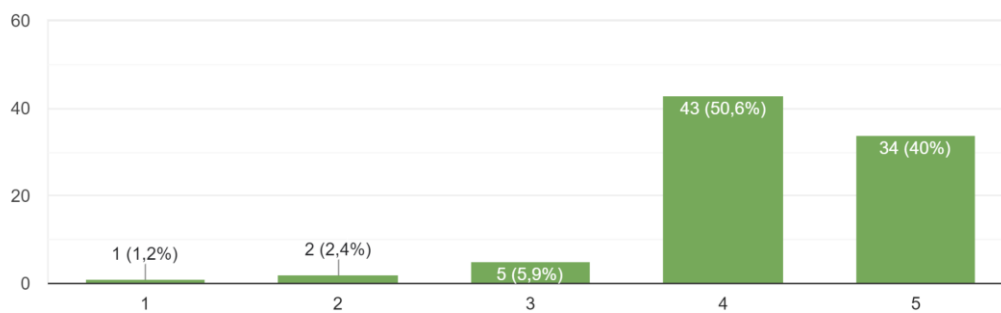
85 odpowiedzi



2) I want to acquire new theoretical knowledge

I want to acquire new theoretical knowledge

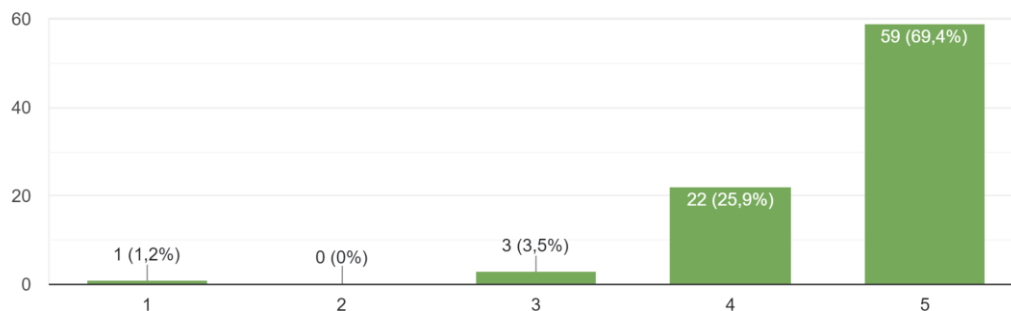
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3) I want to learn new practical skills

I want to learn new practical skills

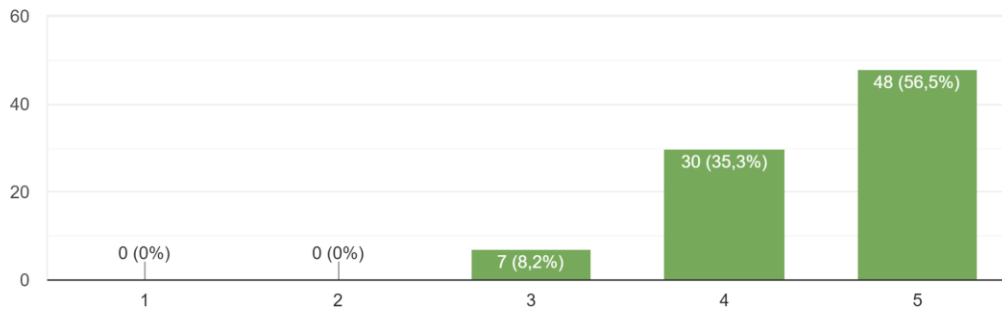
85 odpowiedzi



4) I am happy that a large part of the training will happen in companies

I am happy that a large part of the training will happen in companies

85 odpowiedzi



Findings:

The survey results reveal a generally positive attitude towards the training program among participants.

1. A significant majority of respondents feel motivated to take part in the training, with 44.7% strongly agreeing (rating of 5) and 42.4% agreeing (rating of 4). Only 11.8% remained neutral.
2. Most participants are eager to learn theoretical concepts, with 50.6% agreeing and 40% strongly agreeing. Only 5.9% were neutral.
3. The strongest enthusiasm was shown here, with 69.4% strongly agreeing and 25.9% agreeing on the desire to acquire practical skills. Only 3.5% were neutral.
4. Participants are largely positive about the hands-on company-based training, with 56.5% strongly agreeing and 35.3% agreeing. 8.2% remained neutral.

Overall, the responses indicate strong engagement and enthusiasm for both theoretical and practical aspects of the training.

Q2: Please indicate why you have enrolled in dual vocational training. Please indicate three main reasons

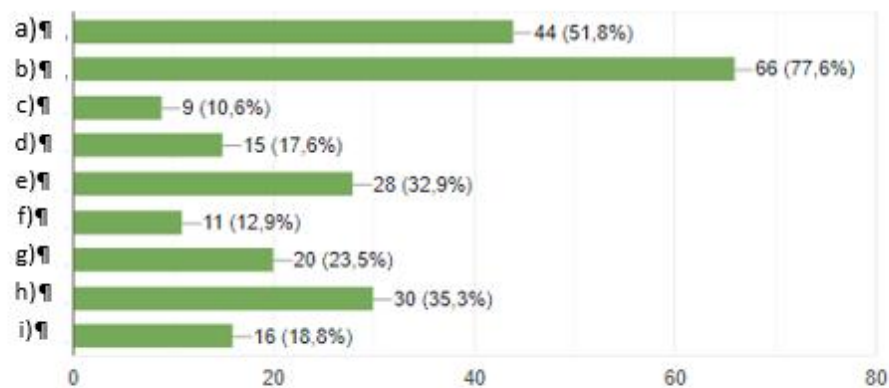
- (a) I want to get a new job,
- (b) I want to earn more money,
- (c) I want to secure my position in my current job,
- (d) I want to get promoted in my current job,
- (e) I want to establish my own business,
- (f) I want to do something new in my current job,

- (g) I want to improve for my own satisfaction,
- (h) I want to acquire new skills,
- (i) I want to attain recognised qualifications,
- (j) I want to gain more job satisfaction,
- (k) other (please, specify what motivated you to enrol in dual vocational training.

Q2. Please indicate why you have enrolled in dual vocational training. Please indicate three main reasons.



85 odpowiedzi



Findings

The primary reason individuals enrolled in dual vocational training is the desire to earn more money, with 77.6% selecting this option. This highlights that financial improvement is a key motivator for most participants. Additionally, 51.8% indicated that they want to get a new job, suggesting that many see vocational training as a pathway to better employment opportunities. Acquiring new skills was also a significant reason, chosen by 35.3%, reflecting the importance of skill development in career advancement.

On the other hand, the least selected reason was securing their position in a current job, with only 10.6% choosing this option. This suggests that most participants are looking for growth or change, rather than simply maintaining their current employment. Only 17.6% wanted to get promoted in their current job, indicating that fewer participants see the training as a direct route to internal career progression. These figures show a stronger focus on external opportunities and financial gains over job security or internal promotion.

Q3: Please indicate what/ who influenced your decision to enrol in dual vocational training. Please indicate a maximum of three answers.

- (a) My partner/ guardian asked me to continue education,
- (b) My employer asked me to improve my skills,

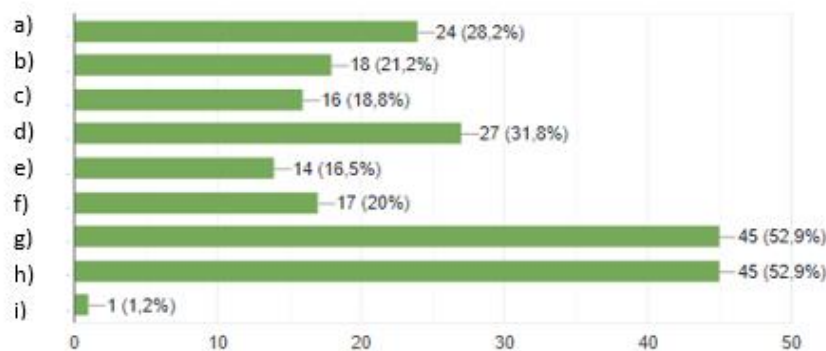


- (c) My friend encouraged me to take up the training,
- (d) The training is legally required in my job,
- (e) I had to continue education because it is compulsory till the age of 18,
- (f) I followed the advice of job counsellor/ career adviser,
- (g) The school has a good reputation,
- (h) The training programme is interesting,
- (i) other (please specify what/ who motivated you to enrol in dual vocational training).

Q3. Please indicate what/who influenced your decision to enrol in dual vocational training. Please indicate a maximum of three answers.



85 odpowiedzi



Findings

The decision to enroll in dual vocational training was influenced by a variety of factors, with the following results highlighting the primary motivators among respondents:

1. **Reputation of the School:** A significant portion of participants (52.9%) cited the school's good reputation as a key influence on their decision. This suggests that the perceived quality and success of the institution played a crucial role in attracting students to dual vocational training.
2. **Interest in the Training Program:** Equally important, 52.9% of respondents indicated that the interesting nature of the training program influenced their choice. This highlights the importance of engaging and relevant curricula in attracting students to vocational training.
3. **Legal Requirements:** Another notable factor was the legal requirement for training in their jobs, reported by 31.8% of participants. This indicates that regulatory factors significantly impact enrollment decisions, emphasizing the necessity for compliance in certain professions.

Other influences included encouragement from partners, employers, friends, and career advisers, as well as the compulsory nature of education until the age of 18.



However, these factors were less frequently cited compared to the top three, suggesting that institutional reputation, program content, and legal obligations are the most decisive influences on students' decisions to enroll in dual vocational training.

Q4: Do you have any other comments regarding your motivation to participate in dual vocational training?

Many respondents simply stated "no" or "none." However, several highlighted key motivators, such as the opportunity to work in a real company, gain hands-on experience, and learn practical skills relevant to their careers. Some emphasised their desire to advance in specific fields like electromechanical maintenance or food industry entrepreneurship. A few noted challenges, like learning technical English, while others expressed enthusiasm for gaining professional qualifications and securing good jobs.

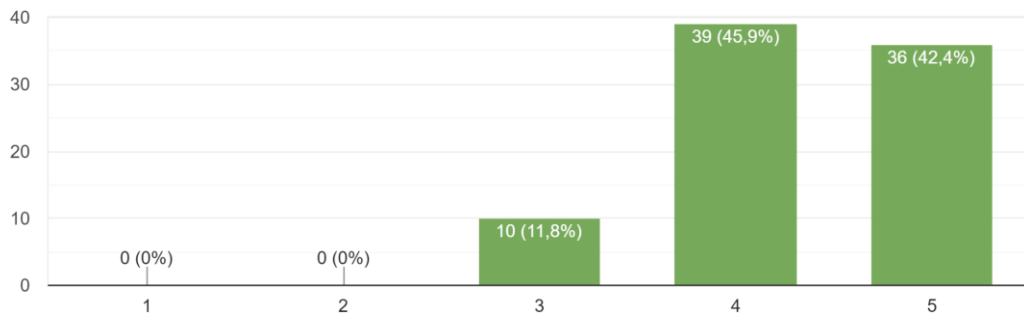
II Evaluation of the expectations about the dual vocational training for the participant

Q5: Please indicate your level of agreement with the statements listed below.

1=Strongly Disagree; 2= Disagree; 3= Neither agree nor disagree; 4=Agree; 5=Strongly Agree

1) The training objectives meet my expectations

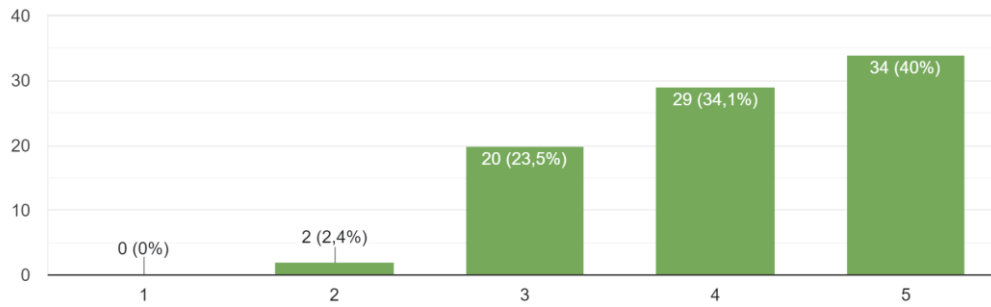
The training objectives meet my expectations
85 odpowiedzi



2) The content seems well organized and easy to follow

The content seems well organized and easy to follow

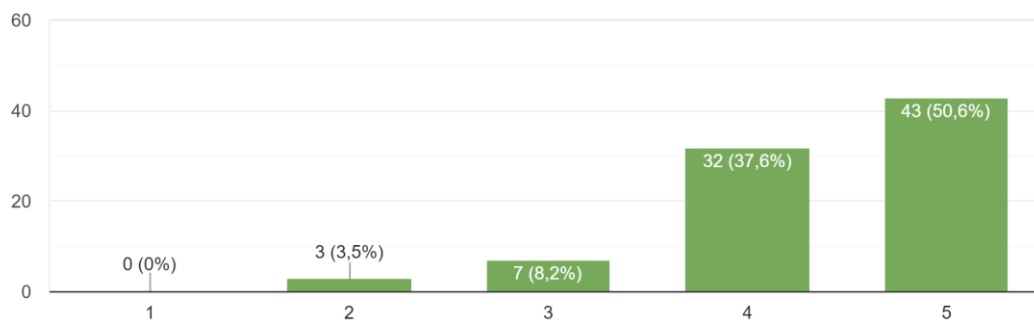
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3) The topics seem relevant to me

The topics seem relevant to me

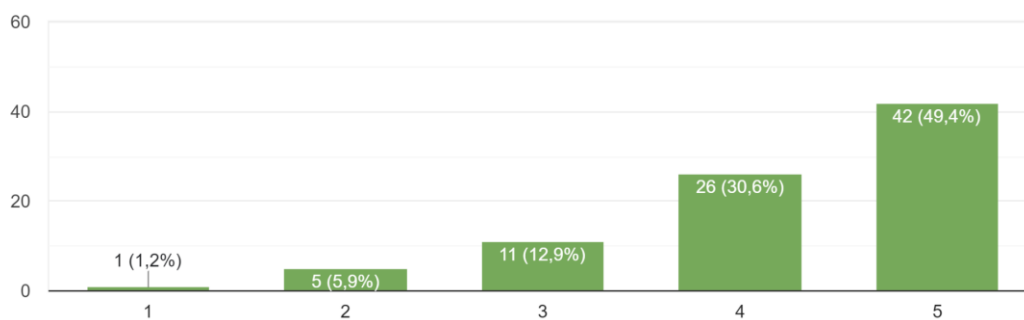
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4) The training process is flexible

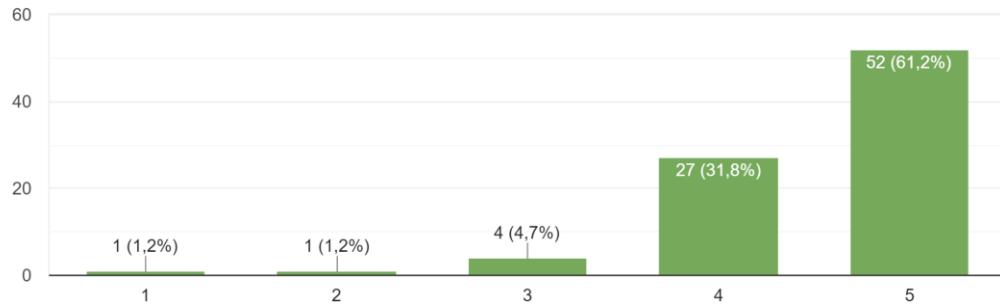
The training process is flexible

85 odpowiedzi



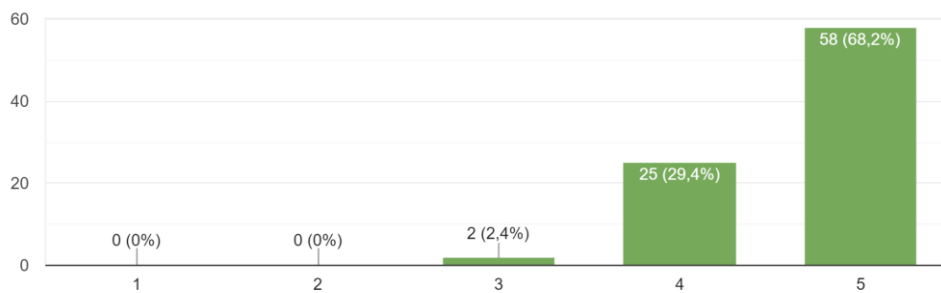
5) The training will improve my theoretical knowledge

The training will improve my theoretical knowledge
85 odpowiedzi



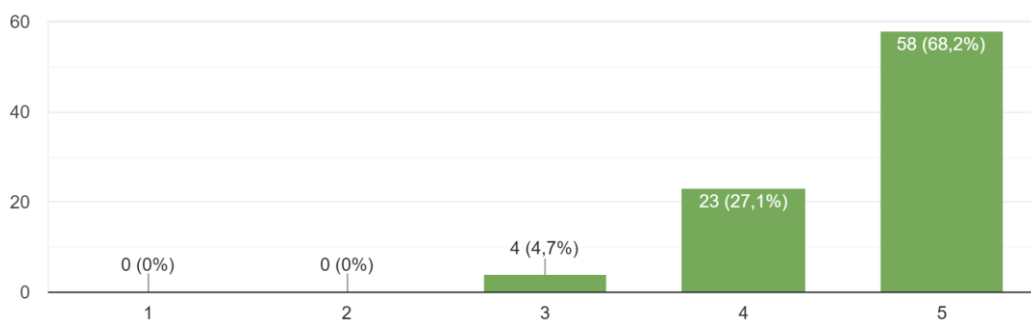
6) The training will improve my practical skills

The training will improve my practical skills
85 odpowiedzi



7) The training experience will be useful in my work

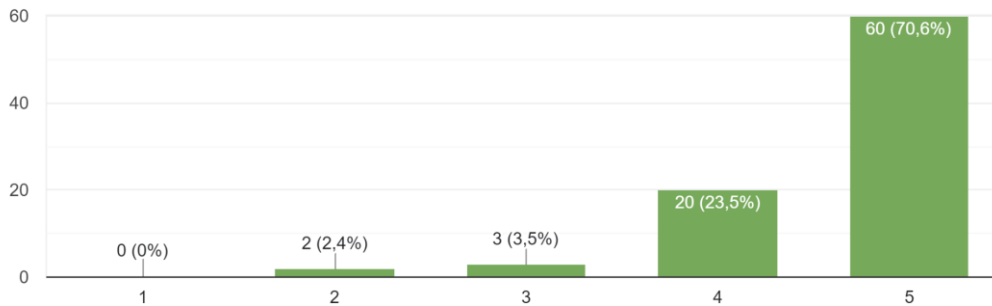
The training experience will be useful in my work
85 odpowiedzi



8) The training in the company will be beneficial

The training in the company will be beneficial

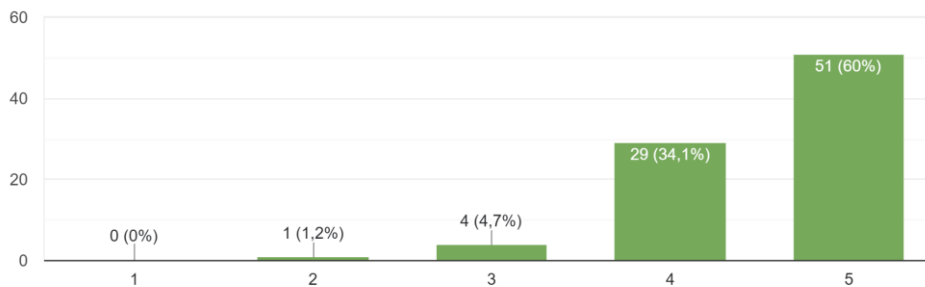
85 odpowiedzi



9) Overall, dual education system will be effective

Overall, dual education system will be effective

85 odpowiedzi



Findings

The evaluation of participants' expectations about the dual vocational training program, based on their responses to nine specific statements, reveals a generally positive sentiment.

Training objectives meeting expectations. Most participants (88.3%) agree or strongly agree (42.4% and 45.9%) that the training objectives align with their expectations.

Content organization. A majority (74.1%) found the content well-organized and easy to follow, with 40% strongly agreeing and 34.1% agreeing.

Relevance of topics. The topics were considered relevant by 88.2% of participants, with 50.6% strongly agreeing.

Training process flexibility. Around 80% agreed the process was flexible, with 49.4% strongly agreeing.



Theoretical knowledge improvement. The training was seen as highly beneficial in enhancing theoretical knowledge, with 93% of participants agreeing or strongly agreeing.

Practical skills improvement. A large majority (97.6%) believed the training would improve their practical skills, with 68.2% strongly agreeing.

Usefulness for work. Participants overwhelmingly (95.3%) agreed that the training experience would be useful in their work.

Company-based training benefits: 94.1% agreed that the company-based training would be beneficial, with 70.6% strongly agreeing.

Effectiveness of the dual education system: Most participants (84.1%) found the dual education system effective, with 50% strongly agreeing.

In summary, the majority of participants expressed a positive outlook on the dual vocational training program, particularly in terms of its relevance, organization, and practical benefits.

Q6: Do you have any comments about your expectations about the dual vocational training you enrolled in?

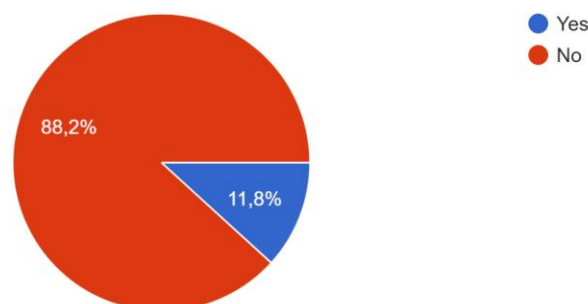
Many participants appreciate the practical experience gained in the company alongside classroom learning. They find both the workplace and the school to be professional and engaging, with valuable lessons and mentorship. Some highlight that the program will help them apply theory in practice and enhance their future job prospects. A few participants expressed challenges, such as language barriers, requesting more materials in their native language (e.g., Latvian), and finding English difficult. Overall, most comments reflect satisfaction and optimism for the training.

IV General information

(5) Did you attend any additional courses/ trainings before you enrolled in this course?

5 (a). Did you attend any additional courses/ trainings before you enrolled in this course?

85 odpowiedzi



Findings:

In response to the question "Did you attend any additional courses/trainings before you enrolled in this course?" the majority of respondents, 88.2%, answered NO, while 11.8% answered YES.

For those who attended courses, the responses were varied but included: Electrician, Mechanics ("Mecanica"), Tiling course.

4.2. Final survey for participants - results

I Evaluation of motivation to participate in the training

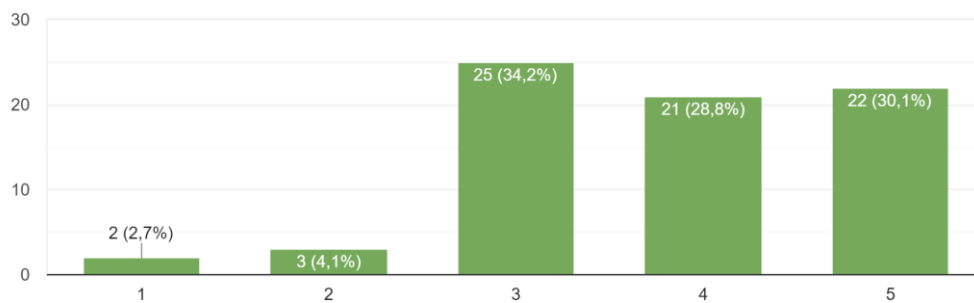
Q1: Please indicate your level of agreement with the statements listed below.

1=Strongly Disagree; 2= Disagree; 3= Neither agree nor disagree; 4=Agree; 5=Strongly Agree

1) I was motivated to participate in the training

I was motivated to participate in the training

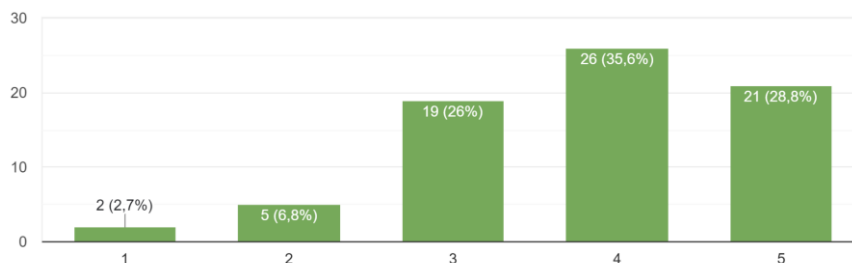
73 odpowiedzi



2) Participation and interaction were encouraged

Participation and interaction were encouraged

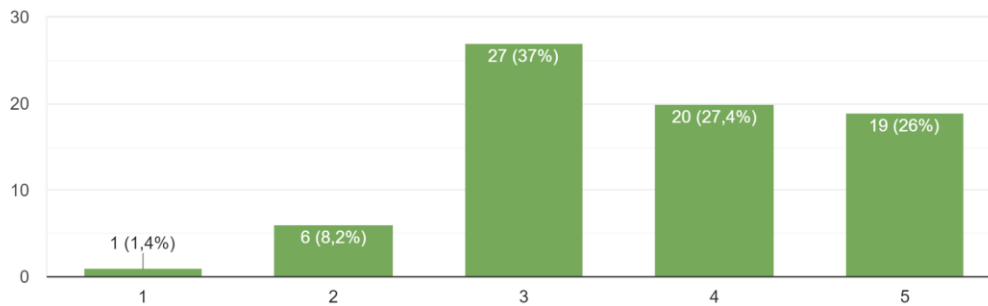
73 odpowiedzi



3) My creativity was encouraged

My creativity was encouraged

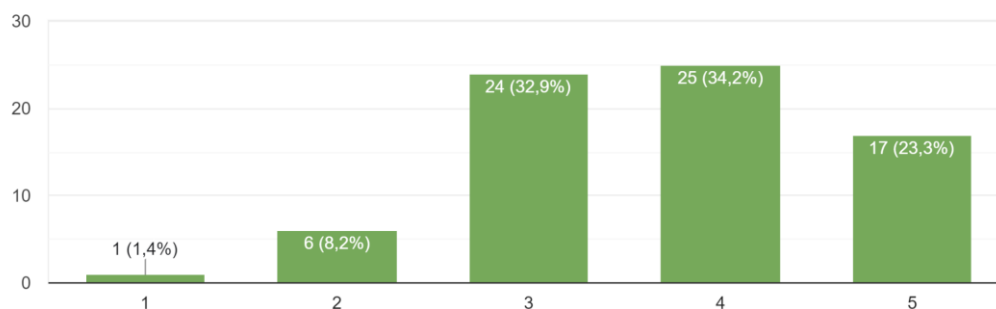
73 odpowiedzi



4) My initiative was highly evaluated

My initiative was highly evaluated

73 odpowiedzi



Findings:

1. **Motivation to Participate in the Training:** The responses indicate a positive perception of motivation among participants. A total of 30.1% of respondents strongly agreed (5), while 28.8% agreed (4). However, a significant portion, 34.2%, chose a neutral stance (3), suggesting that while many participants felt motivated, there remains a notable proportion who did not feel strongly one way or the other.

2. **Encouragement of Participation and Interaction:** The majority of participants responded positively regarding the encouragement of participation and interaction during the training. 28.8% strongly agreed (5), and 36.6% agreed (4). This suggests that most participants felt that the training effectively fostered an engaging and interactive environment.



3. **Encouragement of Creativity:** Regarding the encouragement of creativity, the responses were more mixed. 26% of respondents strongly agreed (5), while 27.4% agreed (4). Notably, a significant 37% of participants remained neutral (3). This indicates that while some participants felt their creativity was nurtured, a substantial number did not express a clear opinion on the matter.

4. **Evaluation of Initiative:** The evaluation of initiative revealed a diverse range of opinions. The dominant responses were 34.2% agreeing (4) and 32.9% neither agreeing nor disagreeing (3). Only 23.3% of respondents strongly agreed (5), suggesting that while a majority appreciated the evaluation of their initiatives, there was still a considerable portion that was ambivalent about this aspect of the training.

Summary

Overall, the findings highlight a generally positive perception of the training, particularly in terms of motivation, participation, and interaction. However, there is room for improvement, especially concerning the encouragement of creativity and the evaluation of initiative, as indicated by the substantial neutral responses.

II Evaluation of the usefulness of training for the participant

Q2: Please indicate your level of agreement with the statements listed below.

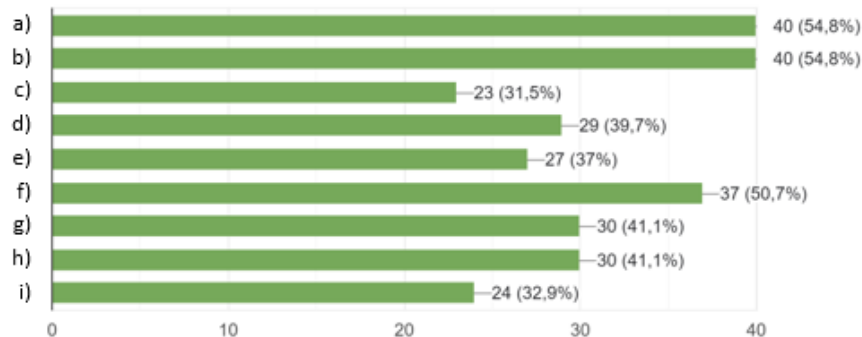
1=Strongly Disagree; 2= Disagree; 3= Neither agree nor disagree; 4=Agree; 5=Strongly Agree

- a) The training objectives met my expectations
- b) The content was well organized and easy to follow
- c) The topics were relevant to me
- d) The facilities for the training were suitable
- e) The training improved my theoretical knowledge
- f) The training improved my practical skills
- g) The training experience will be useful in my work
- h) The training in the company was beneficial
- i) Dual education system was effective
- j) I will recommend dual vocational training to others



Please indicate your level of agreement with the statements listed below.

73 odpowiedzi



Findings

54.8% of participants felt that the training objectives met their expectations and that the content was well-organized and easy to follow. However, only 31.5% found the topics relevant to their needs.

Regarding the training environment, 39.7% considered the facilities suitable, while 37% reported an improvement in theoretical knowledge. A majority, 50.7%, felt that their practical skills had improved. However, only 41.1% believed the training would be useful in their work and regarded the training as beneficial. Finally, 32.9% agreed that the dual education system was effective.

Overall, while many aspects of the training were positively received, there are areas for improvement, particularly concerning the relevance of topics and the effectiveness of the dual education system.

Q3: Do you have any comments regarding the usefulness of dual vocational training?

Opinions on the usefulness of dual vocational training are mostly positive. Of the 73 responses, several people stressed that it was an excellent tool for starting a career, noting the value of gaining real-world experience on the job. Participants appreciated that the training allowed them to gain practical skills and better prepare them for professional challenges. Although some of the responses were neutral or indicated a lack of comment, many people noted the positive aspects of dual training, indicating its usefulness in professional development.

Q4: Please, answer these additional questions.

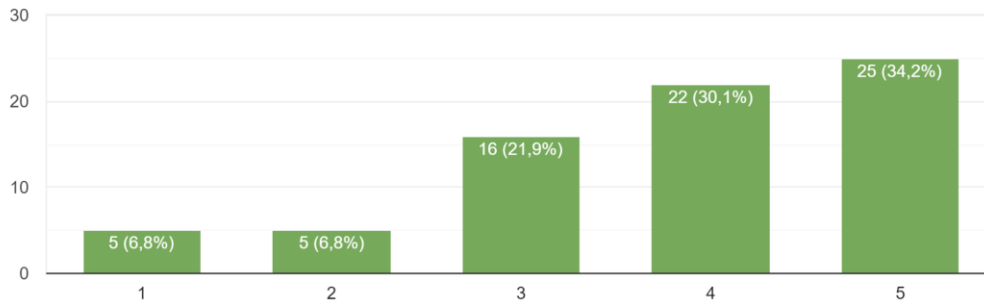
1=Strongly Disagree; 2= Disagree; 3= Neither agree nor disagree; 4=Agree; 5=Strongly Agree

After the completion of the training, I...

- 1) will try to get a new job

will try to get a new job

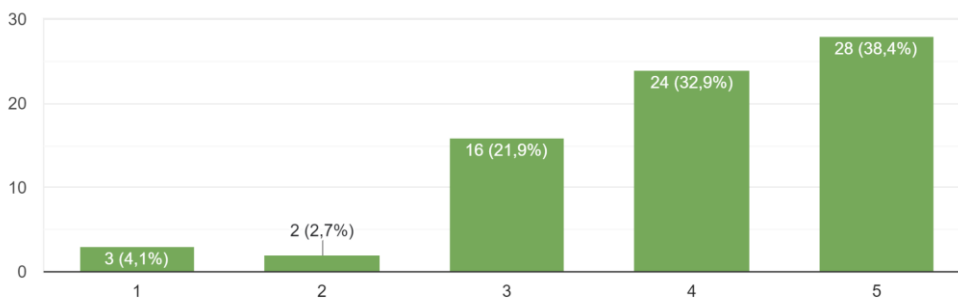
73 odpowiedzi



2) will earn more money

will earn more money

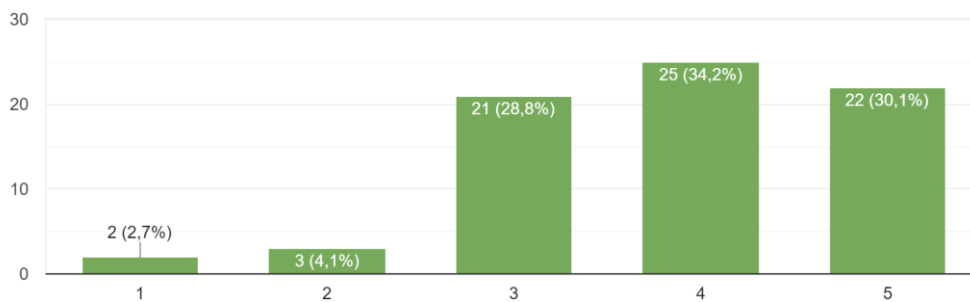
73 odpowiedzi



3) will feel more secure in my current job

will feel more secure in my current job

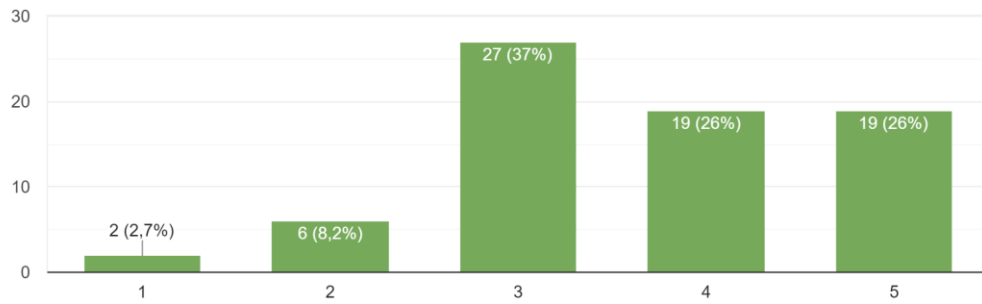
73 odpowiedzi



4) will get promoted

will get promoted

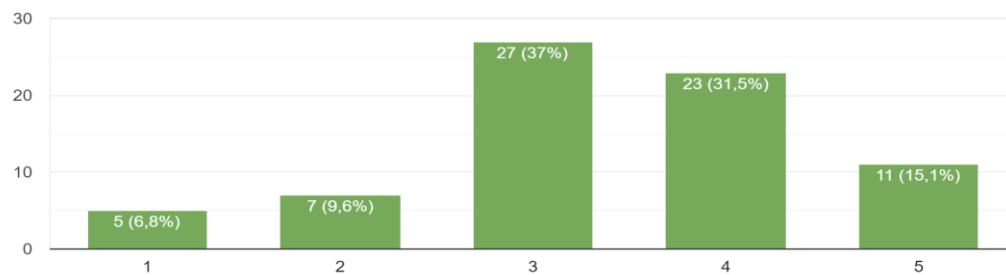
73 odpowiedzi



5) will try to establish my own business

will try to establish my own business

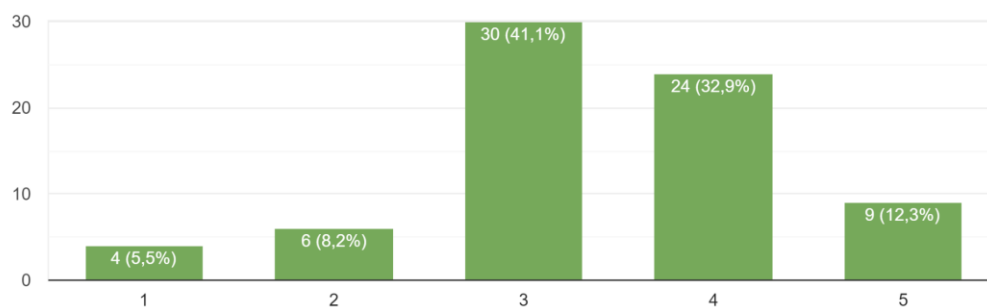
73 odpowiedzi



6) will ask my superiors to entrust me with new responsibilities

will ask my superiors to entrust me with new responsibilities

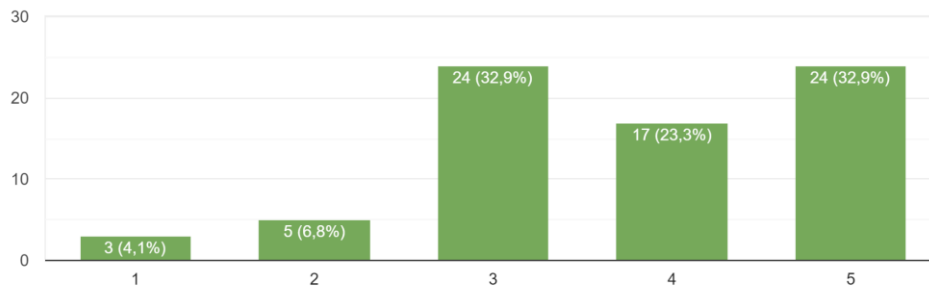
73 odpowiedzi



7) have attained recognised qualifications

have attained recognised qualifications

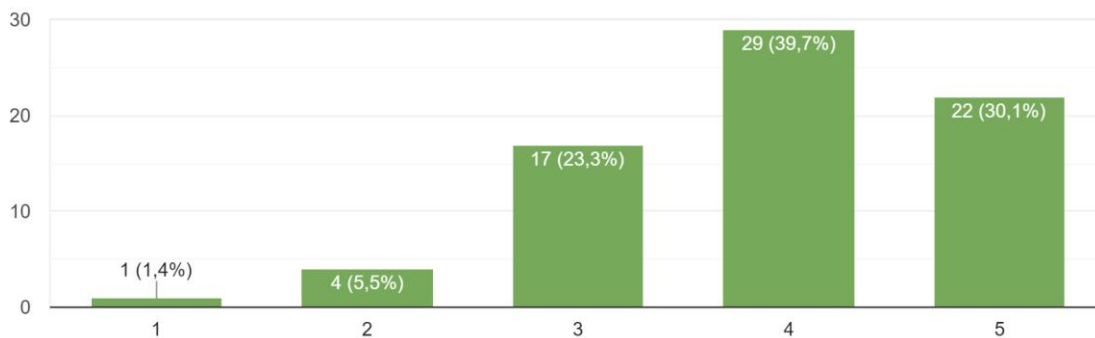
73 odpowiedzi



8) will do my job with greater satisfaction

will do my job with greater satisfaction

73 odpowiedzi



Findings

- 1. Pursuit of New Job Opportunities:** A notable percentage of respondents (34.5%) expressed strong agreement (5) that they will try to get a new job after completing the training. This is supported by an additional 31% who agree (4). However, a significant portion (21.9%) remains neutral (3), while a smaller segment expresses disagreement (6.8% each for 1 and 2). This indicates a generally positive inclination toward seeking new job opportunities post-training.
- 2. Increased Earning Potential:** The majority of participants feel that the training will lead to increased earnings, with 38.4% strongly agreeing (5) and 34.9% agreeing (4). Only 21.9% remain neutral (3), indicating that most participants are optimistic about their financial prospects as a result of the training.
- 3. Job Security Perception:** Regarding job security, 28.8% of respondents expressed skepticism (3) about feeling more secure in their current jobs after the training. However, a combined 64.3% of respondents feel positively about this aspect (52% agreeing



at levels 4 and 5). This shows that while there is some uncertainty, the overall sentiment is towards increased job security.

4. **Promotion Prospects:** The belief in obtaining promotions is more mixed, with 37% expressing skepticism (3). Nevertheless, 52% of respondents feel optimistic about their chances for promotion (combined responses of 4 and 5). This suggests that while many see potential for advancement, a significant proportion remain unsure.
5. **Entrepreneurial Intentions:** The intention to establish one's own business shows mixed responses, with 37% neutral (3) and a combined 46.6% feeling positively (4 and 5). This indicates a fair amount of interest in entrepreneurship, but with many respondents uncertain about their next steps.
6. **Seeking New Responsibilities:** Only 12.3% strongly agree (5) that they will ask superiors for new responsibilities, with 41.1% neutral (3) and 32.9% agreeing (4). This may indicate a hesitance among participants to take initiative in seeking more responsibilities.
7. **Recognition of Qualifications:** There is significant skepticism regarding the attainment of recognized qualifications, with 32.9% remaining neutral (3). In contrast, 54.2% feel positively about this aspect (combined responses of 4 and 5), suggesting that many participants believe the training will enhance their qualifications.
8. **Job Satisfaction:** Finally, the training appears to have a positive effect on job satisfaction, with 30.1% strongly agreeing (5) and 39.7% agreeing (4) that they will do their job with greater satisfaction. However, 23.3% remain neutral (3), indicating some uncertainty among participants.

Conclusion

Overall, the findings suggest a generally optimistic outlook among participants regarding their future job opportunities, earning potential, and job satisfaction as a result of the training. However, there is notable skepticism regarding promotions and the pursuit of new responsibilities, indicating areas where additional support and encouragement may be beneficial.

III Evaluation of the trainers and the organization of the training

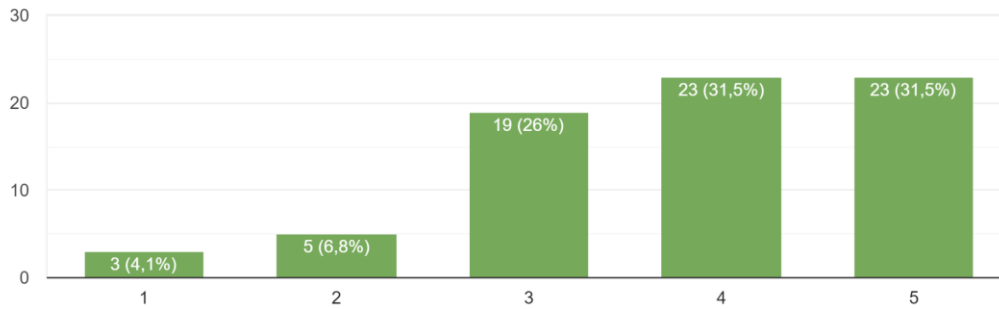
Q5: Please indicate your level of agreement with the statements listed below.

1=Strongly Disagree; 2= Disagree; 3= Neither agree nor disagree; 4=Agree;
5=Strongly Agree

- 1) The lecturers were knowledgeable about the training topics

The lecturers were knowledgeable about the training topics

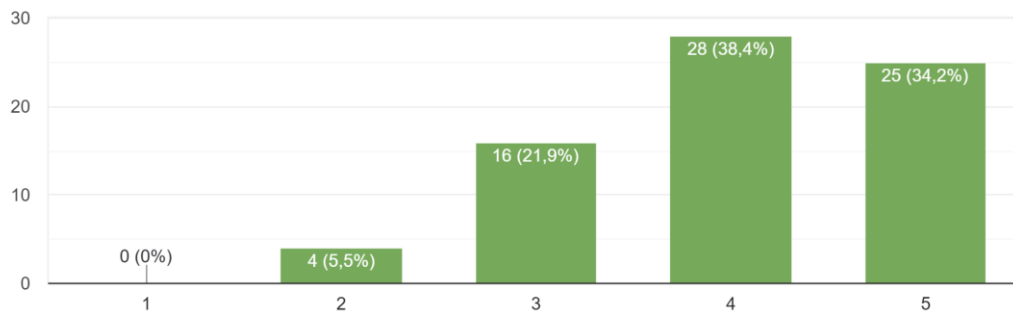
73 odpowiedzi



2) The lecturers were good communicators

The lecturers were good communicators

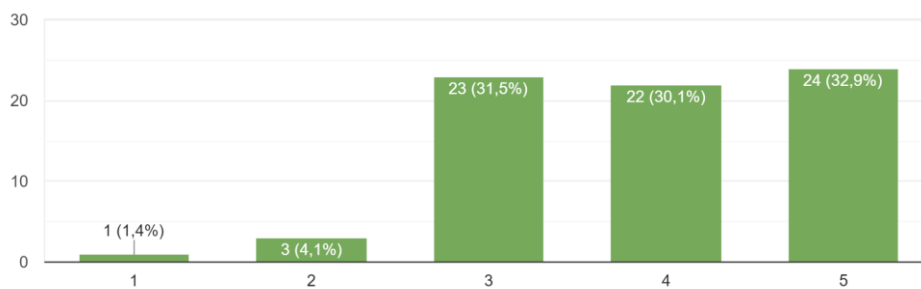
73 odpowiedzi



3) The feedback received from the trainers (teachers) was useful

The feedback received from the trainers (teachers) was useful

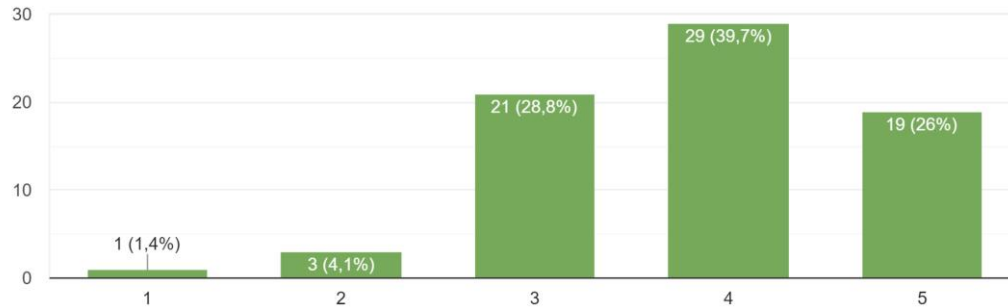
73 odpowiedzi



4) The content (i.e. tasks, activities) was well organized and easy to follow

The content (i.e. tasks, activities) was well organized and easy to follow

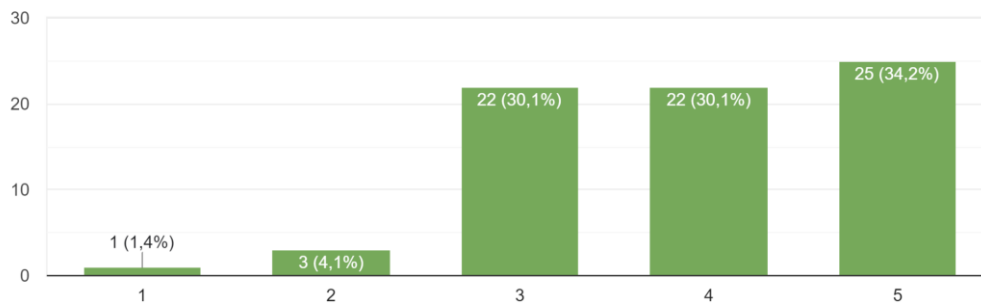
73 odpowiedzi



5) The topics were relevant to me

The topics were relevant to me

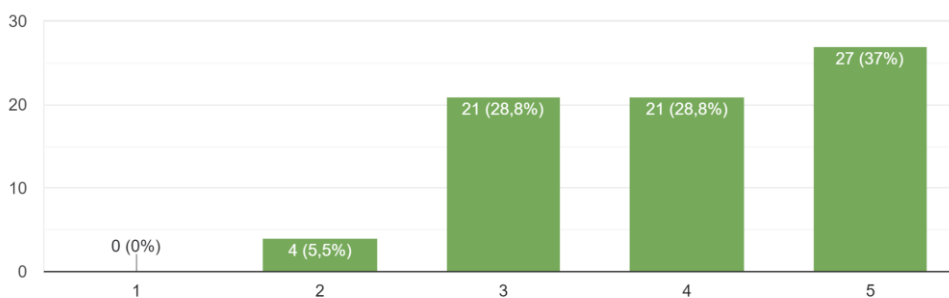
73 odpowiedzi



6) The duration of training was relevant

The duration of training was relevant

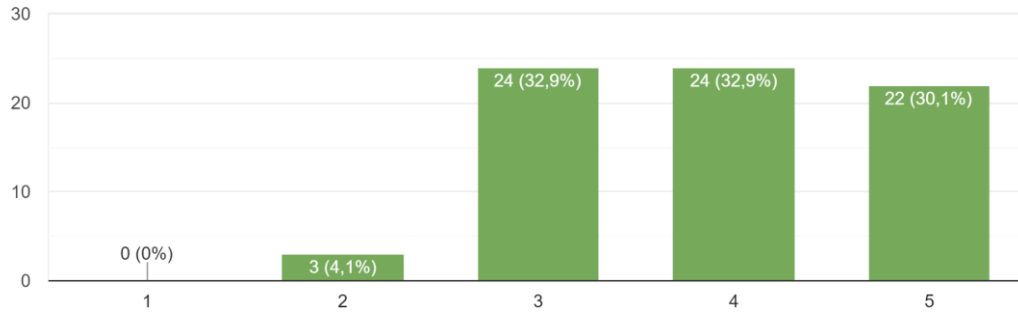
73 odpowiedzi



7) The teaching materials were presented in an organized manner

The teaching materials were presented in an organized manner

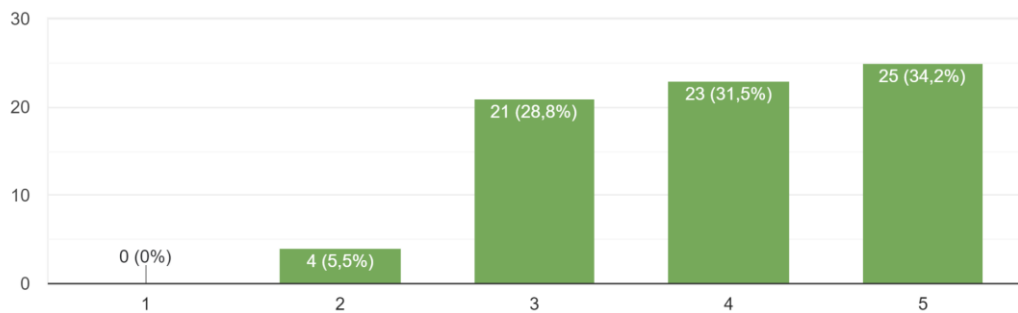
73 odpowiedzi



8) Practical training in companies was compatible with the theoretical content taught at school

Practical training in companies was compatible with the theoretical content taught at school

73 odpowiedzi

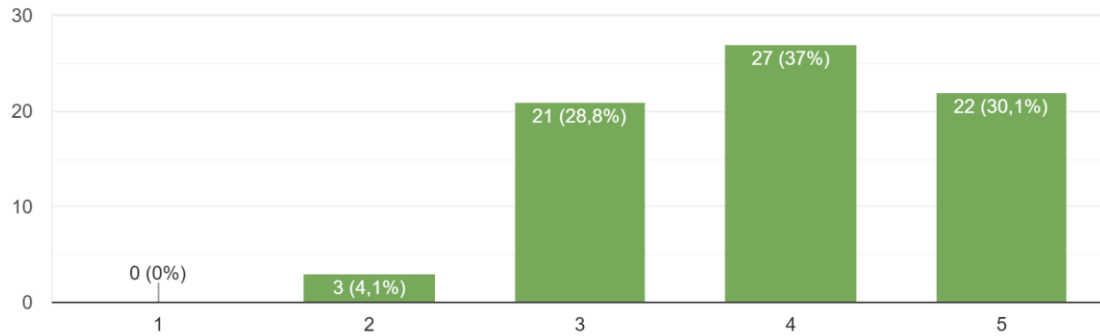


9) The materials distributed were helpful



The materials distributed were helpful

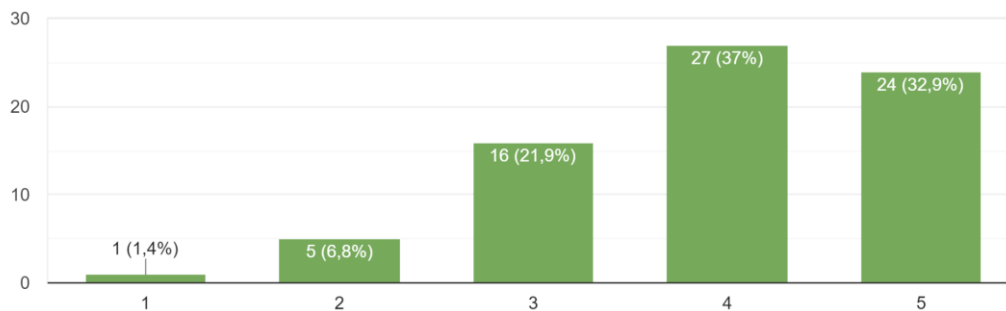
73 odpowiedzi



10) The training process was flexible

The training process was flexible

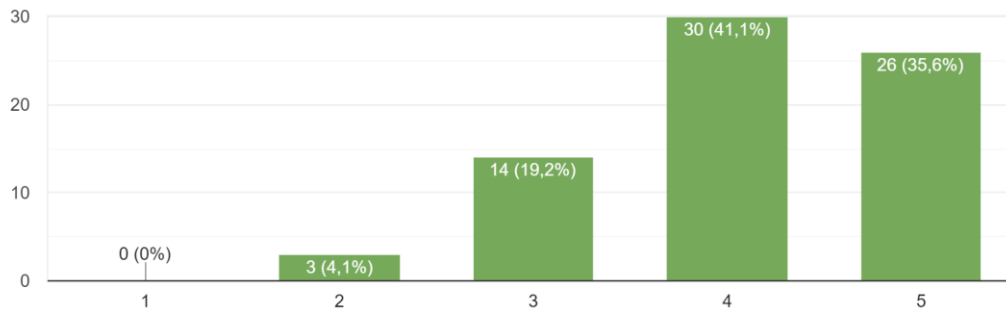
73 odpowiedzi



11) The overall atmosphere of the training was encouraging

The overall atmosphere of the training was encouraging

73 odpowiedzi



Findings

The survey results indicate a generally positive perception of the training program among participants, with notable areas of strength and some opportunities for improvement. Below are the detailed findings for each statement:

1) Knowledge of Lecturers:

- Strongly Agree (5): 31.5%
- Agree (4): 31.5%
- Neither Agree nor Disagree (3): 26%

Interpretation: Participants largely perceive the lecturers as knowledgeable, with over 63% rating them positively (4 and 5).

2) Communication Skills of Lecturers:

- Strongly Agree (5): 34.2%
- Agree (4): 38.4%
- Neither Agree nor Disagree (3): 21.9%

Interpretation: The communication skills of the lecturers were rated positively by a significant majority (over 72%).

3) Usefulness of Feedback from Trainers:

- Strongly Agree (5): Slightly over 30%
- Agree (4): Slightly over 30%
- Neither Agree nor Disagree (3): Slightly over 30%

Interpretation: Feedback from trainers was generally viewed as useful, with responses distributed fairly evenly across all options.

4) Organization of Content:

- Agree (4): 39.7%
- Strongly Agree (5): 30.1%
- Neither Agree nor Disagree (3): Similar levels to 4 and 5.

Interpretation: A majority felt that the content was well organized and easy to follow.

5) Relevance of Topics:

- Strongly Agree (5): 34.2%
- Agree (4): Approximately 30%
- Neither Agree nor Disagree (3): Approximately 30%

Interpretation: Most participants found the topics relevant, indicating a good alignment with their needs.

6) Relevance of Training Duration:

- Strongly Agree (5): 37%

Interpretation: A strong majority felt the duration of the training was appropriate.

7) Organization of Teaching Materials:

- Agree (4): 32.9%
- Neither Agree nor Disagree (3): 32.9%
- Strongly Agree (5): 30.1%

Interpretation: Teaching materials were perceived as generally well-organized, though there is room for improvement.

8) Compatibility of Practical Training with Theoretical Content:

- Strongly Agree (5) and Agree (4): Together accounted for 65.7%
- Neither Agree nor Disagree (3): 28.8%

Interpretation: The integration of practical training with theoretical content was positively rated, reflecting good alignment between theory and practice.

9) Helpfulness of Distributed Materials:

- Agree (4): 37%
- Strongly Agree (5): 30.1%
- Neither Agree nor Disagree (3): 28.8%

Interpretation: A majority found the materials distributed during the training helpful.

10) Flexibility of the Training Process:

- Agree (4): 37%
- Strongly Agree (5): 32.9%

Interpretation: Most participants felt that the training process offered sufficient flexibility.

11) Overall Atmosphere of the Training:

- Agree (4): 41.1%
- Strongly Agree (5): 35.6%
- Neither Agree nor Disagree (3): 19.2%



Interpretation: The training environment was generally viewed as encouraging, with positive feedback from the majority of participants.

Conclusion

Overall, the findings suggest that participants had a favorable experience with the training, particularly in terms of the knowledge and communication skills of the lecturers, the relevance of the content, and the supportive atmosphere. Areas for potential enhancement include improving the organization of teaching materials and ensuring the usefulness of feedback is consistently recognized by all participants.

Q6: Do you have suggestions as to how the training could be improved (in terms of content, organisation, etc.) in the future?

No registered answers.

4.52 Interview for participants – results

1. What did you like the most participating in dual vocational training programme?

Participants in the dual vocational training program highlighted several key aspects they enjoyed the most. They valued the hands-on experience gained during practical training, particularly the opportunity to apply classroom knowledge in real-world settings. Working in a busy kitchen (Cook) allowed them to improve their skills, adapt to stressful environments, and enhance communication and teamwork. They appreciated mentorship from professional chefs, whose guidance and feedback helped refine their techniques and provided insights into the culinary industry. Additionally, participants enjoyed the blend of classroom learning with practical application, which broadened their understanding of restaurant operations (Cook) and opened networking opportunities for future careers.

2. Which specific difficulties did you encounter while participating in dual vocational training programme? Did the trainers try to help you with your difficulties? How?

Participants in the dual vocational training program initially encountered various challenges, particularly with complex tasks, adapting to the fast-paced and high-pressure environment, and applying theoretical knowledge in practice. However, trainers provided significant support in overcoming these difficulties. They offered practical tips, personalized feedback, and guidance on task organization and stress management. Additionally, they clarified the theoretical aspects during practice sessions, spent extra time demonstrating techniques, and allowed for repeated practice. The trainers' encouragement and support helped the participants progress and improve their skills considerably.

3. Which theoretical knowledge you mostly lacked during the studies? Did you try to gain the missing knowledge? How?



Some students reported that they did not lack any theoretical knowledge during their studies, feeling they acquired all necessary concepts. Others, however, identified gaps in areas such as advanced culinary techniques (e.g., sous-vide, molecular gastronomy), nutrition and dietetics, cost control, and menu planning (Cook). To address these deficiencies, they employed various methods, including studying additional resources, watching videos, seeking advice from mentors, and gaining hands-on experience in the workplace. These efforts helped them bridge the knowledge gaps and apply the newly acquired skills in practice.

4. Which part of the training was the most useful for you? Why?

The most useful part of the training, according to the respondents, was the practical component. Many highlighted the value of working in a real-world environment, particularly in a professional kitchen, where they could apply theoretical knowledge to practical situations. This hands-on experience provided them with essential skills such as cooking techniques, kitchen management, time and resource management, and communication. Additionally, learning from experienced professionals helped them develop problem-solving, adaptability, and teamwork skills, all of which they considered crucial for future employment opportunities.

5. Was the whole training consistent, i.e. was the knowledge gained at school expanded and translated into practical skills in the company?

The training was consistent, as the knowledge gained in school was effectively expanded and translated into practical skills in the workplace. Respondents emphasized that the program provided a secure learning environment where theoretical concepts were reinforced through hands-on practice in a real-world setting, such as a restaurant. Practical training allowed students to experiment with cooking techniques learned in class, deepening their understanding. Regular feedback from mentors and teachers further helped bridge the gap between theory and practice, making the learning process continuous and relevant to the restaurant industry.

6. How does participating in dual vocational training programme prepare you to become a highly skilled and highly-valued employee?

Participating in a dual vocational training program prepares individuals to become highly skilled and valued employees by offering a combination of theoretical knowledge and practical experience in a real-world setting. The hands-on training allows students to develop technical skills, confidence, and a strong work ethic under the guidance of industry professionals. This exposure to current industry standards and trends ensures that their skills remain relevant and competitive. Additionally, the program helps students enhance essential soft skills such as communication, collaboration, and problem-solving, making them well-prepared and attractive candidates for future employers.

7. What would you change in the training?



The responses to the question "What would you change in the training?" highlight a variety of suggestions and feedback:

1. **More training hours** – One respondent suggested extending the duration of the training.
2. **Satisfaction with the training** – Some participants were fully satisfied, stating that no changes were needed.
3. **More hands-on activities** – A suggestion was made to incorporate more practical demonstrations alongside theoretical lessons, to better prepare for real-world scenarios, especially in a restaurant setting.
4. **Flexible schedule** – Another respondent proposed offering more flexible class times, such as evening sessions.
5. **Additional customer service information** – It was suggested to include more content related to customer service provision.

Overall, while some were content with the training, others recommended improvements related to practical application, scheduling flexibility, and customer service.

8. How satisfied were you with the training?

Overall, respondents were very satisfied and would recommend the training to others.

Findings

1. **Positive Aspects of Participation.** Participants valued the hands-on experience gained in practical training. This opportunity enhanced their skills, adaptability, and teamwork.
2. **Challenges Faced.** Participants encountered difficulties with complex tasks and the fast-paced environment. Trainers helped by providing practical tips, personalized feedback, and clarifying theoretical concepts. Their support significantly aided participants in overcoming these challenges.
3. **Knowledge Gaps.** While some felt adequately prepared, others identified gaps in advanced culinary techniques, nutrition, cost control, and menu planning (Cook). Participants addressed these through self-study, videos, and mentorship to bridge their knowledge gaps.
4. **Most Useful Training Component.** The practical component was considered the most beneficial. Learning from experienced professionals improved participants' problem-solving and teamwork abilities.
5. **Consistency of Training.** Training was consistent, effectively linking theoretical knowledge with practical skills. Participants noted that classroom concepts were reinforced through real-world application, supported by regular feedback from mentors.
6. **Preparation for Employment.** The program prepared participants to be skilled and valued employees by blending theory with practical experience, fostering

technical skills, confidence, and a strong work ethic, while also enhancing essential soft skills.

7. Suggested Changes to Training. Suggestions for improvement included increasing training hours, adding more hands-on activities, providing flexible schedules, and incorporating additional customer service content. Some participants expressed satisfaction and felt no changes were necessary.
8. Overall Satisfaction. Overall, respondents reported high satisfaction with the training and would recommend the program to others, highlighting a positive experience

4.53 Initial survey for teachers - results

I Evaluation of the content of the training and its organisation

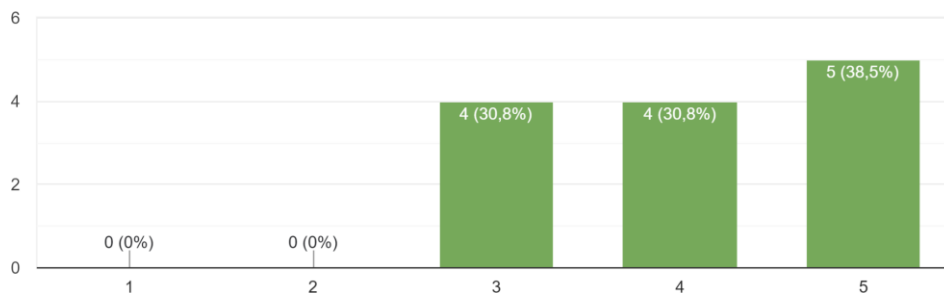
Q1: Please circle the appropriate number to indicate your level of satisfaction

1 = very dissatisfied; 2=somewhat dissatisfied; 3= Neither satisfied nor dissatisfied; 4=somewhat satisfied; 5=very satisfied

- 1) How do you evaluate the program/ curriculum of the training in general?

How do you evaluate the program/ curriculum of the training in general?

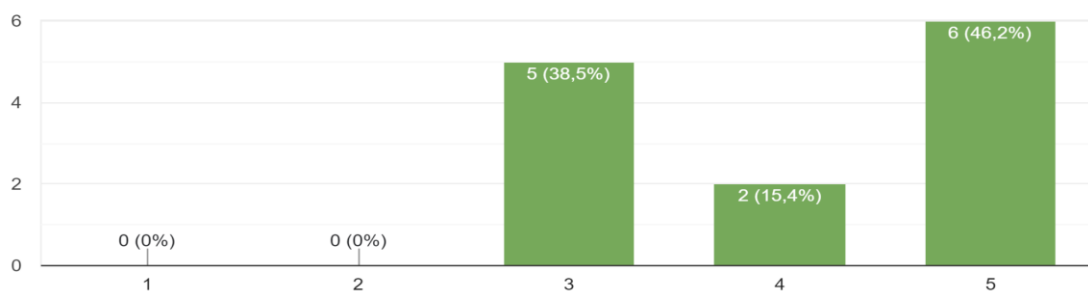
13 odpowiedzi



- 2) How do you evaluate the activities planned in the training in terms of their fulfilling the objectives outlined in the program/curriculum?

How do you evaluate the activities planned in the training in terms of their fulfilling the objectives outlined in the program/curriculum?

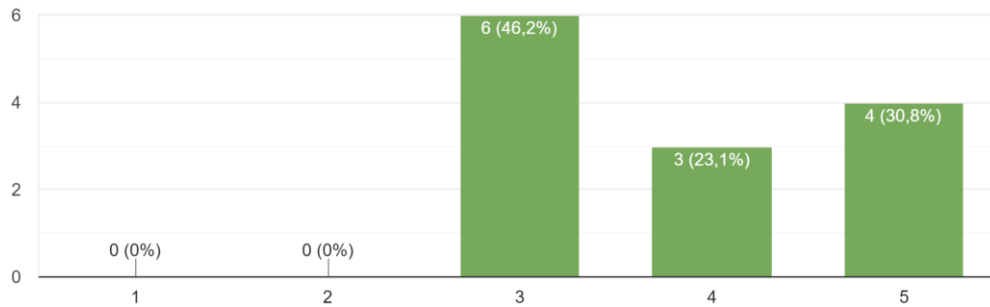
13 odpowiedzi



3) How do you evaluate the length of the training?

How do you evaluate the length of the training?

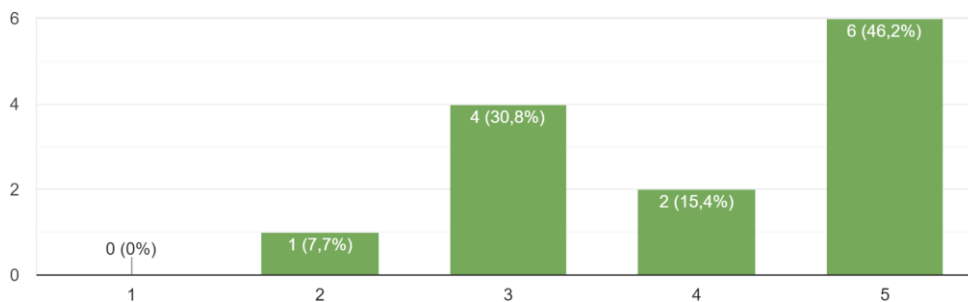
13 odpowiedzi



4) How do you evaluate the balance between theoretical and practical classes/activities?

How do you evaluate the balance between theoretical and practical classes/activities?

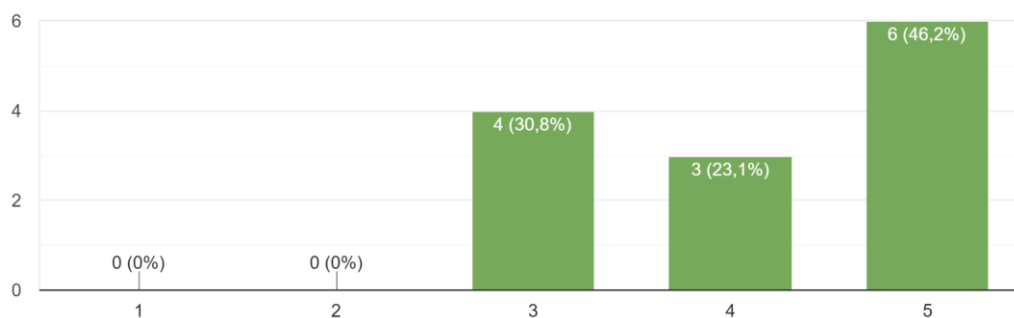
13 odpowiedzi



5) How do you evaluate the organisation of the training?

How do you evaluate the organisation of the training?

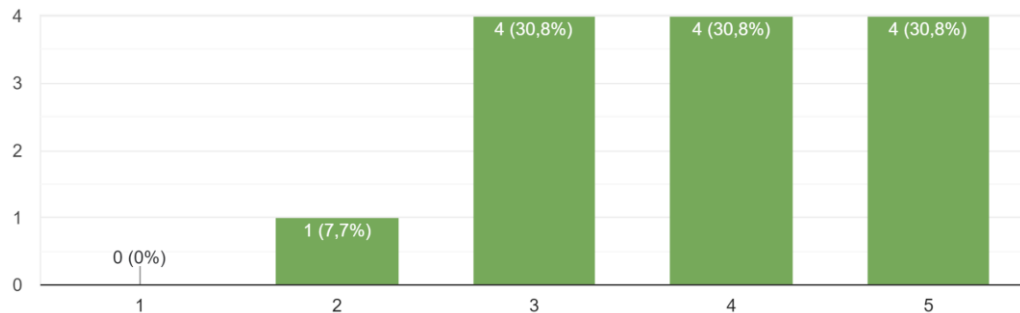
13 odpowiedzi



6) How do you evaluate the availability of materials for the training?

How do you evaluate the availability of materials for the training?

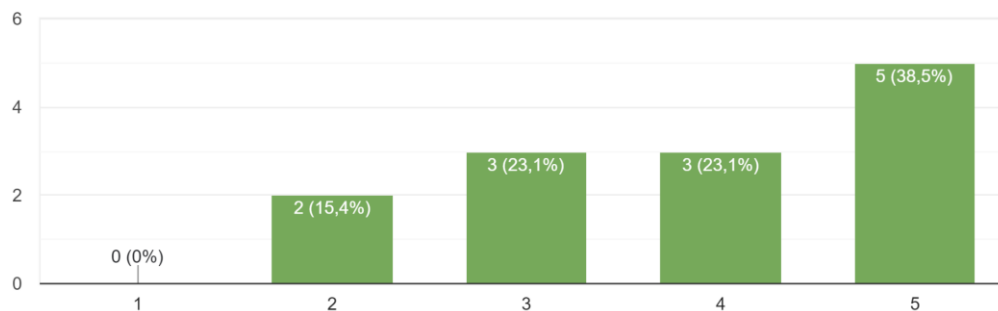
13 odpowiedzi



7) How do you evaluate the degree of flexibility of the training?

How do you evaluate the degree of flexibility of the training?

13 odpowiedzi



Findings

The initial survey conducted among teachers aimed to assess their satisfaction with various aspects of the training program. Below are the key findings:

Evaluation of the Training Program/Curriculum:

- Very Satisfied (5): 38.5%
- Somewhat Satisfied (4): 30.8%
- Neither Satisfied nor Dissatisfied (3): 30.8%

Overall, the majority of teachers expressed a positive evaluation of the training program.

Evaluation of Activities in Terms of Fulfilling Objectives:

- Very Satisfied (5): 46.2%
- Somewhat Satisfied (4): 15.4%
- Neither Satisfied nor Dissatisfied (3): 38.5%



A significant portion of respondents felt that the planned activities were effective in meeting the training objectives.

Evaluation of the Length of Training:

- Very Satisfied (5): 30.8%
- Somewhat Satisfied (4): 23.1%
- Neither Satisfied nor Dissatisfied (3): 46.2%

Responses regarding the length of the training were mixed, with nearly half of the teachers indicating neutrality.

Evaluation of the Balance Between Theoretical and Practical Classes:

- Very Satisfied (5): 48.2%
- Somewhat Satisfied (4): 15.4%
- Neither Satisfied nor Dissatisfied (3): 30.8%
- Somewhat Dissatisfied (2): 7.7%

A strong majority of participants appreciated the balance between theory and practice.

Evaluation of the Organization of the Training:

- Very Satisfied (5): 46.2%
- Somewhat Satisfied (4): 23.1%
- Neither Satisfied nor Dissatisfied (3): 30.8%

The organization of the training received favorable feedback, with many teachers expressing high satisfaction.

Evaluation of the Availability of Training Materials:

- Very Satisfied (5): 30.8%
- Somewhat Satisfied (4): 30.8%
- Neither Satisfied nor Dissatisfied (3): 30.8%
- Somewhat Dissatisfied (2): 7.7%

Opinions on the availability of materials were evenly distributed, indicating room for improvement.

Evaluation of the Degree of Flexibility of the Training:

- Very Satisfied (5): 38.5%
- Somewhat Satisfied (4): 23.1%
- Neither Satisfied nor Dissatisfied (3): 23.1%
- Somewhat Dissatisfied (2): 15.4%

Responses regarding flexibility varied, suggesting that some participants desire greater adaptability in the training program.



Overall, the survey results indicate a generally high level of satisfaction among teachers regarding the training program, its content, and organisation. However, there are areas identified for potential improvement, particularly concerning the length of training and the availability of materials. Addressing these concerns could enhance the overall experience for participants in future training sessions.

Q2: What challenges do you envisage as regards the application of the program/ curriculum of the dual vocational training? How could these challenges be mitigated?

The primary challenge in implementing the dual vocational training program (VET) revolves around a declining number of students, largely due to demographic factors. Additionally, fostering strong cooperation and alignment between schools and companies is crucial. Both must share a common understanding of training objectives, adjusting theoretical knowledge with practical skills through collaboration between school trainers and company mentors. Some companies, however, may lack pedagogical skills, potentially treating apprentices as cheap labour. To mitigate these challenges, increased cooperation, proper student motivation, improved teacher involvement, and more learning materials in local languages are essential. There is also a need to integrate environmental protection and renewable energy topics into the curriculum.

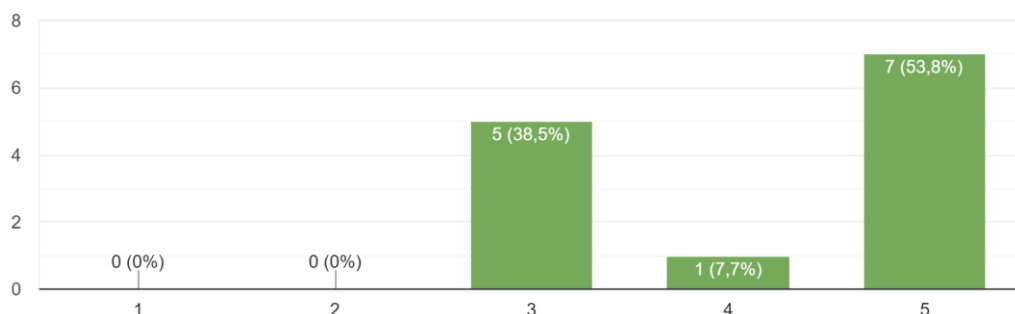
II Evaluation of the trainers' preparedness to run the trainings

Q3: Please indicate your level of agreement with the statements listed below.

1 = very dissatisfied; 2=somewhat dissatisfied; 3= Neither satisfied nor dissatisfied; 4=somewhat satisfied; 5=very satisfied

1) How do you evaluate your understanding of the objectives of the training?

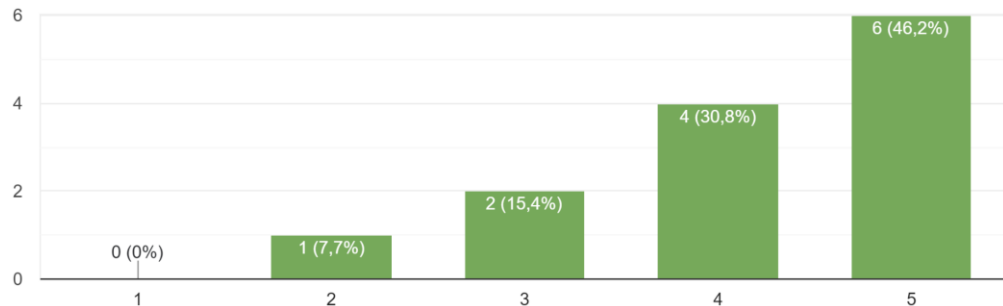
How do you evaluate your understanding of the objectives of the training?
13 odpowiedzi



2) How do you evaluate your pedagogical skills to work with trainees?

How do you evaluate your pedagogical skills to work with trainees?

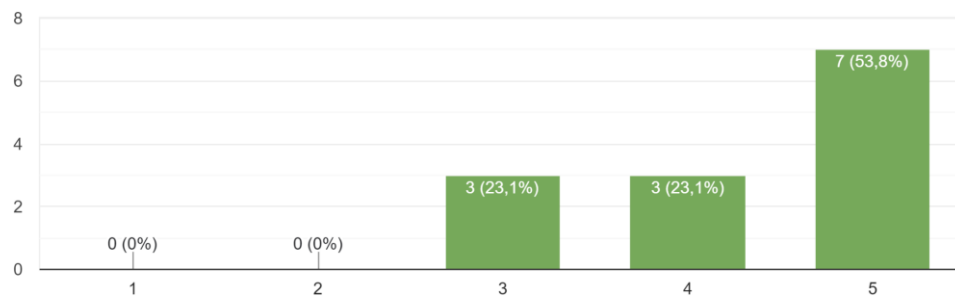
13 odpowiedzi



3) How do you evaluate your subject-related competence to teach selected subjects/ supervise activities?

How do you evaluate your subject-related competence to teach selected subjects/ supervise activities?

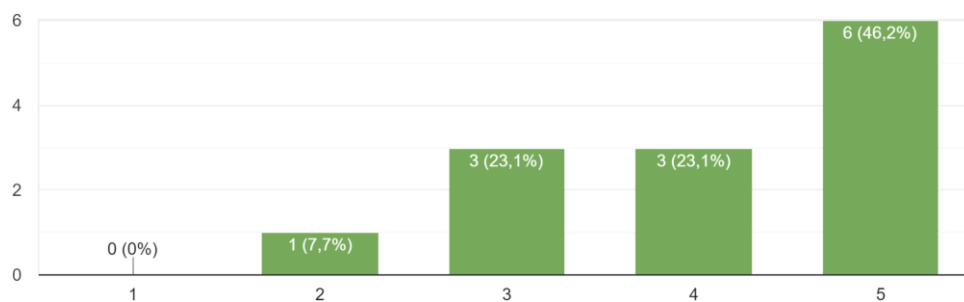
13 odpowiedzi



4) How do you evaluate your motivation to instruct trainees in the dual vocational train-

How do you evaluate your motivation to instruct trainees in the dual vocational training?

13 odpowiedzi

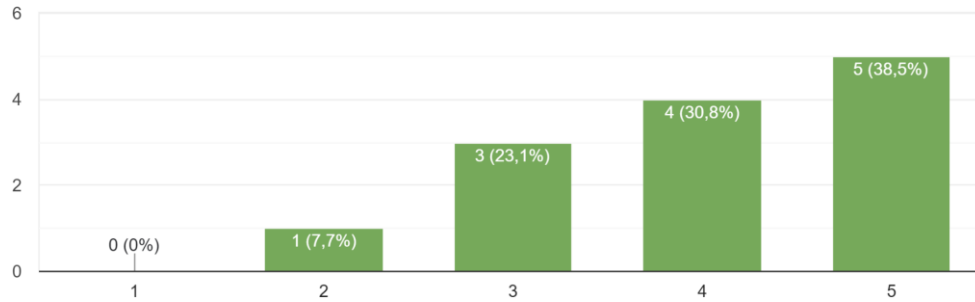


ing?

5) How do you evaluate the assistance on the part of your colleagues in relation to the training?

How do you evaluate the assistance on the part of your colleagues in relation to the training?

13 odpowiedzi



6) How do you evaluate the assistance on the part of your school management in relation to the training?

How do you evaluate the assistance on the part of your school management in relation to the training?

13 odpowiedzi



Findings

The evaluation covered six key statements regarding the training program, with responses rated on a scale from 1 (very dissatisfied) to 5 (very satisfied).

- Understanding of Training Objectives:
 - Very Satisfied (5): 53.8%
 - Somewhat Satisfied (4): 7.7%
 - Neither Satisfied nor Dissatisfied (3): 38.5%

A significant majority (53.8%) of respondents reported a high level of understanding of the training objectives, though a notable percentage (38.5%) remained neutral.



Pedagogical Skills:

- Very Satisfied (5): 46.2%
- Somewhat Satisfied (4): 30.8%
- Neither Satisfied nor Dissatisfied (3): 15.4%

Respondents generally felt positively about their pedagogical skills, with over three-quarters (76.8%) expressing satisfaction.

Subject-Related Competence:

- Very Satisfied (5): 53.8%
- Somewhat Satisfied (4): 23.1%
- Neither Satisfied nor Dissatisfied (3): 23.1%

Similar to the understanding of objectives, a strong majority (53.8%) felt very confident in their subject-related competence.

Motivation to Instruct:

1. Very Satisfied (5): 46.2%
2. Somewhat Satisfied (4): 23.1%
3. Neither Satisfied nor Dissatisfied (3): 23.1%

Motivation levels were high, with nearly half (46.2%) feeling very motivated to instruct trainees.

Colleague Assistance:

- Very Satisfied (5): 38.5%
- Somewhat Satisfied (4): 30.8%
- Neither Satisfied nor Dissatisfied (3): 23.1%

Respondents reported moderate satisfaction with the assistance from colleagues, with over two-thirds expressing satisfaction.

School Management Assistance:

- Very Satisfied (5): 30.8%
- Somewhat Satisfied (4): 38.5%
- Neither Satisfied nor Dissatisfied (3): 30.8%

Feedback on school management assistance showed a more mixed response, with a notable proportion remaining neutral.

The results indicate a generally positive evaluation of the training program, especially regarding understanding objectives, pedagogical skills, and subject-related competence.

Areas of improvement may include increasing satisfaction with colleague and school management assistance, as a higher proportion of respondents were neutral or less satisfied in these areas.



Q4: What other issues would you like to raise in relation to your preparedness as a trainer in the training?

In response to the question about issues related to preparedness as a trainer, several key points were raised:

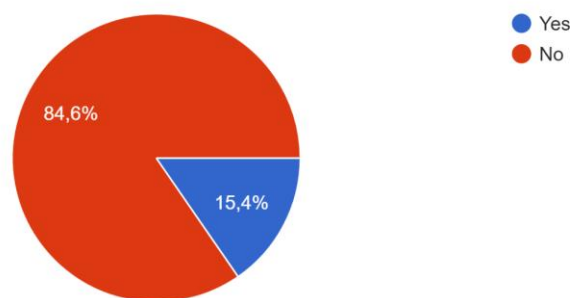
1. Industry-Specific Knowledge - Trainers emphasised the need for concrete knowledge about labour relations and the specific activities of the companies where students will be placed.
2. Professional Development - Multiple respondents highlighted the importance of improving teachers' qualifications, particularly in dual education systems, and suggested the organisation of free training courses for educators.
3. Guidelines and Support - Concerns were raised about a lack of guidelines from management, where trainers spend a lot of unpaid time preparing.
4. Practical Experience - Trainers believe that staying connected to real-world work helps align teaching with industry needs.
5. Resource Limitations - There were challenges noted regarding limited equipment, which hinders comprehensive teaching.

Overall, these responses reflect the need for more support, training, and resources to improve trainer preparedness.

General information

(5) Did you receive additional training/ support in relation to dual vocational training?

5. Did you receive additional training/ support in relation to dual vocational training?
13 odpowiedzi



Findings

In response to the question "Did you receive additional training/support in relation to dual vocational training?", the majority of respondents (84.6%) answered "No," indicating they did not receive extra training or support. A smaller proportion, 15.4%, answered "Yes," signifying that only a minority had access to additional training or support.

4.54 Final survey for teachers - results

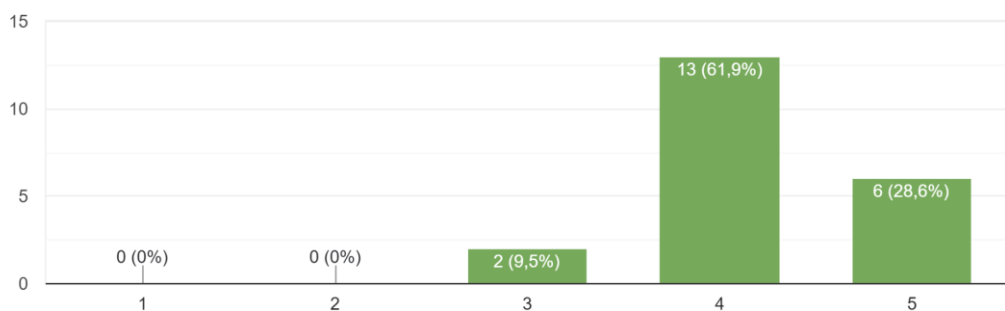
I Evaluation of the content of the training and its organisation

Q1: Please circle the appropriate number to indicate your level of satisfaction

1 = very dissatisfied; 2=somewhat dissatisfied; 3= Neither satisfied nor dissatisfied; 4=somewhat satisfied; 5=very satisfied

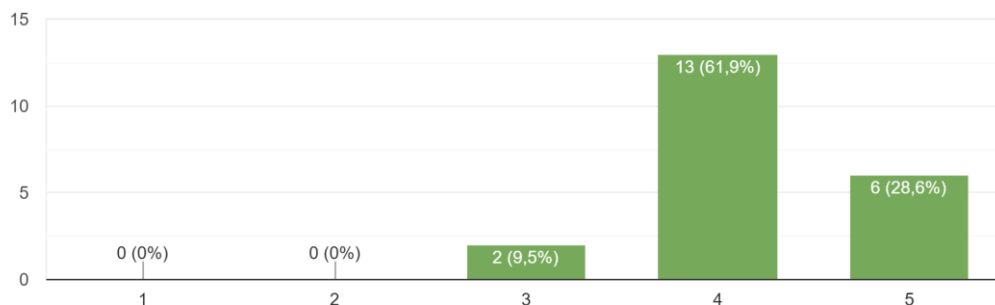
1) How do you evaluate the program/ curriculum of the training after its completion?

How do you evaluate the program/ curriculum of the training after its completion?
21 odpowiedzi



2) How do you evaluate the activities in the training in terms of their fulfilling the objectives outlined in the program/curriculum?

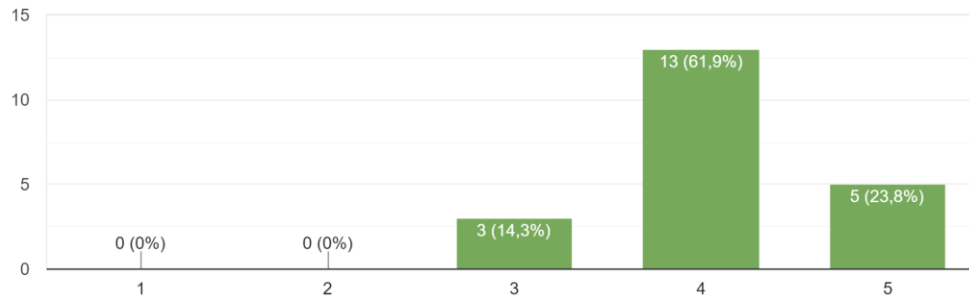
How do you evaluate the activities in the training in terms of their fulfilling the objectives outlined in the program/curriculum?
21 odpowiedzi



3) How do you evaluate the length of training?

How do you evaluate the length of the training?

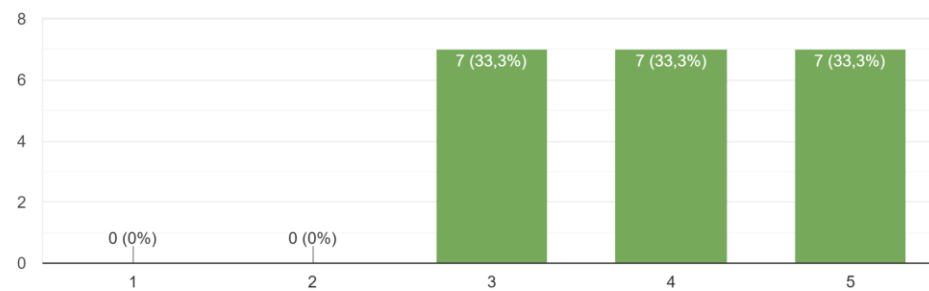
21 odpowiedzi



4) How do you evaluate the balance between theoretical and practical classes/activities?

How do you evaluate the balance between theoretical and practical classes/activities?

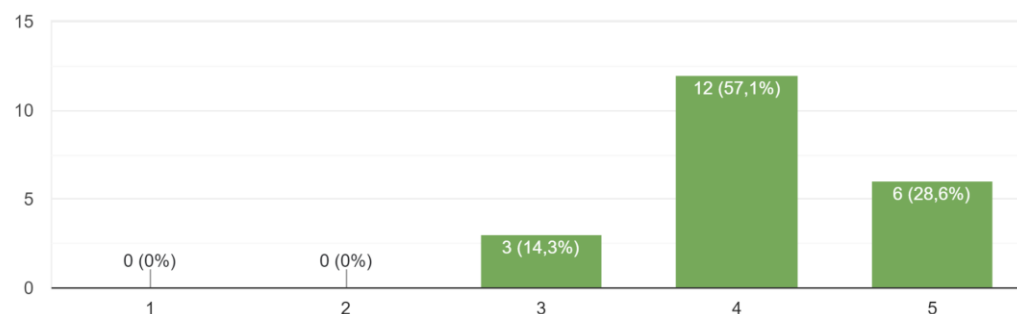
21 odpowiedzi



5) How do you evaluate the organisation of the training?

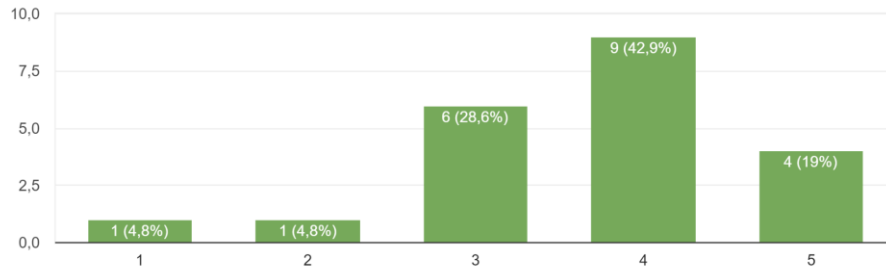
How do you evaluate the organisation of the training?

21 odpowiedzi



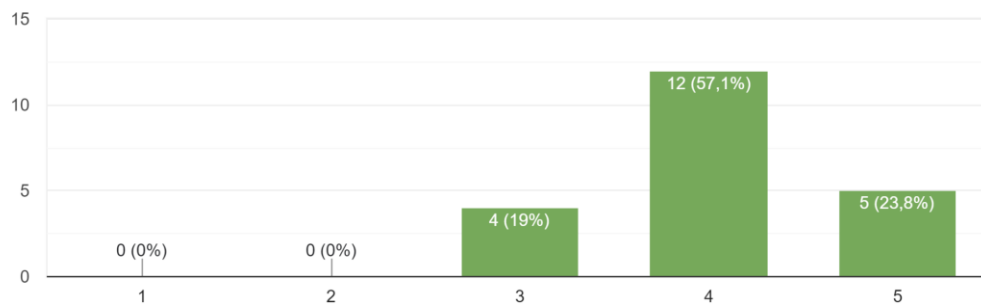
6) How do you evaluate the availability of materials for the training?

How do you evaluate the availability of materials for the training?
21 odpowiedzi



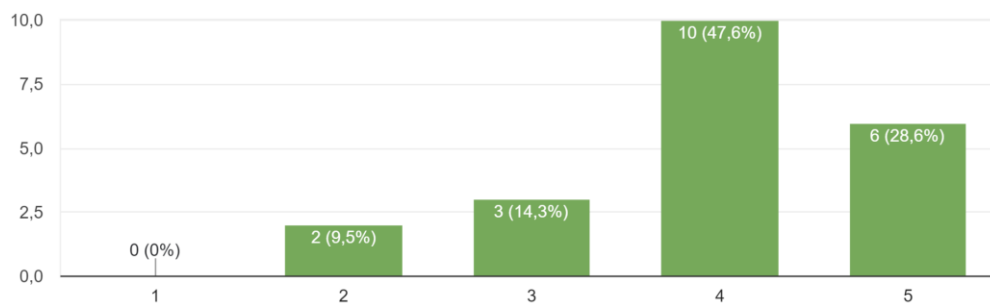
7) How do you evaluate the facilities available for the training?

How do you evaluate the facilities available for the training?
21 odpowiedzi



8) How do you evaluate the degree of flexibility of the training?

How do you evaluate the degree of flexibility of the training?
21 odpowiedzi



Findings



The evaluation of the training program reveals several key insights regarding participant satisfaction across various dimensions:

1) **Program/Curriculum Evaluation:**

A majority of respondents rated the program/curriculum with a score of **4 (somewhat satisfied)** at **61.9%**.

28.6% rated it as **5 (very satisfied)**, indicating a high level of overall satisfaction.

2) **Training Activities:**

In terms of how well the training activities fulfilled the outlined objectives, scores of **4** and **5** combined accounted for over **90%** of responses, highlighting the effectiveness of the activities in meeting their goals.

3) **Length of Training:**

Similar to the evaluation of activities, the length of the training received positive feedback, with scores of **4** and **5** together representing over **90%** of the responses.

4) **Balance Between Theoretical and Practical Classes:**

a) Participants expressed a balanced view regarding the theoretical and practical aspects of the training, with each rating (**3**, **4**, and **5**) receiving equal representation at **33.3%**.

5) **Organization of Training:**

The organization of the training was viewed positively, with combined scores of **4** and **5** accounting for **85.7%** of the feedback, indicating effective planning and execution.

6) **Availability of Training Materials:**

For the availability of materials, scores of **4** and **5** combined comprised **61.9%**, while **28.6%** of participants rated the materials as **3 (neither satisfied nor dissatisfied)**, suggesting room for improvement in material accessibility.

7) **Facilities for Training:**

The evaluation of facilities showed that **57.1%** rated it as **4**, while **23.8%** rated it as **5**, and **19%** rated it as **3**. This indicates that while most were satisfied, some participants may have found the facilities lacking.

8) **Degree of Flexibility:**

Regarding flexibility, **47.6%** rated it as **4**, while **28.6%** rated it as **5**, and smaller percentages rated it as **3 (14.3%)** and **2 (9.5%)**. This suggests that while flexibility was appreciated, there is potential for further enhancement.

Overall, the findings indicate a predominantly positive reception of the training program, with high levels of satisfaction reported in most areas. However, there are specific aspects, such as the availability of materials and facilities, that may benefit from further attention to enhance the training experience.



Q2: What challenges did you encounter while realising the training? How did you mitigate those challenges?

Challenges:

1. Technical Complexity: Difficulties with tools and limited resources, including funding for practical classes.
2. Objective Alignment: Struggles in adapting training objectives to prior learning goals.
3. Diverse Learning Levels: Varying knowledge levels among participants and language barriers.
4. Motivation Issues: Initial lack of engagement from students and challenges in keeping interest in new modules.
5. Practical Skill Development: Difficulty in developing industry-standard practical skills within a limited timeframe.

Mitigation Strategies:

1. Flexible Approaches: Utilized online tutorials and support from experienced colleagues.
2. Structured Practice: Implemented structured practice sessions for skill mastery.
3. Engaging Resources: Employed visual aids and dynamic activities to maintain interest.
4. Peer Collaboration: Encouraged peer assessments and group activities for support.
5. Feedback Mechanisms: Regular feedback was used to adapt and enhance learning strategies.

II Evaluation of trainees' participation in the training.

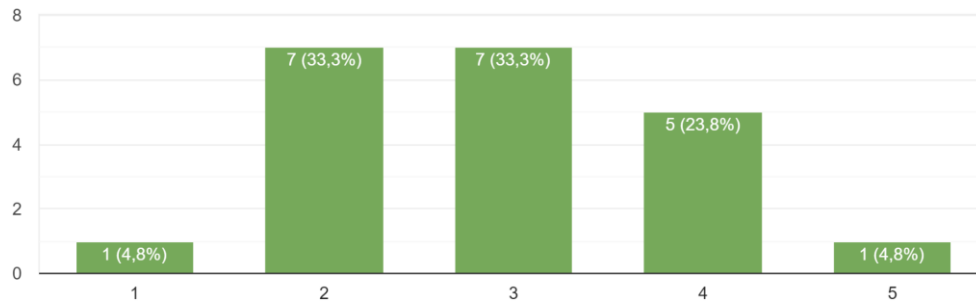
Q3: Please circle the appropriate number to indicate your level of satisfaction

1 = very dissatisfied; 2=somewhat dissatisfied; 3= Neither satisfied nor dissatisfied; 4=somewhat satisfied; 5=very satisfied

- 1) How do you evaluate the trainees' knowledge at the beginning of the training?

How do you evaluate the trainees' knowledge at the beginning of the training?

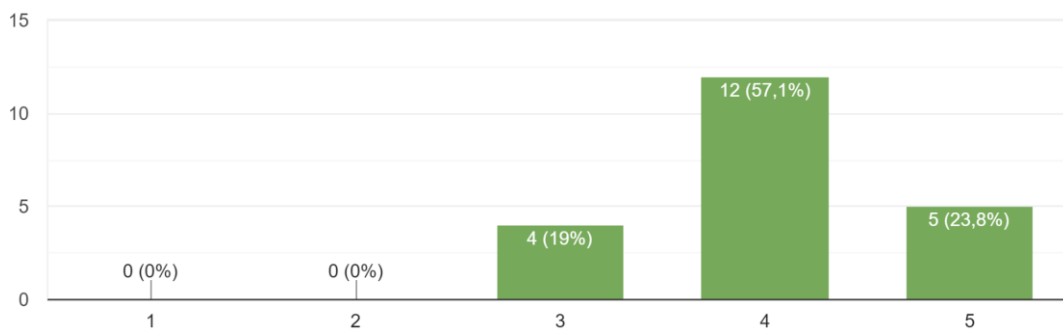
21 odpowiedzi



2) How do you evaluate the trainees' knowledge at the end of the training?

How do you evaluate the trainees' knowledge at the end of the training?

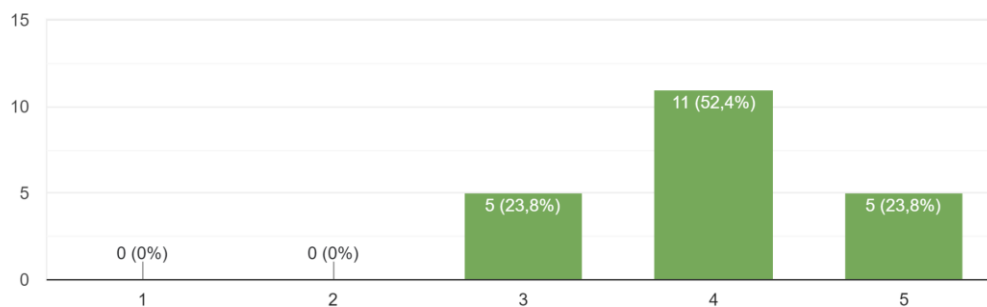
21 odpowiedzi



3) How do you evaluate the progress made by the trainees in terms of the practical skills acquired?

How do you evaluate the progress made by the trainees in terms of the practical skills acquired?

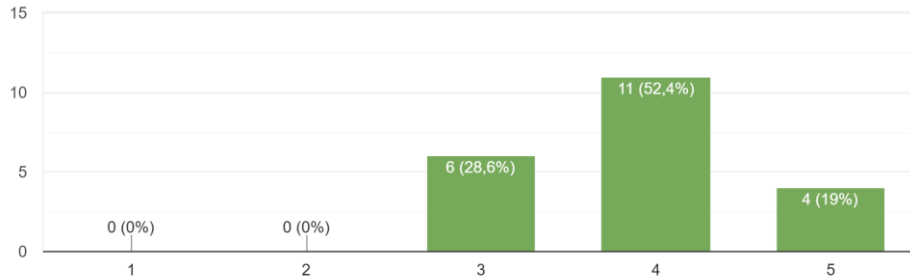
21 odpowiedzi



4) How do you evaluate the trainees' engagement in the training?

How do you evaluate the trainees' engagement in the training?

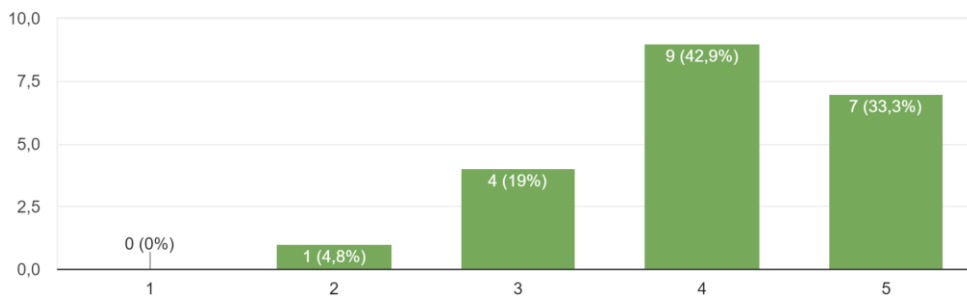
21 odpowiedzi



5) How do you evaluate cooperation between trainees?

How do you evaluate cooperation between trainees?

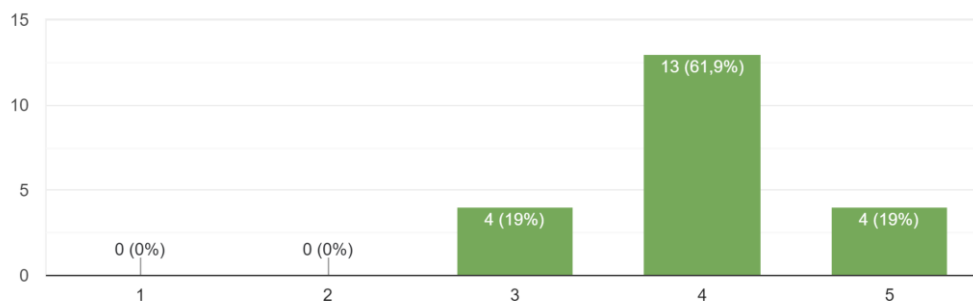
21 odpowiedzi



6) How do you evaluate trainees' work and learning organization?

How do you evaluate trainees' work and learning organization?

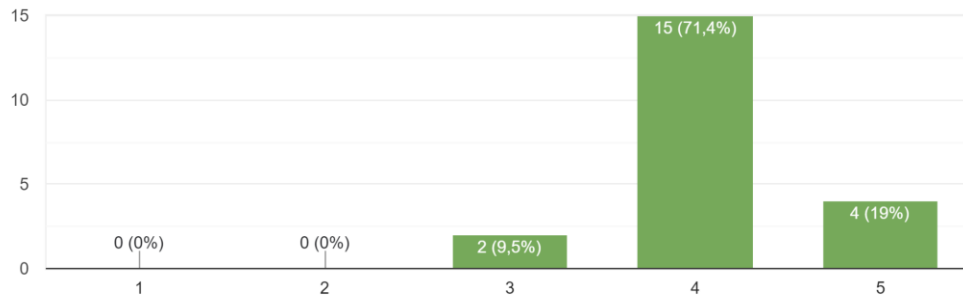
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7) How do you evaluate the readiness of trainees to work in the profession?

How do you evaluate the readiness of trainees to work in the profession?

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Findings

1) Evaluation of Trainees' Knowledge at the Beginning of the Training:

A significant number of participants rated their knowledge at the beginning of the training as either somewhat dissatisfied (2) or neither satisfied nor dissatisfied (3), each accounting for 33.3% of responses.

Ratings of 4 (somewhat satisfied) were given by 23.8% of trainees, while 4.8% expressed being very satisfied (5) and another 4.8% were very dissatisfied (1). This indicates a mixed perception of initial knowledge among trainees.

2) Evaluation of Trainees' Knowledge at the End of the Training:

The assessment of knowledge at the end of the training shows a positive shift, with 57.1% of trainees rating their knowledge as somewhat satisfied (4) and 23.8% rating it as very satisfied (5). This suggests an improvement in knowledge levels throughout the training.

3) Progress in Practical Skills: Trainees' progress in practical skills was rated predominantly with a 4 (52.4%), indicating a good level of satisfaction with their skill development. A notable 23.8% rated their progress as very satisfied (5), reflecting substantial growth in practical abilities.

4) Trainees' Engagement in the Training: Engagement levels varied, with 52.4% of respondents rating their engagement as somewhat satisfied (4) and 28.6% rating it as neither satisfied nor dissatisfied (3). Only 19% of trainees felt very satisfied (5), indicating room for improvement in engagement strategies.

5) Cooperation Among Trainees: The cooperation among trainees received favorable ratings, with combined scores of 75.2% for ratings of 4 and 5. This highlights a strong collaborative environment within the training.

6) Trainees' Work and Learning Organization: A majority of responses (61.9%) indicated that trainees rated their work and learning organization as somewhat satisfied (4), suggesting effective organization of training activities.



7) Readiness to Work in the Profession: The readiness of trainees to enter the profession was rated highly, with over 90% of participants giving scores of 4 and 5 combined. This indicates that trainees feel well-prepared to transition into their professional roles.

Conclusion

Overall, the evaluation of trainees' participation in the training reflects a general trend of improvement, particularly in knowledge and practical skills by the end of the program. While there are areas needing attention, such as engagement and initial knowledge levels, the high scores for cooperation and readiness to work in the profession suggest that the training has been effective in many respects.

Q4: What methodological and/or organisational changes should be made to improve the training so that it better answers the needs of trainees?

To enhance training and better address the needs of trainees, several methodological and organizational changes have been suggested:

1. **Extended Training Duration.** Allow more time for training to cover necessary concepts adequately.
2. **Interactive and Hands-On Activities.** Incorporate more engaging and practical elements into training, such as workshops, case studies, and project-based learning, to keep trainees actively involved.
3. **Flexible Scheduling.** Offer training sessions at various times to accommodate trainees' different schedules, ensuring consistent participation.
4. **Personalized Support.** Implement mentoring or coaching programs and create individualized learning plans that consider each trainee's abilities, pace, and specific needs. Reducing class sizes could facilitate this by allowing for more personalized attention.
5. **Needs Assessment.** Conduct pre-training surveys and interviews to identify specific areas where trainees require additional support or knowledge.
6. **Content Customization.** Tailor course content to align with the trainees' backgrounds and the demands of their respective industries, ensuring relevance and applicability.
7. **Use of Technology.** Integrate digital tools and online resources to enhance the learning experience, allowing access to supplementary materials and facilitating collaboration among trainees.
8. **Continuous Feedback.** Establish mechanisms for ongoing feedback to assess trainee progress and adjust content and teaching methods accordingly.
9. **Enhanced Resources.** Increase the number of illustrative materials and emphasize practical training in modern workshops and laboratories.

III Evaluation of the cooperation between the school and companies.

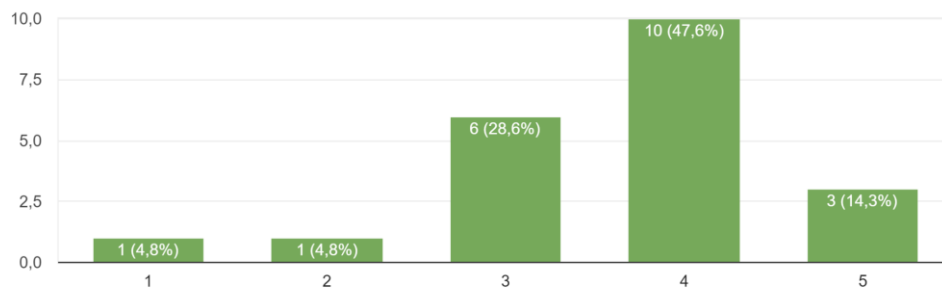
Q5: Please indicate your level of agreement with the statements listed below.

1=Strongly Disagree; 2= Disagree; 3= Neither agree nor disagree; 4=Agree; 5=Strongly Agree

1) The company was engaged in the preparation of the program/ curriculum.

The company was engaged in the preparation of the program/ curriculum.

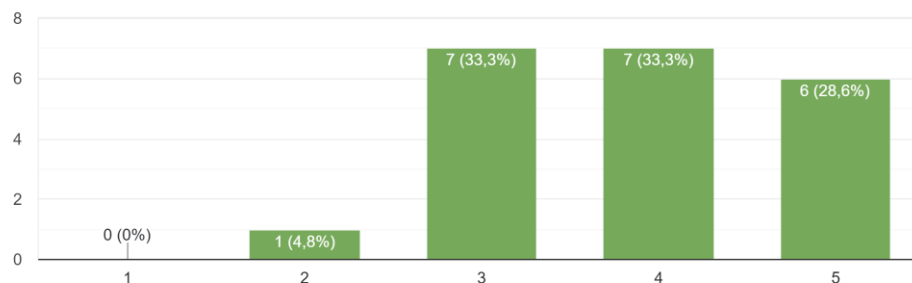
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2) The company was fully engaged in the realisation of the training.

The company was fully engaged in the realisation of the training.

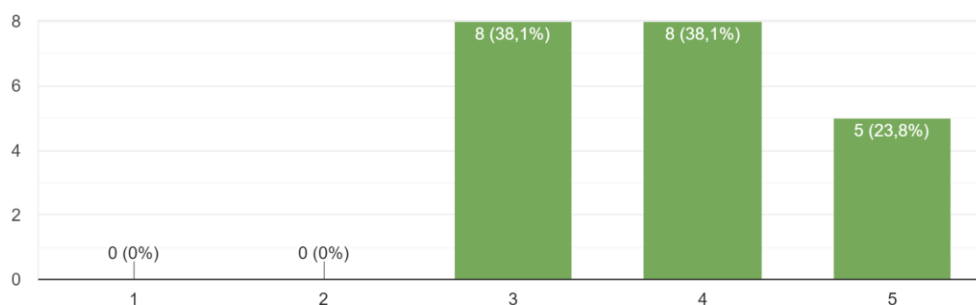
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3) The company followed the program/ curriculum closely.

The company followed the program/ curriculum closely.

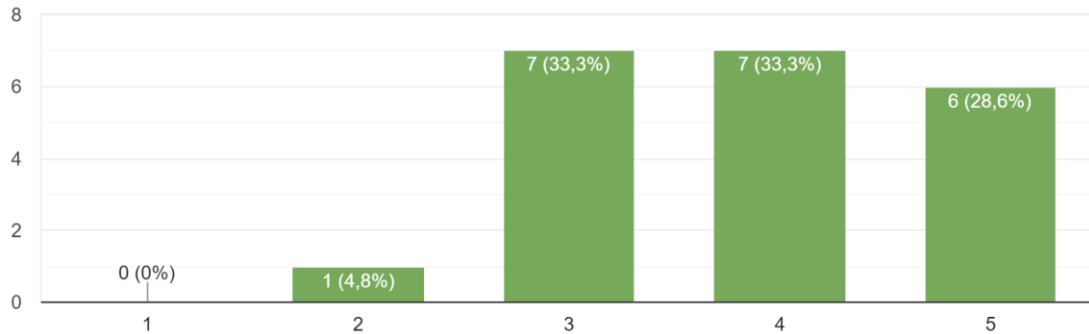
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4) Cooperation with the company was smooth.

Cooperation with the company was smooth.

21 odpowiedzi



Findings

The evaluation of the cooperation between the school and companies was conducted through a series of statements regarding participants' levels of agreement. The results reveal several insights into the perceived effectiveness of this partnership.

1) Engagement in Training

Regarding the statement, "The company was fully engaged in the realization of the training," the responses were varied. A significant portion of respondents (47.6%) agreed with the statement, while 14.3% strongly agreed. Meanwhile, 28.6% expressed a neutral stance, indicating that they neither agreed nor disagreed. Only a combined total of 9.6% of participants disagreed (4.8% disagreed and 4.8% strongly disagreed). This suggests that overall, respondents view the company as reasonably engaged in the training process, though there remains a notable proportion who feel less certain about the extent of this engagement.

2) Adherence to Program/Curriculum

When evaluating whether the company followed the program/curriculum closely, responses were again mixed. The most common responses were neutral (33.3%) and agree (38.1%), indicating that respondents generally felt the company adhered to the curriculum without a strong consensus. Furthermore, 23.8% strongly agreed, suggesting that while many participants recognize the company's adherence, there is still a significant portion of respondents who are uncertain or indifferent about this aspect.

3) Smoothness of Cooperation



For the statement "Cooperation with the company was smooth," the responses showed a similar pattern, with 33.3% of respondents neither agreeing nor disagreeing and 28.6% agreeing. This highlights a perceived ambivalence regarding the smoothness of cooperation, although a notable portion (28.6%) felt positively about their experiences.

Summary

Overall, the findings indicate that while there is a generally positive perception of the cooperation between the school and companies, with considerable agreement regarding engagement and adherence to the curriculum, there is also significant uncertainty among respondents. The high percentage of neutral responses suggests that there may be areas for improvement in enhancing clarity and effectiveness in the partnership.

Q6: What improvements could be made in terms of cooperation between the school and the company while realising dual vocational training?

To enhance cooperation between schools and companies in implementing dual vocational training, several key improvements can be made:

1. Establish Regular Communication. Frequent meetings and discussions should be held to address ongoing issues and strengthen the partnership.
2. Align Curricula with Industry Needs. Schools and companies should collaborate to develop training plans that integrate theoretical knowledge with practical skills relevant to the labor market.
3. Joint Mentorship Programs. Creating mentorship initiatives can provide students with guidance and support, facilitating a smoother transition between classroom learning and on-the-job training.
4. Regular Program Review. Continuous feedback from trainees and company supervisors should be utilized to regularly update the training program, ensuring its relevance and effectiveness.
5. Study Market Relevance. A detailed assessment of current professional demands is necessary to ensure that the curriculum remains aligned with what is needed in the labor market.
6. Utilize Modern Facilities. Providing opportunities for students to engage in practical learning experiences in modern laboratories can enhance their training.

By focusing on these areas, the partnership between schools and companies can be significantly strengthened, benefiting students' educational experiences and better preparing them for the workforce.



4.55 Interview with teachers - results

1. Please indicate the strong elements of the dual vocation training realised in your school. To what degree did these strengths translate into the motivation/knowledge/skills of participants?

The dual vocational training program at the school has several strong elements that contribute to the motivation, knowledge, and skills development of participants. One key strength is the effective integration of theoretical knowledge with practical application, enabling trainees to understand core concepts and apply them in real-world settings. This hands-on experience allows trainees to gain valuable industry exposure, improving their technical skills, work ethic, and understanding of professional standards. The program's partnerships with the industry also ensure that the curriculum is aligned with market needs, keeping the training relevant and up-to-date.

Participants benefit from personalized support and mentoring, enhancing their motivation and fostering the development of soft skills like adaptability, responsibility, and self-confidence. The combination of practical experience and the opportunity to earn wages further boosts trainees' motivation and engagement. Continuous assessment and close collaboration with industry partners help to prepare students effectively for future employment. Overall, the comprehensive curriculum, hands-on learning, and industry ties create a supportive environment that equips trainees with the knowledge and skills necessary for success in their careers.

2. Please indicate the weak elements of the dual vocational training realised in your school? What measures were undertaken to improve the training? Were they satisfactory?

The dual vocational training at the school faced several challenges, which prompted specific measures for improvement:

- 1) **Wide Range of Abilities and Learning Paces:** Trainees had varying levels of ability and learning speed, making it hard to cater to all equally. Measures such as differentiated instruction, additional coaching, and flexible learning plans were introduced. These efforts were only partially satisfactory as managing diverse abilities remained difficult, suggesting that more individualized attention and resources are needed.
- 2) **Inconsistent Communication with Industry Partners:** Early issues with communication between the school and industry partners led to misunderstandings about expectations. Regular meetings and online platforms were introduced, significantly improving coordination and aligning both parties, making this measure satisfactory.
- 3) **Trainee Integration into Workplaces and Soft Skills Deficit:** Some trainees struggled to integrate into the work environment, partially due to insufficient soft skills training. The school addressed this by incorporating soft skills workshops



and role-playing, which led to significant improvements in teamwork and customer service, proving the measure very successful.

- 4) **Lack of Coordination Between Theoretical and Practical Content:** Initially, the alignment between classroom theory and workplace practice was weak. Regular meetings between teachers and company supervisors helped bridge this gap, improving cohesion and student satisfaction.
- 5) **Limited Partner Companies for Internships:** A shortage of industry partners restricted internship opportunities. The school expanded its network of collaborators, which increased the number and quality of internships, making this improvement satisfactory.
- 6) **Unequal Quality of Practical Training:** The quality of internships varied between companies. To address this, the school implemented stricter evaluation and monitoring of partner companies, resulting in more uniform and improved student experiences. This measure was successful in enhancing satisfaction.

In summary, while most measures were effective, managing the range of student abilities remains an ongoing challenge.

3. How would you evaluate the program/ curriculum of the dual vocation training realised in your school? What worked well? What needs to be improved?

The evaluation of the dual vocational training program "Cook" at the school reveals several strengths and areas for improvement. Key successes include the balanced integration of theoretical knowledge and practical training, strong partnerships with industry, and individualized support for trainees. These elements have motivated participants and provide them with essential skills for their careers. Internships with local restaurants and hotels have been particularly beneficial in offering hands-on experience. Many trainees were even offered permanent jobs after completing the program, highlighting its success.

However, there are areas that need enhancement to further improve the program's effectiveness. These include better resource allocation, more practical training opportunities, and more flexible learning paths to accommodate diverse needs. Improving coordination between teachers and industry partners would help ensure that theoretical content aligns better with practical experiences. Additionally, increasing feedback sessions between students, teachers, and mentors could help refine the program in line with real market needs.

4. Please indicate knowledge, skills, and abilities that trainees need the most to be successful in the training?

To be successful in a dual vocational training program, such as for becoming a cook, trainees need a combination of technical knowledge, practical skills, and interpersonal abilities. Key areas include:



1. **Culinary Knowledge:** Mastery of cooking techniques, nutritional information, menu planning, and food presentation.
2. **Practical Skills:** Proficiency in cutting, grilling, roasting, and other cooking methods, as well as plating, garnishing, and time management.
3. **Soft Skills:** Effective communication, teamwork, adaptability, stress management, and problem-solving.
4. **Customer Service:** Understanding and providing excellent service to customers.
5. **Adaptability and Initiative:** Ability to adapt to changing environments and work independently when needed.

By focusing on these areas, trainees can excel in both their training and future culinary careers.

5. What main difficulties did you encounter during the training process? How did you solve the problems encountered?

The main difficulties encountered during the training process varied across different responses, including challenges such as diverse learning paces, initial lack of coordination between theoretical and practical training, inconsistent quality of internships, rigid scheduling, lack of motivation among some trainees, and limited resources. Solutions to these challenges involved implementing differentiated instruction to cater to individual learning needs, enhancing communication with industry partners, and holding regular meetings between instructors and company mentors to align theory and practice. Flexible scheduling and additional coaching helped manage student workload and motivation. A more rigorous evaluation of internships ensured consistent quality across placements. Despite these issues, some participants reported smooth experiences due to well-planned programs and strong collaboration with industry partners.

6. What kind of support would you expect from your school management/ country government?

To enhance the dual vocational training program's effectiveness, support from both school management and the government is crucial in several areas:

1. **Financial Assistance:** The government could offer grants or subsidies to help schools purchase advanced equipment, maintain training facilities, and provide incentives for businesses participating in the program.
2. **Professional Development:** Continuous training for teachers to update their pedagogical skills and stay aligned with industry needs is important.
3. **Industry Collaboration:** Both the school and government should facilitate partnerships with companies to expand internship opportunities and create better career pathways for students.



4. **Curriculum Improvement:** Updating and adapting the curriculum to meet the evolving demands of industries like culinary and hospitality is essential.
5. **Emotional and Behavioral Support:** Schools should enhance support systems for students' emotional and behavioral well-being.
6. **Career Guidance:** Schools should offer more career counseling services to help trainees navigate the job market and prepare for workplace challenges.
7. **Flexible Learning:** The government and schools should promote flexible learning options that adapt to the trainees' diverse needs.

By focusing on these areas, vocational training can be more effective and better suited to both current and future industry demands.

7. In what way is dual vocational training beneficial for trainees in their future professional life? Explain.

Dual vocational training offers significant benefits to trainees by combining practical skills with theoretical knowledge, preparing them effectively for their future careers. Trainees gain hands-on experience in real-world settings, allowing them to apply what they learn in the classroom to real job situations. This practical exposure builds their technical competence, confidence, and adaptability, making them more attractive to employers.

Additionally, dual vocational training provides networking opportunities with industry professionals, helping trainees establish valuable connections for future job prospects. Graduates are more competitive in the job market, as they possess both theoretical knowledge and practical experience, reducing the gap between academic training and workplace demands. This approach equips them not only with expertise but also with essential soft skills, such as teamwork and problem-solving, enhancing their employability and career prospects.

8. How satisfied were you with participating in this project?.

The participants expressed high levels of satisfaction with their involvement in the project. They highlighted it as a valuable and enriching experience, both professionally and personally. Many appreciated the opportunity to learn new teaching methods, stay current with industry trends, and develop skills in mentoring and supporting trainees. Witnessing the growth and success of trainees was particularly rewarding. Several noted that the hands-on approach had significantly boosted the trainees' practical skills and confidence. Overall, participants felt well-prepared for future challenges and grateful for the opportunities the project provided.

Findings

Strong Elements of the Dual Vocational Training Program: The dual vocational training program at the school has several strong elements that have positively impacted the motivation, knowledge, and skill development of participants:



- **Integration of Theory and Practice:** The effective blending of theoretical knowledge with hands-on application has enabled trainees to grasp core concepts and apply them in real-world situations, improving their technical skills and understanding of professional standards.
- **Industry Exposure:** Through direct industry involvement, trainees gain invaluable practical experience and industry insights, enhancing their technical abilities and overall work ethic.
- **Industry-Relevant Curriculum:** Collaboration with industry partners ensures that the curriculum remains relevant to market needs, thus keeping trainees updated with current industry trends and demands.
- **Personalized Support:** Trainees benefit from one-on-one mentoring and support, which fosters motivation and the development of essential soft skills like adaptability, responsibility, and self-confidence.
- **Incentive through Wages:** Earning wages during the program motivates trainees and increases their engagement in learning.
- **Continuous Assessment:** Close monitoring and regular assessment ensure trainees are well-prepared for future employment opportunities.

Weak Elements and Measures Undertaken: Several challenges were identified in the training program, which led to the following corrective measures:

- **Diverse Abilities:** Trainees had varied learning abilities, making it difficult to cater to all equally. Differentiated instruction and flexible learning plans were introduced, though this remains a partial success as more individualized attention is still needed.
- **Industry Communication Gaps:** Early communication issues with industry partners led to misaligned expectations. Regular meetings and online platforms improved coordination, resolving the issue satisfactorily.
- **Workplace Integration and Soft Skills Deficit:** Some trainees faced difficulties integrating into workplace environments due to insufficient soft skills training. Incorporating soft skills workshops and role-playing exercises improved this aspect significantly.
- **Misalignment of Theory and Practice:** Initially, the connection between theoretical lessons and workplace training was weak. This was addressed through regular coordination between teachers and company supervisors, improving alignment and student satisfaction.
- **Limited Internship Opportunities:** A lack of sufficient internship placements led the school to expand its network of industry partners, improving both the quantity and quality of internship opportunities.
- **Varying Internship Quality:** The quality of internships varied across companies. The school implemented a stricter evaluation system for industry partners, resulting in a more consistent and satisfactory experience for trainees.



Evaluation of the Program/Curriculum:

- **What Worked Well:** The program successfully balanced theoretical and practical training and maintained strong partnerships with the industry. Personalized support for trainees contributed to their motivation and development of key skills. Internships provided crucial hands-on experience, and many trainees secured permanent jobs as a result.
- **What Needs Improvement:** Resource allocation needs to be optimized to provide more practical training opportunities. The program would benefit from more flexible learning paths to accommodate diverse needs. Better coordination between teachers and industry partners is necessary to ensure better alignment between theoretical content and practical experiences. Additionally, increasing feedback sessions among students, teachers, and mentors would help refine the program further.

Support Expected from School Management and Government: To further enhance the program, the following support would be beneficial:

- **Financial Assistance:** Government grants for purchasing advanced equipment and maintaining training facilities.
- **Professional Development:** Continuous teacher training to align with industry standards.
- **Industry Collaboration:** Expanded partnerships to increase internship and job placement opportunities.
- **Curriculum Updates:** Continuous adaptation of the curriculum to meet changing industry demands.
- **Student Support Systems:** Enhanced emotional and behavioral support for trainees.
- **Career Guidance:** Increased focus on career counseling and job market preparation.
- **Flexible Learning Options:** Promoted by both the school and government to accommodate diverse learner needs.

Benefits of Dual Vocational Training for Trainees' Future Careers: Dual vocational training provides significant benefits for trainees in their future professional lives:

- **Real-World Experience:** Hands-on industry experience ensures that trainees are well-prepared for their careers.
- **Technical and Soft Skills:** The program combines practical and theoretical learning with the development of soft skills, making trainees more adaptable and competent in the workplace.
- **Networking Opportunities:** Interaction with industry professionals creates valuable connections for future job prospects.



- **Increased Employability:** Graduates are highly competitive due to their comprehensive training, reducing the gap between academic learning and industry needs.

Participant Satisfaction: Participants expressed high satisfaction with the program. Many highlighted the enriching nature of the hands-on approach, which significantly improved trainees' practical skills and confidence. The personalized support, exposure to industry standards, and opportunities for mentoring were appreciated. Overall, participants felt well-prepared for future challenges and valued the experience provided by the project.

4.56 Interview with companies

1. Please indicate the main benefits of dual vocational training from the perspective of your company?

- 1) **Talent Qualification:** Access to students who blend up-to-date theoretical knowledge with practical experience, facilitating quicker integration into our work environment.
- 2) **Reduced Training Time:** Exposure to our operations during their training helps decrease the duration of internal training and enhances productivity.
- 3) **Tailored Training:** customize training according to our specific operational needs and standards, ensuring trainees are proficient in our procedures and service expectations.
- 4) **Improved Employee Retention:** Interns who transition to full-time roles reduce recruitment and training costs, as they are already familiar with our processes.
- 5) **Employee Development:** The program fosters development opportunities for existing staff through mentorship roles, enhancing their leadership and teaching skills.
- 6) **Enhanced Reputation:** Participation in vocational training improves our standing in the community and industry, showcasing our commitment to social responsibility and workforce development. This can attract customers who value businesses invested in community initiatives.
- 7) **Financial Incentives:** Engaging in dual vocational training can offer financial benefits, contributing to the overall success and competitiveness of our restaurant.

These advantages collectively strengthen our operational efficiency and community ties while building a skilled and motivated workforce.

2. How would you evaluate the content of the program/ curriculum of the dual vocational training realised in your company?



The dual vocational training program is viewed positively within the company, as it strikes a good balance between theoretical knowledge and practical experience relevant to the sector. It is designed to equip students with a deep understanding of processes and technologies in the field, which is vital for their immediate contributions upon entering the workforce.

From the company's perspective, the curriculum is essential for long-term success, meticulously structured to ensure students acquire necessary technical and practical skills tailored to industry challenges.

The program's strengths include its focus on practical application and soft skills development.

To enhance the program's effectiveness, ongoing collaboration with industry partners is recommended to regularly update the curriculum based on trends and feedback from trainees and mentors, ensuring the training remains relevant and produces highly skilled professionals.

3. Please indicate knowledge, skills, and abilities that trainees need to be successful in your company.

To be successful in our company, trainees should possess a diverse set of knowledge, skills, and abilities, including:

1) **Technical Knowledge:**

- Understanding of relevant processes and technologies in their field.
- Proficiency in essential techniques related to their specific roles.

2) **Practical Skills:**

- Strong hands-on skills relevant to daily tasks and responsibilities.
- Ability to follow procedures and guidelines to ensure quality and consistency.

3) **Soft Skills:**

- Excellent teamwork and communication skills for effective collaboration with colleagues.
- Adaptability and time management to navigate a dynamic work environment.
- Capacity to manage stress and remain calm under pressure.

4) **Personal Attributes:**

- A strong work ethic and sense of responsibility.
- Attention to detail and commitment to high standards.
- Professionalism in handling customer interactions and feedback.

This combination of technical expertise, practical abilities, soft skills, and personal attributes will equip trainees to thrive in the company's fast-paced and collaborative environment.



4. What were the main difficulties you encountered during the training process? How did you try to mitigate the difficulties?

During the training process, several significant difficulties were encountered.

1. **Coordination between Theory and Practice:** There was a noticeable discrepancy between the theoretical content taught and its practical application within the company.
2. **Variance in Quality of Practical Experiences:** The quality of hands-on training varied significantly, with some experiences being more structured and enriching than others, impacting students' learning outcomes.
3. **Diverse Skill Levels:** Trainees arrived with different knowledge and experience levels, leading to inconsistent performance and varying learning speeds.
4. **Time Management Challenges:** Balancing training needs with the operational demands of a busy restaurant, particularly during peak hours, proved to be difficult.
5. **Communication Gaps:** Occasional misunderstandings arose among trainees, mentors, and kitchen staff, leading to inefficiencies.
6. **Emotional and Behavioral Issues:** Trainees faced challenges adapting to real-world pressures, which affected their performance.

To mitigate these difficulties, several strategies were implemented:

- **Individualized Instruction:** Tailoring support to each trainee's skill level helped address diverse learning needs.
- **Structured Schedules:** Detailed training schedules were created to ensure adequate instruction time without disrupting restaurant operations.
- **Regular Meetings:** Frequent discussions among trainees, mentors, and staff improved communication and clarified any misunderstandings.
- **Supportive Environment:** Creating a supportive atmosphere fostered better adaptation to the training process.
- **Gradual Exposure:** Trainees were gradually exposed to real-world pressures to build their resilience and skills.

These strategies collectively improved the training experience and addressed the challenges effectively.

5. How would you evaluate cooperation with the school during the realisation of the dual vocational training? For example, where you provided pedagogical support by school trainers?

The evaluation of cooperation with the school during the dual vocational training program highlights several key aspects that contributed to its success:



1. **Pedagogical Support and Guidance:** School trainers offered valuable pedagogical support to students, aiding their understanding and application of theoretical concepts in real work situations. They were actively involved in helping trainees navigate challenges encountered during their internships, serving as a bridge between the school and the workplace.
2. **Problem Resolution:** Trainers were readily available to assist students with specific issues that arose during their practical training. This included addressing behavioral problems and skill gaps, ensuring that timely interventions were made to support the trainees' development.
3. **Regular Communication and Coordination:** The partnership involved excellent communication between the school and the company. Regular updates via emails, phone calls, and meetings facilitated discussions on trainee progress and problem-solving. Joint planning sessions ensured that the training curriculum aligned with operational needs, balancing theoretical and practical education.
4. **Resource Sharing:** the school provided specialized equipment to help trainees practice techniques that required tools not available at the restaurant. This resource sharing enriched the learning experience and prepared students effectively for their roles in the culinary industry.

In conclusion, the collaboration with the school has been instrumental in delivering a comprehensive and well-rounded education for trainees, significantly enhancing their preparedness for successful careers in the culinary field.

6. What kind of support would you expect from your local authorities/country's government/etc. in relation to dual vocational training?

- 1) **Collaboration with Educational Systems:** Stronger partnerships between educational authorities and businesses are essential to align dual training programs with local labor market needs.
- 2) **Emotional and Psychological Support:** Access to emotional and psychological services is important for students to help them manage the stresses of balancing work and study.
- 3) **Financial Assistance:** Governments should provide subsidies and grants to cover training materials, equipment, and mentorship costs. Tax incentives for businesses participating in dual training programs would encourage greater company involvement.
- 4) **Subsidies for Training Organization:** Specific financial support for organizing dual training can ease the financial burden on companies, enabling them to provide quality training without compromising efficiency.
- 5) **Professional Development Funding:** Investment in professional development for company mentors and trainers ensures they are equipped with current pedagogical techniques and industry knowledge, enhancing training quality.



- 6) **Public Awareness Campaigns:** Government-led initiatives to promote the benefits of dual vocational training would support its implementation and acceptance.
- 7) **Comprehensive Support Services:** To ensure effective training, standardized certification processes, flexible regulations, and extensive support services for trainees are necessary.

Overall, comprehensive financial, educational, and emotional support from local authorities and the government is crucial for the success and sustainability of dual vocational training programs.

7. How and why is the dual vocational training more beneficial than traditional in-school training for trainees in their future working life? Explain.

The dual vocational training system offers several advantages over traditional in-school training, significantly enhancing trainees' future working lives.

- 1) **Real-World Experience:** Trainees engage in practical work experiences in actual businesses or institutions, applying theoretical knowledge in real-world situations. This exposure equips them with industry-specific skills and a deeper understanding of workplace dynamics from an early stage.
- 2) **Increased Confidence and Self-Esteem:** The hands-on experience and direct feedback from supervisors and mentors help trainees build confidence in their abilities and foster a positive self-image regarding their professional potential.
- 3) **Skill Development:** Through immersion in a professional environment, trainees gain practical skills that are directly relevant to their future jobs, such as technical abilities in specific fields and essential soft skills like communication and teamwork. These skills are crucial for success in collaborative work settings.
- 4) **Career Path Exploration:** The dual training model allows trainees to explore their chosen fields firsthand, helping them assess whether the career path suits them. This experience can lead to more informed and motivated career choices, reducing job turnover and enhancing job satisfaction.
- 5) **Integration of Theory and Practice:** Trainees can immediately apply theoretical knowledge in practical settings, reinforcing learning and retention. This hands-on approach provides ample opportunities to master essential skills through practice, making trainees more competitive in the job market.
- 6) **Employability:** By acquiring skills that are in demand, trainees become more attractive to employers. They are better prepared to meet industry-specific needs, leading to higher employability rates.

Overall, dual vocational training enhances learning outcomes, builds confidence, and better prepares trainees for the workforce, making it a more beneficial alternative to traditional in-school training.



8. How satisfied were you with participating in this project?

The responses indicate a high level of satisfaction among participants in the dual vocational training project. Key points include:

Effective Training Structure: Participants appreciated the balance between theoretical instruction and practical application, which they found to be highly effective.

Positive Contributions: Trainees positively impacted kitchen operations, bringing enthusiasm and energy. Some trainees have shown potential for future employment and have continued with the company post-training.

Professional Development for Mentors: Being a mentor provided valuable opportunities for professional growth, enhancing teaching and leadership skills.

Overall, the feedback reflects a successful and beneficial training experience for both trainees and mentors.

Findings

1. Main Benefits

- **Talent Qualification:** Access to students with both theoretical knowledge and practical experience for quicker integration.
- **Reduced Training Time:** Exposure during training shortens internal training duration and boosts productivity.
- **Tailored Training:** Customized programs meet specific operational needs and standards.
- **Improved Retention:** Interns transitioning to full-time roles minimize recruitment costs.
- **Employee Development:** Mentorship roles enhance existing staff's leadership and teaching skills.
- **Enhanced Reputation:** Commitment to vocational training boosts community standing and attracts socially conscious customers.
- **Financial Incentives:** Training participation can yield financial benefits for the restaurant.

2. Curriculum Evaluation The program effectively balances theory and practice, equipping students with necessary skills. Strengths include practical application and soft skills focus. Ongoing collaboration with industry partners is recommended to keep the curriculum relevant.

3. Necessary Knowledge, Skills, and Abilities Trainees should have:



- Technical Knowledge: Understanding of relevant processes and proficiency in essential techniques.
- Practical Skills: Hands-on abilities and adherence to quality procedures.
- Soft Skills: Teamwork, communication, adaptability, and stress management.
- Personal Attributes: Strong work ethic, attention to detail, and professionalism.

4. Challenges Encounter

- Coordination Issues: Gaps between theory and practical application.
- Quality Variance: Inconsistent hands-on experiences.
- Diverse Skill Levels: Different backgrounds led to varied performance.
- Time Management: Balancing training with busy operations.
- Communication Gaps: Misunderstandings among trainees and staff.
- Emotional Challenges: Difficulty adapting to real-world pressures.

Mitigation Strategies:

- Individualized instruction and structured schedules.
- Regular meetings to improve communication.
- Creating a supportive environment and gradual exposure to pressures.

5. Cooperation with the School The collaboration with the school was beneficial:

- Pedagogical Support: School trainers provided valuable guidance and problem resolution.
- Communication: Regular updates and joint planning ensured alignment between the curriculum and operational needs.
- Resource Sharing: Access to specialized equipment enriched training.

6. Support from Authorities Expectations include:

- Stronger partnerships between educational authorities and businesses.
- Emotional support services for students.
- Financial assistance for training materials and mentorship.
- Public awareness campaigns promoting dual vocational training.

7. Advantages Over Traditional Training

- Real-World Experience: Trainees apply theory in practical settings.
- Confidence Building: Hands-on feedback fosters self-esteem.
- Skill Development: Relevant technical and soft skills are acquired.
- Career Exploration: Trainees can assess their fit in their chosen field.
- Improved Employability: In-demand skills make trainees attractive to employers.

8. Overall Satisfaction Participants expressed high satisfaction:



- **Effective Structure:** The balance of theory and practice was well received.
- **Positive Contributions:** Trainees added enthusiasm to operations.
- **Professional Development:** Mentoring provided growth opportunities for existing staff.

Overall, the dual vocational training program is deemed effective in preparing trainees for successful careers.

4.57 Final Findings and results

Participants

The results from the **initial survey** and the **final survey** reveal important insights into the participants' experience and perception of the dual vocational training program:

1. Motivation and Expectations

- **Initial Survey:** Participants showed high motivation to participate in the training, with 87.1% agreeing or strongly agreeing that they felt motivated. Most wanted to acquire new theoretical knowledge (90.6%) and practical skills (95.3%). The primary motivation to enroll was financial, with 77.6% stating they wanted to earn more money, followed by the desire to find a new job (51.8%).
- **Final Survey:** Motivation remained generally high but declined slightly, with 58.9% reporting they felt motivated during the training. There was a notable increase in neutrality regarding creativity (37% neutral) and initiative (32.9% neutral), indicating participants may not have felt fully encouraged to express or develop these traits during the training.

2. Training Content and Organization

- **Initial Survey:** The participants had positive expectations about the organization and relevance of the training, with 88.2% finding the topics relevant and 74.1% agreeing that the content was well-organized.
- **Final Survey:** While a majority (54.8%) felt that the training met their expectations and that the content was well-organized, only 31.5% found the topics relevant to their specific needs. The gap between expectations and final impressions regarding topic relevance suggests room for improvement.

3. Skills Development

- **Initial Survey:** Participants had strong expectations for improving both theoretical and practical skills. Nearly all respondents believed the training would enhance their theoretical (93%) and practical (97.6%) skills.



- **Final Survey:** In the final assessment, 50.7% felt they improved their practical skills, and only 37% saw improvement in theoretical knowledge. This suggests that while hands-on experience may have met expectations, the theoretical components did not fully deliver on the initial promises.

4. Post-Training Outlook

- **Initial Survey:** The initial survey showed a strong desire for career advancement, with 77.6% wanting to earn more money and 51.8% aiming to secure a new job.
- **Final Survey:** After completing the training, 34.5% strongly agreed they would pursue new job opportunities, and 38.4% strongly believed they would earn more money. However, only 32.9% felt they had attained recognized qualifications, which could affect their confidence in post-training employment prospects.

5. Trainer Effectiveness and Practical Components

- **Initial Survey:** Participants expected high-quality training from knowledgeable and communicative trainers. They were also excited about the practical, company-based aspects of the program.
- **Final Survey:** Trainer communication and knowledge were rated highly by participants, with over 72% agreeing they were effective. The practical training was seen as beneficial by 65.7%, indicating that hands-on experience remained a highlight of the program. However, some areas, such as feedback usefulness and the flexibility of the training process, saw mixed responses.

Trainers:

The findings from this evaluation are structured based on specific evaluation questions and key themes, such as the content and organization of the training, trainer preparedness, trainee participation, and the cooperation between schools and companies. A comparison between initial and final results of teacher surveys is also incorporated.

Organization of Findings

The findings are organized by major themes and issues:

1. Evaluation of the Training Content and Organization
2. Trainers' Preparedness
3. Trainees' Participation and Progress
4. Cooperation Between Schools and Companies
5. Challenges Encountered and Suggested Improvements
6. Results of Quantitative and Qualitative Analyses



1. Evaluation of the Training Content and Organization

Initial Results: In the initial survey, 38.5% of teachers were "very satisfied" with the overall program curriculum, and 30.8% were "somewhat satisfied". This reflected a generally positive perception, but some areas needed attention, such as the availability of training materials and the length of the program.

Final Results: In the final evaluation, the program curriculum satisfaction increased, with 61.9% reporting as "somewhat satisfied" and 28.6% as "very satisfied." The organization of the training improved, with 85.7% reporting positive feedback. However, concerns about the availability of materials and flexibility persisted, with 28.6% still rating materials as "neither satisfied nor dissatisfied."

Comparison: The final survey reflects an overall increase in satisfaction, especially in the perceived effectiveness of the activities and organization. However, persistent issues with material availability suggest room for improvement.

2. Trainers' Preparedness

Initial Results: In the initial assessment, most trainers (53.8%) felt very confident in their subject-related competence, but only 46.2% felt "very satisfied" with their pedagogical skills. There were also concerns about the limited support from school management and colleagues, with mixed responses indicating a need for stronger collaboration and clearer guidelines.

Final Results: The final results show improvements in trainers' confidence, with 84.6% of trainers "satisfied" with their understanding of training objectives and pedagogical skills. However, issues with ongoing support from management were still mentioned.

Comparison: Trainers' understanding of objectives and pedagogical skills improved, but gaps in external support persisted, pointing to the need for more structured assistance.

3. Trainees' Participation and Progress

Initial Results: Trainees' initial knowledge was generally perceived as low, with 66.6% of teachers reporting dissatisfaction. However, teachers noted improvements in practical skills and knowledge levels over time. Engagement levels were moderate, and some trainees struggled with motivation and skill application.

Final Results: By the end of the training, knowledge and skills had improved significantly, with 57.1% of teachers rating their knowledge as "somewhat satisfied" and 23.8% as "very satisfied". Practical skill development also saw improvement, with 52.4% rating progress as "good."

Comparison: There was a clear improvement in trainees' knowledge and skills from the beginning to the end of the program. Engagement levels, though still moderate, slightly improved.



4. Cooperation Between Schools and Companies

Initial Results: The initial survey revealed mixed opinions about the cooperation between schools and companies, with only 46.2% of teachers satisfied with company engagement. Communication issues and lack of alignment between school curricula and industry needs were significant concerns.

Final Results: By the final survey, company engagement in the training had improved, with 61.9% of teachers expressing satisfaction. Still, many teachers felt that companies needed to align more closely with the training curriculum.

Comparison: There was an increase in the perceived quality of cooperation, but challenges remained in aligning the curriculum more closely with industry needs.

5. Challenges and Improvements

Initial Challenges: Initial challenges included a lack of communication between schools and companies, a lack of soft skills training, and limited internship opportunities.

Final Improvements: These issues were addressed by implementing more structured communication and providing additional soft skills workshops. Teachers also noted an increase in the quality and number of internships.

Comparison: The final findings reflect successful measures taken to mitigate initial challenges, such as improved communication and expanded internships, though issues like inconsistent support for trainers remain.

The training program demonstrated marked improvements in key areas such as curriculum satisfaction, practical skill development, and cooperation between schools and industry. However, ongoing challenges like material availability and the alignment of theoretical content with industry needs suggest further areas for enhancement. Overall, the results indicate a positive trajectory in the training program's effectiveness, with participants gaining significant practical and theoretical skills for their future careers.

4.6 Recommendations

Participants:

Based on the conclusions drawn from the initial survey and final survey, the following recommendations are proposed to enhance the dual vocational training program:

1. Curriculum Relevance and Adaptation

- **Improve Topic Relevance:** In the final survey, only 31.5% of participants found the topics relevant to their needs, compared to the strong initial expectations. This suggests a need to re-evaluate the curriculum to ensure better alignment with the current job market demands and participants' career aspirations.

- Action: Conduct regular industry needs assessments to adjust the curriculum and ensure it addresses emerging trends and skills in the relevant sectors.
- Introduce More Advanced Content: Some participants identified gaps in areas such as advanced techniques, nutrition, cost control, and business planning.
 - Action: Include more advanced modules in specific areas, and offer elective courses based on participants' professional interests (e.g., advanced culinary techniques or entrepreneurship).

2. Training Methods

- Increase Practical Training Hours: Practical skills development was highly valued by participants, with many noting the usefulness of hands-on experience. However, some participants suggested extending practical training.
 - Action: Extend the number of practical training hours to allow participants more opportunities to apply theoretical knowledge in real-world environments.
- Balance Theory with Practice: While most participants valued the hands-on components, the feedback indicated that the theoretical content did not always align well with the practical experiences.
 - Action: Ensure closer integration between classroom-based theory and on-the-job practical training. Regular feedback loops between company mentors and school trainers can help bridge this gap.

3. Enhance Support for Creativity and Initiative

- Encouragement of Creativity and Initiative: A significant number of participants remained neutral regarding the encouragement of creativity (37%) and the evaluation of initiative (32.9%).
 - Action: Introduce more project-based learning where participants can develop their creativity and take initiative. Activities such as case studies, problem-solving challenges, and innovation labs can foster a more stimulating environment.

4. Improve Flexibility and Accessibility

- Flexible Training Schedules: Some participants requested more flexibility in the training schedule, suggesting evening sessions.
 - Action: Introduce more flexible class schedules, including evening or weekend sessions, to accommodate participants who may be balancing work or other commitments.
- Tailor Materials to Participant Needs: Some participants expressed challenges with language barriers and requested more training materials in their native language.



- Action: Provide training materials in multiple languages where applicable and ensure that trainers are aware of participants' language needs.

5. Feedback and Continuous Improvement

- Enhance the Usefulness of Feedback: Participants rated the feedback from trainers evenly across positive, neutral, and negative categories, suggesting room for improvement.
 - Action: Implement a structured feedback mechanism where participants receive specific, actionable advice that helps them improve their skills in real time. Regular check-ins between trainers and participants can enhance the learning process.
- Utilize Participant Feedback for Continuous Program Improvement: Since participants value practical components and hands-on training (Participants), feedback should be regularly collected and acted upon to ensure the program evolves with participant needs.
 - Action: Introduce periodic participant feedback sessions (e.g., mid-course evaluations) to make adjustments during the training period itself, rather than only at the end.

6. Post-Training Support

- Strengthen Qualification Recognition: Only 32.9% of participants felt confident that they had attained recognized qualifications after completing the training.
 - Action: Strengthen partnerships with certification bodies and ensure that the qualifications earned through the program are recognized and valued in the relevant industries.
- Career Advancement Support: Many participants expressed optimism about earning more money and finding new jobs post-training, but less so about job security and promotion.
 - Action: Offer post-training career counseling and workshops focused on job search, promotion strategies, and entrepreneurship to support participants in their career advancement.

By implementing these actions, the dual vocational training program can enhance its effectiveness, meet participants' expectations more fully, and provide them with the skills and qualifications necessary for success in the job market

Trainers

Based on the findings and conclusions from the evaluation of the dual vocational training program, several actionable recommendations are proposed to enhance the effectiveness and outcomes of the program. These recommendations focus on improving



the training curriculum, teaching methods, and the overall collaboration between schools and companies.

1. Enhance Material Availability and Resources

- Action: Increase the availability of training materials to address the concerns raised by both teachers and trainees. Ensure that essential resources, such as instructional guides, practical tools, and reference materials, are available to all participants.
- Implementation: Allocate additional funds or seek government grants to invest in better materials, including digital and print resources, which can be regularly updated. Partner with companies to provide relevant industry-specific materials.
- Rationale: Addressing this gap will improve the overall training experience and ensure that trainees have access to the resources they need to succeed.

2. Improve Flexibility in Training Delivery

- Action: Introduce more flexible scheduling and training options to accommodate diverse learning paces and personal schedules. Offer evening or weekend training sessions and provide the possibility for trainees to access online learning modules.
- Implementation: Implement blended learning approaches that integrate both in-person and online training elements. Customize training modules based on individual trainees' skill levels, offering remedial or accelerated paths when necessary.
- Rationale: Greater flexibility will ensure that trainees with varying backgrounds and commitments can fully participate and benefit from the training.

3. Strengthen Alignment Between Theory and Practice

- Action: Ensure closer coordination between the theoretical content taught in schools and the practical experiences trainees gain during internships. The curriculum should be revised to better reflect industry requirements and challenges.
- Implementation: Conduct regular consultations between school teachers and company mentors to ensure that the curriculum remains relevant and aligned with the needs of employers. Incorporate feedback from both industry partners and trainees to continuously improve the integration of theory and practice.
- Rationale: A stronger alignment will help trainees make more meaningful connections between what they learn in the classroom and their practical work, enhancing their overall competence and employability.

4. Expand Soft Skills Training

- Action: Increase the focus on developing essential soft skills such as communication, teamwork, problem-solving, and adaptability, which are critical for successful workplace integration.
- Implementation: Incorporate dedicated modules on soft skills into the curriculum, including workshops, role-playing exercises, and group activities. Engage industry professionals to mentor trainees in these areas.
- Rationale: Soft skills are increasingly important in modern workplaces, and improving them will not only enhance trainees' professional readiness but also their ability to thrive in various work environments.

5. Foster Closer School-Company Partnerships

- Action: Strengthen the collaboration between schools and companies by establishing more formalized and frequent communication channels. Jointly develop training programs that better reflect industry needs.
- Implementation: Set up regular meetings between school representatives and industry partners to discuss curriculum updates, internship quality, and trainee progress. Implement a joint mentoring program where both school staff and company mentors work together to support trainees.
- Rationale: A more structured partnership will ensure that the training program remains relevant, up-to-date, and aligned with real-world job requirements, improving the value of the program for trainees and employers alike.

6. Increase Trainee Engagement and Motivation

- Action: Introduce more interactive, hands-on, and engaging teaching methods to sustain trainee interest and participation throughout the program. Methods such as workshops, case studies, and project-based learning should be emphasized.
- Implementation: Design dynamic learning activities that combine traditional lectures with practical assignments, industry visits, and peer learning opportunities. Provide regular feedback to trainees to keep them motivated and on track.
- Rationale: Engaging teaching methods are critical to maintaining trainee motivation, which will lead to better participation, improved learning outcomes, and higher completion rates.

7. Provide Ongoing Professional Development for Trainers

- Action: Offer continuous professional development opportunities for trainers to enhance their pedagogical skills and keep them updated with industry trends. This includes both subject-specific and teaching methodology training.



- Implementation: Organize workshops, seminars, and online courses for trainers, ensuring that they stay informed about the latest industry developments and best teaching practices. Facilitate peer learning and experience-sharing sessions among trainers.
- Rationale: Well-trained and motivated trainers are key to delivering high-quality instruction. Continuous development will ensure that trainers are better equipped to meet the evolving needs of trainees and industry partners.

8. Increase Internship Quality and Consistency

- Action: Improve the consistency and quality of internship experiences by establishing clear standards for partner companies. Monitor and evaluate these placements more rigorously.
- Implementation: Develop a framework for evaluating internship quality, including feedback from trainees and company supervisors. Ensure regular follow-ups with partner companies to address any issues and improve the learning experience.
- Rationale: Ensuring that all trainees have high-quality internship experiences is vital for their skill development and professional growth. By standardizing and improving these experiences, trainees will be better prepared for their careers.

9. Expand Career Guidance and Job Placement Support

- Action: Offer more robust career counseling and job placement services to help trainees transition from the training program into the workforce.
- Implementation: Create partnerships with local businesses and industry associations to provide trainees with job opportunities. Develop workshops focused on resume building, interview preparation, and job search strategies.
- Rationale: Enhanced career support will ensure that trainees are not only prepared for their future careers but also successfully find employment after completing the program.

By implementing these recommendations, the dual vocational training program can further enhance its effectiveness, address current challenges, and better prepare trainees for successful careers in their chosen industries.



4.7 Appendix

1 SURVEY OF PARTICIPANTS⁹

(INITIAL EVALUATION QUESTIONNAIRE)

Dear Participant,

The objective of the study is to evaluate your motivation and expectations related to dual vocational training you have enrolled in. The training is realized within the Project “Three-level Centres of Professional Excellence: Qualification, Entrepreneurship and Innovation in the Green Economy (3LOE)”.

Please, take a few minutes and fill this his evaluation form. Your comments and suggestions will help us to improve the training. The questionnaire is anonymous. To fill out it takes you only a few minutes.

Please indicate your institution.

- PP4 – Poland – Izba Rzemieśnicza Małej i Średniej Przedsiębiorczości
- PP7 – Lithuania – Professinio Makymo Centras Zirmunai
- PP20 – Spain – Institut Pere Martell
- PP23 – Latvia – Profesionālās izglītības kompetences centrs

I Evaluation of motivation to participate in the dual vocational training

Q1: Please indicate your level of agreement with the statements listed below.

1=Strongly Disagree; 2= Disagree; 3= Neither agree nor disagree; 4=Agree; 5=Strongly Agree

	Strongly Disagree			Strongly Agree	
I feel motivated to participate in the training	1	2	3	4	5
I want to acquire new theoretical knowledge	1	2	3	4	5
I want to learn new practical skills	1	2	3	4	5
I am happy that a large part of the training will happen in companies	1	2	3	4	5

⁹ Please note that all questionnaires will be distributed in the online form.



Q2: Please indicate why you have enrolled in dual vocational training. Please indicate three main reasons.

- I want to get a new job,
- I want to earn more money,
- I want to secure my position in my current job,
- I want to get promoted in my current job,
- I want to establish my own business,
- I want to do something new in my current job,
- I want to improve for my own satisfaction,
- I want to acquire new skills,
- I want to attain recognised qualifications,
- I want to gain more job satisfaction,
- other (please, specify what motivated you to enrol in dual vocational training)...

Q3: Please indicate what/ who influenced your decision to enrol in dual vocational training. Please indicate a maximum of three answers.

- My partner/ guardian asked me to continue education,
- My employer asked me to improve my skills,
- My friend encouraged me to take up the training,
- The training is legally required in my job,
- I had to continue education because it is compulsory till the age of 18,
- I followed the advice of job counsellor/ career adviser,
- The school has a good reputation,
- The training programme is interesting,
- other (please specify what/ who motivated you to enrol in dual vocational training).

Q4: Do you have any other comments regarding your motivation to participate in dual vocational training?



II Evaluation of the expectations about the dual vocational training for the participant

Q5: Please indicate your level of agreement with the statements listed below.

1=Strongly Disagree; 2= Disagree; 3= Neither agree nor disagree; 4=Agree; 5=Strongly Agree

		Strongly Disagree				Strongly Agree
The training objectives meet my expectations	1	2	3	4	5	
The content seems well organized and easy to follow	1	2	3	4	5	
The topics seem relevant to me	1	2	3	4	5	
The training process is flexible	1	2	3	4	5	
The training will improve my theoretical knowledge		1	2	3	4	5
The training will improve my practical skills	1	2	3	4	5	
The training experience will be useful in my work	1	2	3	4	5	
The training in the company will be beneficial	1	2	3	4	5	
Overall, dual education system will be effective	1	2	3	4	5	

Q6: Do you have any comments about your expectations about the dual vocational training you enrolled in?

IV General information

(1) Please indicate your gender

- Male
- Female
- Prefer not to answer

(2) Please indicate your age

- Younger than 18
- 18 - 24



- 25 - 34
- 35 – 44
- 45 - 54
- Prefer not to answer

(3) Please indicate your professional experience

- no professional experience
- 0-6 months
- 6-12 months
- 1-3 years
- 3-5 years
- 5-10 years
- more than 10 years

(4) Please indicate your educational background

- no formal education
- primary school
- junior high school
- vocational school
- high school
- technical high school
- college/ university (Bachelor’s Degree/ Engineering Degree)
- college/ university (Master’s Degree)

(5) Did you attend any additional courses/ trainings before you enrolled in this course?

- YES
- NO

(6) What additional courses/ trainings did you attend before you enrolled in this course?

(7) Did you know anything about dual vocational trainings before you heard about this training?

- YES
- NO

Thank you for your answers!



Appendix 2 SURVEY OF PARTICIPANTS¹⁰ **(FINAL EVALUATION QUESTIONNAIRE)**

Dear Participant,

The objective of the study is to evaluate your satisfaction with dual vocational training. The training has been realized within the Project “Three-level Centres of Professional Excellence: Qualification, Entrepreneurship and Innovation in the Green Economy (3LOE)”.

Please, take a few minutes and fill this his evaluation form. Your comments and suggestions will help us to improve future trainings. The questionnaire is anonymous. To fill out it takes you only a few minutes.

Please indicate your institution.

- PP4 – Poland – Izba Rzemieślnicza Małej i Średniej Przedsiębiorczości
- PP7 – Lithuania – Professinio Makymo Centras Zirmunai
- PP20 – Spain – Institut Pere Martell
- PP23 – Latvia – Profesionālās izglītības kompetences centrs

I Evaluation of motivation to participate in the training

Q1: Please indicate your level of agreement with the statements listed below.

1=Strongly Disagree; 2= Disagree; 3= Neither agree nor disagree; 4=Agree; 5=Strongly Agree

	Strongly Disagree					Strongly Agree	
I was motivated to participate in the training	1	2	3	4	5		
Participation and interaction were encouraged	1	2	3	4	5		
My creativity was encouraged	1	2	3	4	5		
My initiative was highly evaluated	1	2	3	4	5		

¹⁰ Please note that all questionnaires will be distributed in the online form.



II Evaluation of the usefulness of training for the participant

Q2: Please indicate your level of agreement with the statements listed below.

1=Strongly Disagree; 2= Disagree; 3= Neither agree nor disagree; 4=Agree; 5=Strongly Agree

	Strongly Disagree		Strongly Agree		
The training objectives met my expectations	1	2	3	4	5
The content was well organized and easy to follow	1	2	3	4	5
The topics were relevant to me	1	2	3	4	5
The facilities for the training were suitable	1	2	3	4	5
The training improved my theoretical knowledge	1	2	3	4	5
The training improved my practical skills	1	2	3	4	5
The training experience will be useful in my work	1	2	3	4	5
The training in the company was beneficial	1	2	3	4	5
Dual education system was effective	1	2	3	4	5
I will recommend dual vocational training to others	1	2	3	4	5

Q3: Do you have any comments regarding the usefulness of dual vocational training?

Q4: Please, answer these additional questions.

1=Strongly Disagree; 2= Disagree; 3= Neither agree nor disagree; 4=Agree; 5=Strongly Agree

After the completion of the training, I...

will try to get a new job	1	2	3	4	5
will earn more money	1	2	3	4	5
will feel more secure in my current job	1	2	3	4	5
will get promoted	1	2	3	4	5



will try to establish my own business	1	2	3	4	5
will ask my superiors to entrust me with new responsibilities	1	2	3	4	5
have attained recognised qualifications	1	2	3	4	5
will do my job with greater satisfaction	1	2	3	4	5
other...					

III Evaluation of the trainers and the organization of the training

Q5: Please indicate your level of agreement with the statements listed below.

1=Strongly Disagree; 2= Disagree; 3= Neither agree nor disagree; 4=Agree; 5=Strongly Agree

	Strongly Disagree			Strongly Agree	
The lecturers were knowledgeable about the training topics	1	2	3	4	5
The lecturers were good communicators	1	2	3	4	5
The feedback received from the trainers (teachers) was useful	1	2	3	4	5
The content (i.e. tasks, activities) was well organized and easy to follow	1	2	3	4	5
The topics were relevant to me	1	2	3	4	5
The duration of training was relevant	1	2	3	4	5
The teaching materials were presented in an organized manner	1	2	3	4	5
Practical training in companies was compatible with the theoretical content taught at school	1	2	3	4	5
The materials distributed were helpful	1	2	3	4	5
The training process was flexible	1	2	3	4	5



The overall atmosphere of the training was encouraging 1 2 3 4 5

Q6: Do you have suggestions as to how the training could be improved (in terms of content, organisation, etc.) in the future?

IV General information

(1) Please indicate your gender

- Male
- Female
- Prefer not to answer

(2) Please indicate your age

- Younger than 18
- 18 - 24
- 25 - 34
- 35 – 44
- 45 - 54
- Prefer not to answer

(3) Please indicate your professional experience

- no professional experience
- 0-6 months
- 6-12 months
- 1-3 years
- 3-5 years
- 5-10 years
- more than 10 years

(4) Has your position changed in the organisation where you work?

- YES
- NO



(5) Did your position change because of the training?

- YES
- NO

What is your position in the organization where you work?

Thank you for your answers!

Appendix 3 SURVEY OF TRAINERS

(INITIAL EVALUATION QUESTIONNAIRE)

Dear Trainer,

The aim of the study is to evaluate the training program/ curriculum, the organisation of the training as well as your preparedness to teach at Dual Vocational Training, realised within the Project “Three-level Centres of Professional Excellence: Qualification, Entrepreneurship and Innovation in the Green Economy (3LOE)”.

Please take a few minutes to complete this evaluation form. The questionnaire is anonymous. The survey will help to improve the content/ organisation of Dual Vocational Training.

Please indicate your institution.

- PP4 – Poland – Izba Rzemieśnicza Małej i Średniej Przedsiębiorczości
- PP7 – Lithuania – Professinio Makymo Centras Zirmunai
- PP20 – Spain – Institut Pere Martell
- PP23 – Latvia – Profesionālās izglītības kompetences centrs

I Evaluation of the content of the training and its organisation

Q1: Please circle the appropriate number to indicate your level of satisfaction

1 = very dissatisfied; 2=somewhat dissatisfied; 3= Neither satisfied nor dissatisfied; 4=somewhat satisfied; 5=very satisfied

	Very Dissatisfied			Very Satisfied	
How do you evaluate the program/ curriculum of the training in general?	1	2	3	4	5

How do you evaluate the activities planned in the training in terms of their fulfilling the objectives outlined in the program/curriculum?	1	2	3	4	5
How do you evaluate the length of the training?	1	2	3	4	5
How do you evaluate the balance between theoretical and practical classes/activities?	1	2	3	4	5
How do you evaluate the organisation of the training?	1	2	3	4	5
How do you evaluate the availability of materials for the training?	1	2	3	4	5
How do you evaluate the degree of flexibility of the training?	1	2	3	4	5

Q2: What challenges do you envisage as regards the application of the program/ curriculum of the dual vocational training? How could these challenges be mitigated?

II Evaluation of the trainers' preparedness to run the trainings

Q3: Please indicate your level of agreement with the statements listed below.

1 = very dissatisfied; 2=somewhat dissatisfied; 3= Neither satisfied nor dissatisfied; 4=somewhat satisfied; 5=very satisfied

	Very Dissatisfied				Very Satisfied
How do you evaluate your understanding of the objectives of the training?	1	2	3	4	5
How do you evaluate your pedagogical skills to work with trainees?	1	2	3	4	5



How do you evaluate your subject-related competence to teach selected subjects/ supervise activities? 1 2 3 4 5

How do you evaluate your motivation to instruct trainees in the dual vocational training? 1 2 3 4 5

How do you evaluate the assistance on the part of your colleagues in relation to the training? 1 2 3 4 5

How do you evaluate the assistance on the part of your school management in relation to the training? 1 2 3 4 5

Q4: What other issues would you like to raise in relation to your preparedness as a trainer in the training?

Background information

(1) Please indicate your gender.

- Male
- Female
- Prefer not to answer

(2) Please indicate your age

- 18 - 24
- 25 - 34
- 35 - 44
- 45 - 54
- 55 - 64
- 65 or older



- Prefer not to answer

(3) Please indicate how long have you worked as a trainer?

- 6 months to less than 1 year
 1 year to less than 3 years
 3 years to less than 5 years
 5 years to less than 10 years
 10 years to less than 15 years
 15 years or more
 Other

(4) What is the highest level of education you have completed?

- Vocational secondary education
 Professional higher education
 Bachelor's degree or equivalent qualification
 Master's degree or equivalent qualification
 Other

(5) Did you receive additional training/ support in relation to dual vocational training?

- YES
 NO

Thank you for your answers!

Appendix 4 SURVEY OF TRAINERS

(FINAL EVALUATION QUESTIONNAIRE)

Dear Trainer,

The aim of the study is to evaluate the effectiveness of dual vocational training, realized within the Project “Three-level Centres of Professional Excellence: Qualification, Entrepreneurship and Innovation in the Green Economy (3LOE)”.

Please take a few minutes to complete this evaluation form. The questionnaire is anonymous. The survey will help to improve future dual vocational trainings.

Please indicate your institution.

- PP4 – Poland – Izba Rzemieślnicza Małej i Średniej Przedsiębiorczości
- PP7 – Lithuania – Professinio Makymo Centras Zirmunai
- PP20 – Spain – Institut Pere Martell
- PP23 – Latvia – Profesionālās izglītības kompetences centrs

I Evaluation of the content of the training and its organisation

Q1: Please circle the appropriate number to indicate your level of satisfaction

1 = very dissatisfied; 2=somewhat dissatisfied; 3= Neither satisfied nor dissatisfied; 4=somewhat satisfied; 5=very satisfied

	Very Dissatisfied				Very Satisfied
How do you evaluate the program/ curriculum of the training after its completion?	1	2	3	4	5
How do you evaluate the activities in the training in terms of their fulfilling the objectives outlined in the program/curriculum?	1	2	3	4	5
How do you evaluate the length of the training?	1	2	3	4	5
How do you evaluate the balance between theoretical and practical classes/activities?	1	2	3	4	5
How do you evaluate the organisation of the training?	1	2	3	4	5
How do you evaluate the availability of materials for the training?	1	2	3	4	5
How do you evaluate the facilities available for the training?	1	2	3	4	5
How do you evaluate the degree of flexibility of the training?	1	2	3	4	5



Q2: What challenges did you encounter while realising the training? How did you mitigate those challenges?

II Evaluation of trainees’ participation in the training.

Q3: Please circle the appropriate number to indicate your level of satisfaction

1 = very dissatisfied; 2=somewhat dissatisfied; 3= Neither satisfied nor dissatisfied; 4=somewhat satisfied; 5=very satisfied

	Very Dissatisfied			Very Satisfied	
How do you evaluate the trainees’ knowledge at the beginning of the training?	1	2	3	4	5
How do you evaluate the trainees’ knowledge at the end of the training?	1	2	3	4	5
How do you evaluate the progress made by the trainees in terms of the practical skills acquired?	1	2	3	4	5
How do you evaluate the trainees’ engagement in the training?	1	2	3	4	5
How do you evaluate cooperation between trainees?	1	2	3	4	5
How do you evaluate trainees’ work and learning organization?	1	2	3	4	5
How do you evaluate the readiness of trainees to work in the profession?	1	2	3	4	5



Q4: What methodological and/or organisational changes should be made to improve the training so that it better answers the needs of trainees?

III Evaluation of the cooperation between the school and companies.

Q5: Please indicate your level of agreement with the statements listed below.

1=Strongly Disagree; 2= Disagree; 3= Neither agree nor disagree; 4=Agree; 5=Strongly Agree

	Strongly Disagree				Strongly Agree
The company was engaged in the preparation of the program/ curriculum.	1	2	3	4	5
The company was fully engaged in the realisation of the training.	1	2	3	4	5
The company followed the program/ curriculum closely.	1	2	3	4	5
Cooperation with the company was smooth.	1	2	3	4	5

Q6: What improvements could be made in terms of cooperation between the school and the company while realising dual vocational training?

Background information

Please indicate your gender.

- Male
- Female
- Prefer not to answer



Please indicate your age

- 18 - 24
- 25 - 34
- 35 - 44
- 45 - 54
- 55 - 64
- 65 or older
- Prefer not to answer

Please indicate how long have you worked as a trainer?

- 6 months to less than 1 year
- 1 year to less than 3 years
- 3 years to less than 5 years
- 5 years to less than 10 years
- 10 years to less than 15 years
- 15 years or more
- Other

What is the highest level of education you have completed?

- Vocational secondary education
- Professional higher education
- Bachelor's degree or equivalent qualification
- Master's degree or equivalent qualification
- Other

Thank you for your answers!



APPENDIX 5 PERSONAL SEMI-STRUCTURED INTERVIEW QUESTIONS – FOR PARTICIPANTS OF DUAL VOCATIONAL TRAINING

Dear Participant,

The objective of the study is to evaluate the dual vocational training, realised within the Project “Three-level Centres of Professional Excellence: Qualification, Entrepreneurship and Innovation in the Green Economy (3LOE)”.

We would appreciate you taking your time to answer the questions. Your comments and suggestions will help us to improve the training.

Please, ask your interviewer for clarification, if necessary.

Please indicate your institution.

- PP4 – Poland – Izba Rzemieślnicza Małej i Średniej Przedsiębiorczości
- PP7 – Lithuania – Professinio Makymo Centras Zirmunai
- PP20 – Spain – Institut Pere Martell
- PP23 – Latvia – Profesionālās izglītības kompetences centrs

1. What did you like the most participating in dual vocational training programme?

2. Which specific difficulties did you encounter while participating in dual vocational training programme? Did the trainers try to help you with your difficulties? How?

3. Which theoretical knowledge you mostly lacked during the studies? Did you try to gain the missing knowledge? How?

4. Which part of the training was the most useful for you? Why?



5. Was the whole training consistent, i.e. was the knowledge gained at school expanded and translated into practical skills in the company?

6. How does participating in dual vocational training programme prepare you to become a highly-skilled and highly-valued employee?

7. What would you change in the training?

8. How satisfied were you with the training?

Thank you for your answers!



APPENDIX 6 PERSONAL SEMI-STRUCTURED INTERVIEW QUESTIONS WITH TRAINERS OF DUAL VOCATIONAL TRAINING

Dear Trainer,

The objective of the study is to evaluate the dual vocational training, realised within the Project “Three-level Centres of Professional Excellence: Qualification, Entrepreneurship and Innovation in the Green Economy (3LOE)”.

We would appreciate you taking your time to answer the questions. Your comments and suggestions will help us to improve the training.

Please, ask your interviewer for clarification, if necessary.

Please indicate your institution.

- PP4 – Poland – Izba Rzemieślnicza Małej i Średniej Przedsiębiorczości
- PP7 – Lithuania – Professinio Makymo Centras Zirmunai
- PP20 – Spain – Institut Pere Martell
- PP23 – Latvia – Profesionālās izglītības kompetences centrs

1. Please indicate the strong elements of the dual vocation training realised in your school. To what degree did these strengths translate into the motivation/knowledge/ skills of participants?

2. Please indicate the weak elements of the dual vocational training realised in your school? What measures were undertaken to improve the training? Were they satisfactory?

3. How would you evaluate the program/ curriculum of the dual vocation training realised in your school? What worked well? What needs to be improved?

4. Please indicate knowledge, skills, and abilities that trainees need the most to be successful in the training?

5. What main difficulties did you encounter during the training process? How did you solve the problems encountered?



5. What kind of support would you expect from your school management/ country government?

6. In what way is dual vocational training beneficial for trainees in their future professional life? Explain.

7. How satisfied were you with participating in this project?

Thank you for your answers!

Appendix 7 PERSONAL SEMI-STRUCTURED INTERVIEW QUESTIONS WITH REPRESENTATIVES OF COMPANIES TAKING PART IN DUAL VOCATIONAL TRAINING

Dear Interviewee,

The objective of the study is to evaluate dual vocational training, realised within the Project “Three-level Centres of Professional Excellence: Qualification, Entrepreneurship and Innovation in the Green Economy (3LOE)”.

We would appreciate you taking your time to answer the questions. Your comments and suggestions will help us to improve the training.

Please indicate the institution with which you cooperate within the framework of dual vocational training.

- PP4 – Poland – Izba Rzemieśnicza Małej i Średniej Przedsiębiorczości



- PP7 – Lithuania – Profesinio Makymo Centras Zirmunai
- PP20 – Spain – Institut Pere Martell
- PP23 – Latvia – Profesionālās izglītības kompetences centrs

1. Please indicate the main benefits of dual vocational training from the perspective of your company?

2. How would you evaluate the content of the program/ curriculum of the dual vocational training realised in your company?

3. Please indicate knowledge, skills, and abilities that trainees need to be successful in your company.

4. What were the main difficulties you encountered during the training process? How did you try to mitigate the difficulties?

5. How would you evaluate cooperation with the school during the realisation of the dual vocational training? For example, where you provided pedagogical support by school trainers?

6. What kind of support would you expect from your local authorities/ country's government/ etc. in relation to dual vocational training?



7. How and why is dual vocational training more beneficial than traditional in-school training for trainees in their future working life? Explain.

8. How satisfied were you with participating in this project?

Thank you for your answers!



APPENDIX 8 AN EXAMPLE OF AN ONLINE SURVEY DISTRIBUTED AMONGST PARTNERS (SCREENSHOTS).


WP3 A4.4 - SURVEY OF PARTICIPANTS - FINAL EVALUATION QUESTIONNAIRE


Dear Participant,

The objective of the study is to evaluate your satisfaction with dual vocational training. The training has been realized within the Project "Three-level Centres of Professional Excellence: Qualification, Entrepreneurship and Innovation in the Green Economy (3LOE)".

Please, take a few minutes and fill this his evaluation form. Your comments and suggestions will help us to improve future trainings. The questionnaire is anonymous. To fill out it takes you only a few minutes.

Thank you.
Pomeranian University in Slupsk (PP6)

marek.lukasik@upsl.edu.pl [Switch account](#) 

 Not shared

* Indicates required question

Please indicate your institution. *

- PP4 – Poland – Izba Rzemieśnicza Małej i Średniej Przedsiębiorczości
- PP7 – Lithuania – Professinio Makymo Centras Zirmunai
- PP20 – Spain – Institut Pere Martell
- PP23 – Latvia – Profesionālās izglītības kompetences centrs

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Evaluation of motivation to participate in the vocational training

A. Please indicate your level of agreement with the statements listed below.
 1=Strongly Disagree; 2=Disagree; 3=Neither agree nor disagree; 4=Agree; 5=Strongly Agree

I was motivated to participate in the training *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

Participation and interaction were encouraged *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

My creativity was encouraged *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

My initiative was highly evaluated *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

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Evaluation of the usefulness of training for the participant

Please indicate your level of agreement with the statements listed below. *

- The training objectives met my expectations
- The content was well organized and easy to follow
- The topics were relevant to me
- The facilities for the training were suitable
- The training improved my theoretical knowledge
- The training improved my practical skills
- The training experience will be useful in my work
- The training in the company was beneficial
- I will recommend dual vocational training to others

Do you have any comments regarding the usefulness of dual vocational training? *

Your answer



After the completion of the training, I...

will try to get a new job *

	1	2	3	4	5	
Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Agree

will earn more money *

	1	2	3	4	5	
Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Agree

will feel more secure in my current job *

	1	2	3	4	5	
Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Agree

will get promoted *

	1	2	3	4	5	
Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Agree



will try to establish my own business *

	1	2	3	4	5	
Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Agree

will ask my superiors to entrust me with new responsibilities *

	1	2	3	4	5	
Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Agree

have attained recognised qualifications *

	1	2	3	4	5	
Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Agree

will do my job with greater satisfaction *

	1	2	3	4	5	
Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Agree

Do you have any comments about any of your answers to the questions in Section B? *

Your answer

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Evaluation of the trainers and the organization of the training

Please indicate your level of agreement with the statements listed below.
 1=Strongly Disagree; 2=Disagree; 3=Neither agree nor disagree; 4=Agree;
 5=Strongly Agree

The lecturers were knowledgeable about the training topics *

	1	2	3	4	5	
Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Agree

The lecturers were good communicators *

	1	2	3	4	5	
Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Agree

The feedback received from the trainers (teachers)was useful *

	1	2	3	4	5	
Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Agree



The content (i.e. tasks, activities) was well organized and easy to follow *

	1	2	3	4	5	
Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Agree

The topics were relevant to me *

	1	2	3	4	5	
Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Agree

The duration of training was relevant *

	1	2	3	4	5	
Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Agree

The teaching materials were presented in an organized manner *

	1	2	3	4	5	
Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Agree

Practical training in companies was compatible with the theoretical content taught at school *

	1	2	3	4	5	
Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Agree



The materials distributed were helpful *

	1	2	3	4	5	
Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Agree

The training process was flexible *

	1	2	3	4	5	
Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Agree

The overall atmosphere of the training was encouraging *

	1	2	3	4	5	
Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Agree

Do you have suggestions as to how the training could be improved (in terms of content, organisation, etc.) in the future? *

Your answer

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General information

1. Please indicate your gender *

- Male
- Female
- Prefer not to answer

2. Please indicate your age *

- Younger than 18
- 18-24
- 25-34
- 35-44
- 45-54
- Prefer not to answer

3. Please indicate your professional experience *

- no professional experience
- 0-6 months
- 6-12 months
- 1-3 years
- 3-5 years
- 5-10 years
- more than 10 years



4. Has your position changed in the organisation where you work? *

Yes

No

5. Did your position change because of the training? *

Yes

No

6. What is your position in the organization where you work? *

Your answer _____

Thank you for taking part in our evaluation survey.

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