



SHare, Improve, develop: today's excellenCe for tomorrow's HVET
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Intellectual Output 2

Peer review of Best Practices

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Introduction

Higher Vocational Education and Training (HVET) plays a crucial role for the European Union, who needs to be innovative and competent. The Erasmus+ project SHINE's main focus is to distribute European Best Practices via sharing, comparing, finding improvement pathways and finally developing piloting tools and policy recommendations. With this goal, it addresses the Erasmus+ priorities to increase the labor market relevance of VET and to make the knowledge triangle work.

For the development of the governance system and the following local action plans, the project partners have prepared surveys, where they provided examples, methodologies and outcomes of co-operations among HVET training institutions, business and economic players. Additionally, practices of the management of training and of relationships with triple helix stakeholders have been described. Thereupon, every partner has determined two best practices within their field of expertise. These practices include qualifications around EQF levels 5. For these international studies, a common framework was developed by one of the partners, the Ufficio Scolastico Regionale per il Veneto, in close cooperation with the project partners. These practices were shared and discussed not only among the project group, but also during multiplier events. For the first period of the project a peer review of the previously presented surveys was conducted. The University of Applied Sciences Zwickau (WHZ) developed and coordinated a peer review process of the surveys devised in the first output. There, themes, elements and methods that make the identified practices effective have been pointed out.

SHINE: the project

The European Union needs competences, innovation, balanced and integrated territory development in order to boost its growth. Indeed, innovation is not only a linear process, a result of R&D activities. On the opposite, more and more innovation sprouts in broad, multi-sectoral socio-economic contexts, strongly application-oriented, and through complex processes, integrating top-down (based on economic development policies) and bottom-up (user- and market-driven) approaches.

Higher Vocational Education and Training (HVET), especially for qualifications around EQF level 5, has a relevant role, and a tremendous potential to that aim. In fact, its curricula:

- link to high-tech production sectors;
- without being academic, fulfil the market demand of technicians with new and high-tech competences, able to foster innovation and master and manage advanced organisational and productive processes;
- lay between upper secondary school and university, right at the hub among education, academy and business;
- are governed, designed and managed jointly by public authorities, schools, training bodies, enterprises;
- are highly interesting to students, as they offer tempting perspectives on several fronts: steady employment, career advancement, continuous training.

Aware of such challenges and potential, SHINE targets actors governing and managing HVET programmes, as well as to students, aiming at bridging the gap among individual local economic contexts and goals set by corresponding regional Smart Specialization Strategies, by acknowledging the role and innovative potential of high-level technical professional profiles.

The project follows a cycle foreseeing:

- survey and evidence of excellence in HVET in partner territories, as to crosslinking HVET and business, management practices, governance;



- peer review of excellence and identification of innovations/spillovers for improvement, especially regarding smart specialization and local development strategies, proactive approach to training and skills supply design, business involvement, ability to deliver innovation services;
- definition of an innovative model for design and governance of HVET programmes, in order to encompass the above issues at stake;
- piloting the model in practice, by local action plans;
- assessment of results and subsequent identification of policy mechanisms to improve the use of EU tools (e.g. ESCO, ECVET) by HVET;
- definition of possible improvement processes and related indicators for high level (national/EU) policies;
- review of the model, by involving the “Triple Helix” stakeholders (training/innovation, business, institutions);
- validation and fine tuning.

In compliance with what mentioned above, the methodology adopted by the consortium includes a constant switch among bottom-up (collection of information, stakeholders involvement, piloting) and top-down (model definition, process definition) phases, always flanked by monitoring of progress made.

Main expected results are:

- improvement of training offer by partners, with subsequent increase in the employment chances for students and in competitiveness for local companies;
- improvement in competences of company trainers involved in programme delivery, thanks to sharing and discussion with other EU excellent partners;
- set-up of a permanent, relevant EU network, gathering public and private excellent HVET actors;
- capacity building of decision makers governing HVET, and subsequent acknowledgement of tools for reviewing innovation policies, with special regard to professional technical issues, as innovation driver inside business;
- definition and piloting of a governance system, based on the integration of HVET policy makers and the labour market.

The project deploys in three phases, basically corresponding to the three years of its duration.

Phase 1 drafts and brings to evidence best practices in management of training and relations among local productive contexts, aiming to provide for clear guidelines for improvement and innovation of existing systems.

Phase 2, building on output of phase 1, designs and identifies actions for improvement and innovation in partner territories regarding governance of HVET programmes, development/ enforcing of services to business, relationships with triple helix stakeholders (policy makers, education and training, business).

Phase 3 aims at:

- 1) ensuring valorisation and impact of outcomes on systems and policies in partner territories,
- 2) mainstreaming at a national and European level, and
- 3) integrating triple helix networks of partners.

The above are accompanied by three further, crosscutting, supporting phases, regarding management-coordination, communication-dissemination and monitoring-quality assurance.

Intellectual Output 2: the peer review

Aim

The peer review aims to identify and compare innovation generated in each territory, with a view to suggest spillovers and transfer to other contexts. The findings of the peer review will later contribute to a



dissemination tool and to subsequent improvement actions, like the governance model and the local action plan, which are part of phase two. As figure 1 shows, the next two big phases will be to improve and to develop HVET programs. Based on the previous outputs, the partners will elaborate a general reference framework for policies of HVET. They will begin in the end of 2016.

Each partner co-operated by providing the information required, in line with the methodology proposed by WHZ.



Figure 1: Phases of the project SHINE in time

Fields of investigation

The peer review examined the surveys in terms of:

1. smart specialization strategies and local development strategies of territories involved;
2. pro-active approaches that can be adopted in order to improve continuous training of company staff;
3. pro-active approaches and participative methods for involvement of local economic players in defining competences for innovation and development; that is, competences that are crucial for designing the training offer;
4. opportunities for creation/improvement of delivery of innovative services to business by training organizations, including close co-operation with service providers, university, policy makers.

Features

What are peer reviews generally and what is the advantage to use it? As F. Pagani summarizes in his work, a peer review can be defined as a “systematic examination and assessment of the performance” of a partner’s work by other partners’ works, with the aim to support the reviewed partner’s work to improve its work (2002: 15). He further points out, that this method is characterized by dialogue between the partners and interactive analysis, which leads to decision for the choice of a methodology described in the following.

Methodology

According to the goals for the peer review, five question categories were developed:

1. Aspects of effectiveness
2. Aspects of innovation
3. Local development strategies
4. Improvement of continuous training of teaching staff
5. Involvement of local players

Each partner reviewed one national survey (randomly assigned) with the according two Best Practices. The WHZ decided to split up the questions in two questionnaires per Best Practice:



- One questionnaire is designed with questions the partners can fill out on their own by reading through the survey and by giving own ideas and opinions.
- The second questionnaire is designed with questions where the partner might need the other project partner to support them with the necessary information, to find out further details about effective aspects and innovative methods of these Best Practices.

It was chosen to develop online questionnaires because of its easy way to provide and share information and opinions, and due to its possibility to summarize its results more effectively. The tool used is SoSci Survey ©, available at <https://www.socisurvey.de> .

For this peer review, closed and open questions, multiple and single choice questions were used. Furthermore, 5-point Likert scales were used to measure personal attitudes, where 1 means “strongly disagree” and 5 means “strongly agree”.

Process

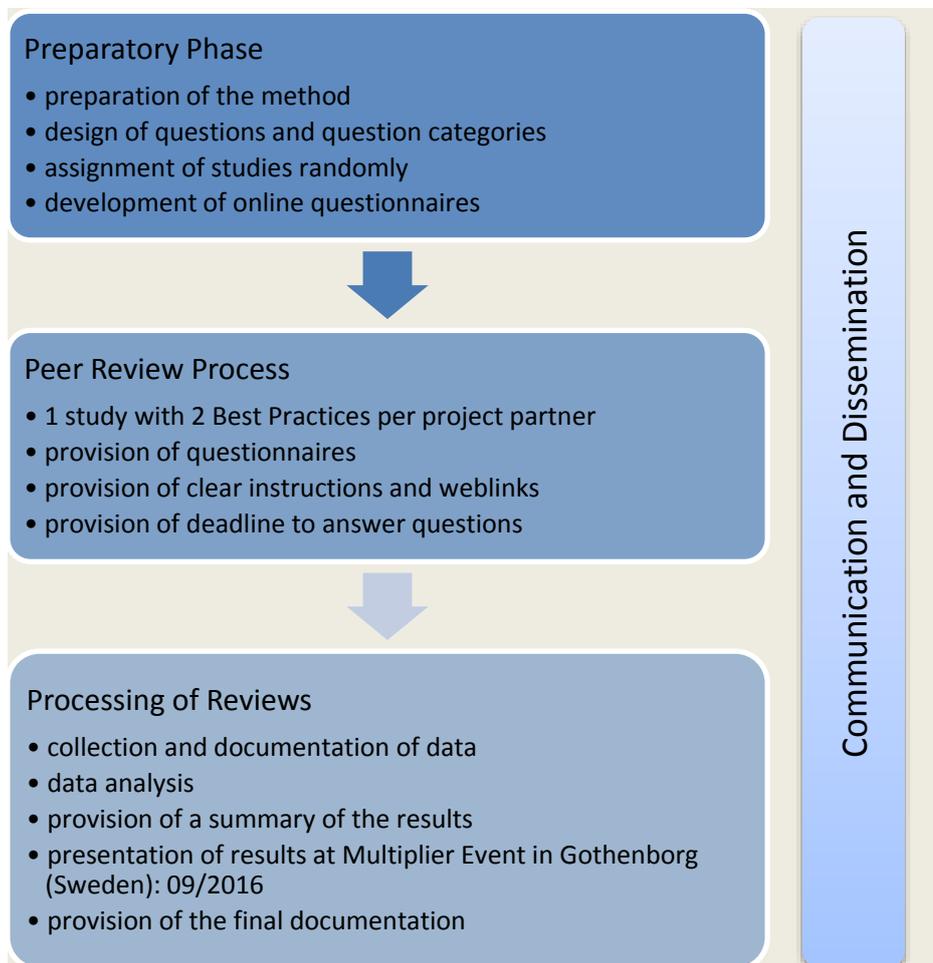


Figure 1: Process of the Peer Review System



Assignment of surveys

Assignment of the studies to the partners was done random. In Excel, the formula "random numbers" (in German: =ZUFALLSZAHL()) was used for both assignments. Please see Attachment 1 for the evidence of the method. In brief, surveys by each partner were given a code as follows:

S1 – Italy 1 (IFOA)
S2 – Italy 2 (SIAV)
S3 – all EfVET
S4 – Sweden
S5 – Croatia
S6 – Romania
S7 – Germany

Then, surveys were assigned random to partners:

P1 – IFOA	S3 – all EfVET
P2 – SIAV	S5 – Croatia
P4 – WHZ	S6 – Romania
P5 – GTC	S1 – Italy 1 (IFOA)
P6 – CTB	S7 – Germany
P7 – OUZG	S2 – Italy 2 (SIAV)
P8 - EfVET	S4 – Sweden

Templates for questionnaires can be found in Appendix 1.

Summary of results

Detailed answers provided for by partners can be read in Appendix 2. It is highly recommended to further read the detailed document, because this summary cannot cover all methods and facts, which however might be of high importance for others. Here we present just the most outstanding findings, sorted by the five categories mentioned above.

Effectiveness

In this category the participants were asked several questions related to effectivity, such as for general evaluations, the ability to also recognize previous experience or being up-to-date to the regional market demands of the project partners. In the following a summary of the results are given.

It was found out that all best practices have general evaluations as part of their training offers. However, they all use different kinds of evaluations. Some of them are organized by state rules (such as national programs, e.g. the master craftsman exam in Croatia), others are organized on individual level. Some have to follow very specific criteria, such as it is written in the Interministerial Decree in Italy, which provides specific guidelines, criteria and related indicators for the monitoring and evaluation activity at regional and national level.

The majority (64%) of best practices offers the ability to recognize previous work experience in the same field. Additionally, in most practices (12 out of 14), it is possible to also complement this practice with other programs to achieve the next qualification level.



The balance of theory and practice in the best practices was overall evaluated as well composed. More than 80 percent strongly or rather agree that the training offers are well balanced. In 13 of 14 practices one or more companies are directly involved in the learning pathway, which might lead to the rather positive evaluation of the balance between theory and practice.

To be effective also means to be “up-to-date” about the regional market demands. According to the results, the practices were mainly rated as in the middle sector (57%), so neither very quick nor very slow, to adapt their training offers to the market demands. Three were ranked as “extremely quick”, which are the ITS Maker and ITS Area Nuove Tecnologie in Italy, and the Swedish HVE at Gothenburg Technical College. How these programs involve local economic players can be read under the category “involvement of local players”.

Another aspect of effectiveness can be seen in the state how easy their students can go into the labour market after graduating from the HVET program. When evaluating the practices according to how well their graduates are prepared for a direct labour insertion, the participants rated the HVET’s graduates to be rather well prepared. So how were these graduates prepared, and which kind of support did they get during their HVET programs? More than 60 % of the participants said that one of their own best practices offer extra support for their students. Each of these institutes offer many possibilities for students to get extra service. There is a broad variety, from a general student office, to psychological help, financial support, career counselling, language preparation classes and support for foreign students, Google groups among teachers as well as students, educational tours, study trips, also medical assistance, help about international mobility programs, support for students with lower results, e.g. by offering preparation courses and tutorials, or offering a buddy system. All experiences about which kind of extra support learners need mostly (they did not need to be implemented already) can be read in the attachment 2. However, here, the participants mentioned many interesting and new facts, which have not everywhere been implemented yet, such as informing about open learning methods, providing information about the current labour market, information about networking and how to present yourself as a future employee (e.g. by using social media), efficient and responsive placement services or the establishment of a dedicated entrepreneurial supporting desk at local level. Also, further ideas of more aspects which make programs effective have been asked for. In summary, using various modern teaching methods and strategies, building topic specific networks, networks with alumni-activities and mentorships were mentioned as important factors. The development of a strong link to the most relevant assets of the region (such as tourism in Greece) was also inserted. Additionally, the need for a flexibility of entry requirements was also mentioned as a factor, which leads to effective programs. Further details about more ideas can be read in appendix 2.

Innovation

One main goal of the peer review was to further find out innovative aspects of HVET programs. Thus, the project partners were asked to find these aspects within the surveys of the best practices. They were asked to categorize their findings in nine categories of innovative aspects. In the following, some examples of innovative aspects are given from each category:

Innovative aspects in the creation/development of the HVET program: (examples)

- They focus on the needs of the local industry, e.g. on the technological innovation management (by Croatia - Short professional degree for Smelter at the University of Zagreb or by Romania - Medical field at Henri Coandă Post-Secondary School).
- They integrate vocational qualification certified by the local Chamber of Trade (by Germany - Three track course of study: Electrical Engineering).
- They provide participants with an in-depth analysis of sector-specific skills (by Italy - ITS Meccatronico).



- Innovative aspects in the learning pathway: (examples)
- They use previous best practices' experiences of European well-known universities (by Croatia - Short professional degree for Smelter at the University of Zagreb).
- They cover not only technical, but also relational and intercultural topics at 360° (by EfVET - Greece).
- They offer a possibility to gain more degrees within one program, e.g. by combining vocation education and academic studies (by Germany - Three track course of study: Electrical Engineering).
- They monitor and evaluate activities by the tutors to constantly evaluate the work in progress of the project and possibly implement any corrective measures “on the run” (by Italy - ITS Turismo), this can also be combined with the development of a meeting table, focused on (technical) competences with the aim to be more flexible in up-dating of content in programme (by Italy - ITS Area Nuove Tecnologie per il Made in Italy Sistema Meccanico – Meccatronico (Energia) Puglia “A. Cuccovillo”).
- They structure modules of theoretical preparation in speciality and modules of practical preparation (by Romania - Commerce-Accountability-Administration field at Economic College F. S. Nitti).

Innovative aspects in the training methods: (examples)

- They connect theory and practice (by Croatia - Short professional degree for Smelter at the University of Zagreb, EfVET - Greece).
- They offer self-training/distance learning phases (by Germany - Extra-occupational study course: Business Informatics).
- They include simulation and role playing, problem solving, technical workshops, educational tours, study trips (by Italy - ITS Turismo).
- They include trainers with experience from the industry, who make for great role models in building a professional identity (by Sweden - HVE at Gothenburg Technical College).

Innovative aspects in the external support for the HVET program/institute: (examples)

- Many answered to have support by the national authorities.
- They get support by international co-operation with foreign leading universities and Research Centres in the field (by Croatia - Short professional degree for Smelter at the University of Zagreb).
- They provide support with funding of international mobility activities, like internships, by Erasmus+ mobility projects (Italy - ITS Turismo).
- They get support by economical suppliers, who are involved in the curriculum development (Romania - Commerce-Accountability-Administration field at Economic College F. S. Nitti).

Innovative aspects in the support for the learners: (examples)

- Many answered to generally offer supporting services, financial incentives and assistance, etc. offered by the university/institute.
- Graduates offer support for current students (by Sweden - HVE at Gothenburg Technical College).

Innovative aspects with the teachers: (examples)

- The teachers must go through two levels of selection, then being included in public roster, which supports status of HVE trainers and ensures quality (by Italy - ITS Area Nuove Tecnologie per il Made in Italy Sistema Meccanico – Meccatronico (Energia) Puglia “A. Cuccovillo”).
- They involve qualified educational staff with experience in the adult education segment (by Romania - Medical field at Henri Coandă Post-Secondary School, and Romania - Commerce-Accountability-Administration field at Economic College F. S. Nitti).

Innovative aspects in the quality management: (examples) all participants answered to use...

- either Institutional mechanisms (e.g. with a Quality Management system) for systemic assessment and coordination of initiatives and development programs with the ongoing purpose of promoting high standards of professional and specialist development of interested parties;



- or monitoring and evaluation activities by the tutors (both supervisors within the company and course tutors).

Innovative aspects with the involved local players: (examples)

- They involve the local industry in the designing of the curriculum and through the intermediary role of the National Chamber of Trades and Crafts on technical, legislative aspects (by many partners, e.g. Croatia, Germany, Italy, Romania).
- They involve upper secondary schools (by Italy - ITS Maker – Istituto Tecnico Superiore Meccanica-Meccatronica-Motoristica e Packaging).
- They involve employers’ associations (by Italy - ITS Area Nuove Tecnologie per il Made in Italy Sistema Meccanico – Meccatronico (Energia) Puglia “A. Cuccovillo”).
- They involve clinics to take over practical education (by Romania - Medical field at Henri Coandă Post-Secondary School).
- They involve the local education counsel (by Sweden - T4 at the Curt Nicolin School in Finspång).
- Innovative aspects in the management of the relationships with triple helix stakeholders: (examples)
- They include multipartite Sector Skills Councils (operating at national level), including all relevant stakeholders for each professional profile (by Croatia - Master Craftsman Exam).
- They set up an ownership structure composed with Public Administrations, Academy, Companies (by Italy - ITS Meccatronico).
- They communicate with stakeholders on all levels for bottom-up (mentors/teachers working on the factory floor) and top-down (HR managers and CEOs) commitment to partnership (by Italy - ITS Maker).
- They have the triple helix to share the responsibility in meeting the structural challenge of matching education and competence needed by the employers and for ensuring competence, employability and growth in the region (by Sweden - HVE at Gothenburg Technical College).

Furthermore, how can businesses around profit from innovative services provided by the practices of the education institutes? Here, one project partner mentioned for example the general concept of extra occupational study courses, which makes it possible for companies’ employees to further educate themselves and achieve next level knowledge while they work. Another example is that course curricula are developed together with companies, or based on previously recognized local industry gaps, which makes it easy and very direct to later provide the best fitting qualified graduates. Moreover, institutes also represent the local economy in national networks, which can gain influence on national level.

For more information concerning innovation, the participants were also asked to mention other innovative aspects that they found in the best practices and also which innovative services they offer to their regional businesses. These details can be found in appendix 2.

It is not only interesting to see, what kind of innovation is provided by others, but more necessary is, when it comes to sharing information and learning from one another, to find out, what can be useful for other partners too. Thus, the partners also mentioned which innovative aspects would fit to their regional context. As a result, many various answers were given. All detailed ones can be found in appendix 2, but to name some: In general, the most aspects were found by OUZG, who saw four aspects in the practice ITS Turismo from Italy that they would like to introduce in their institute. For example, they mentioned new methods, like simulation and role plays, problem solving, technical workshops and educational tours or study trips. However, the amount of aspects does not mean it weighs more in the importance of one special aspect. That is a matter of interpretation of each of the partners.

Local development strategies

It is of high importance to stay innovative and competitive, thus to keep a close eye on the local companies’ demands. This is why the participants were asked to read through the other partners’ best



practices, talk with the partners and rate how useful they find these for the current market demands also of their own region. Here, one partner rated one practice as “extremely useful” (highest point on scale), which was the Swedish GTC reviewing Italy’s (IFOA) best practice ITS Maker – Istituto Tecnico Superiore Meccanica-Meccatronica-Motoristica e Packaging. Additionally, six partners rated certain practices as rather useful (second highest point on scale) for their own region. They were the following: WHZ about Romania’s best practice Medical field at Henri Coandă Post-Secondary School, CTB about Germany’s best practices Three track course of study: Electrical Engineering and Extra-occupational study course: Business Informatics, OUZG about Italy’s (SIAV) best practices ITS Meccatronico and ITS Turismo, GTC about Italy’s (IFOA) best practice ITS Area Nuove Tecnologie per il Made in Italy Sistema Meccanico – Meccatronico (Energia) Puglia “A. Cuccovillo”.

Furthermore, all partners agreed that the practices have a method to involve the demands of local companies. Which methods they use to involve them are diverse. For instance, companies are involved by the help of chambers or industry networks and associations, to support them with current demands. Some also involve companies during the development process of new study programs. But in some institutes, the programs go through the process of adapting to new demands and topics from regional companies, not just at the beginning, but also every year, such as in Italy’s practices ITS Area Nuove Tecnologie and ITS Maker. These methods, which were found in the studies, could also fit to some other partner’s institute. Thus, the participants were asked which of these local development methods could be useful for themselves. Here, for example GTC says that the method used in ITS Area Nuove Tecnologie is very similar to their own so it would be useful to share their experiences. Additionally, the WHZ mentions they would like to use the method seen in Romania’s best practice “Medical field at Henri Coandă Post-Secondary School” to work closely together with local hospitals and execute the practical education there, to get to know the real needs of their market.

Improvement of continuous training of teaching staff

In this category the participants were asked several questions concerning the teachers and their possibility to get further training and improve their work. For example, if they need to have a certain minimum degree or if there is an evaluation especially related to the teachers. The results show, that in 12 out of 14 best practices the teachers need to have a certain minimum degree. In summary, if there are trainers coming from companies, they are not required to have a specific written qualification. But they usually need to have registered business or industry experience for a certain amount of time. The theory teachers coming from Universities or other education institutes mainly need to have a University degree.

Furthermore, 11 of 14 answered there are evaluations related to the trainers. The participants generally would like to see evaluations of teachers after every year or after every course. Summed up, the majority of evaluations related to teachers are executed once, in some cases twice a year. In general, the partners use diverse systems for it. For example, in the Croatian Master craftsman exam, evaluation documents have to be filled in by the VET Schools yearly. There the evaluation is part of the quality assurance system and also includes self-assessments. This approach was developed by the Agency for VET and Adult Education and uses the logic and methodology of the EQAVET provisions.

Also an essential part for the improvement of study programs is the improvement of teachers. In this part, the majority (78%) of the best practices work very well and offer further training for their teachers. According to the answers, there are many diverse possibilities, with more or less financial and organizational support. For example, in the Croatian Master Craftsman Exam, the situation has worsened due to a limitation of resources to organize and implement training courses. Also in the area of the German best practices, in Saxony, there already is a lack of teachers because the work and contract conditions in the other federal states are more attractive. Thus there need to be much more approaches to actively keep the teachers (also for a longer time) and also to keep and develop well qualified teachers. On the other side, the ITS Maker Foundation is strongly investing on training of trainers and of internal



staff. For instance, they have a labour psychologist who is supporting the staff in their work with students and several initiatives for sharing best practices. Also both Romanian programs offer three or four times a year several possibilities for their trainers, such as teacher exchanges, workshops, inter-assistances at didactical activities.

Involvement of local players

In this category the participants were asked if and how local economic players are involved in the training program. It is positive to see that all best practices have local companies involved in their training program. However, it is interesting to see which kind of methods they use. Besides regular channels, such as possible internships, contacts with committees or networks, or one-to-one contacts by professors or institute members, there is also a method used in Germany, which is a study model where the students not just study, but also get an apprenticeship and later Meister/Master degree where they also have practical work as main part of their education path. There, the companies play an important role with their involvement in the training itself. This gives the students the possibility to not just improve their network, their professional interaction, and get to know the newest developments. It also offers a chance for companies to build and preserve experts for a long term.

Furthermore, coming from what other partners do to actively involve the local players, it is also good to get experiences coming from own institutes, since there the partners have much more insight. The participants were also asked to rate their own methods starting with the most useful for their region. The answers on the first rank were:

- the CTB said to use co-operations in the designing of the local development curricula.
- Similar to that, the WHZ works closely together with local companies during the development/creation process to involve their needs and experiences.
- The institutes from EfVET offer internships.
- The GTC started out with one big stakeholder (Volvo) as active player from the local economy, which later attracted several more SMEs in automotive and manufacturing.
- IFOA ranked the creation of a permanent table, including local economic players, for needs analysis, programme design, and assessment of programme outcomes, on the first place.
- The OUZG mentioned direct contacts as their most useful method for their region.
- SIAV describes their most useful method as development of a Technical-Scientific Committee, which is part of the statutory bodies foreseen by each ITS, and is composed by members belonging to the local economic environment, as companies, relevant business associations, universities and training organizations and PAs.

Next steps Further details can be read in appendix 2.

Where are improvement pathways for existing systems?

There might be innovation and possible improvements for some in other aspects of the peer review, so please read through the detailed answers. Here, some obvious points for improvement have been found out according to the analysis of the data:

- The training for teachers and trainers in some practices should get more support, especially by the government. In some cases, the institutes cannot cover the expenditures. Generally, it should not just be the task of the institutes themselves to provide funding for further training.
- In the majority of the practices, the work contract for teachers are rather short, on average about 24 months, which does not provide a long-term perspective neither for schools nor for the teachers. Here, it is necessary that the education institutes and the government need to work together, keep talking about real experiences, possible threats and possible solutions.
- The practices were mainly (57%) rated as in the middle sector, so neither very quick nor very slow, to



adapt their training offers to the market demands. Here, a possible explanation would be that the project partners couldn't definitely evaluate their partner's methods. However, it might be necessary for each participant to read through the other comments on how to keep an eye on current needs, if the local market's demands to stay up-to-date.

- More than 60 % of the participants said that one of their own best practices offer extra support for their students. It is much, but it would be important to offer extra support for students in every education program to provide well-prepared graduates and prevent drop-outs.

Results in Detail

Appendix 2 reports in detail answers to both questionnaires for all previously mentioned domains.

Next steps

The peer review allowed partners to get much more into each other's contexts, and better understand not only *how* things are performed, but most important *why* they are performed in that way. Results set a coherent knowledge base to structuring and implementing local action plans for improvement of governance of programmes at EQF 5 and similar.

However, before developing such plans, two more actions will be necessary:

1. developing a common framework for describing local action plans, in order to make (once again) all partners' work comparable. This will be the goal of Output 4- Innovative governance model(s). Guided by the Gothenburg Technical College, partners will devise an overarching methodological scheme to encompass local actions they will then pilot and assess;
2. creating and exploiting a common dissemination tool, that is, an effective imaging to describe most relevant findings from National surveys (Output 1) and this peer review (Output 2), and to explain where Output 4 and the subsequent local action plans (Output 5) are heading.

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This paper and all project documents can be accessed through the project website, at www.projectshine.eu



Appendixes

1. Questionnaires for Peer Review
2. Detailed results of Peer Review



Appendix 1 – Questionnaires for Peer Review

Questionnaires were delivered on-line (see above, Methodology), and consisted in:

- basic questions, in order to identify who was peer reviewing whom;
- a first questionnaire, including questions which could be filled out by reading through the surveys and by giving own ideas/opinions;
- a second questionnaire, including questions where project partners had to cooperate with the other partner, to find out further details.

Basic questions

- **BQ01 Please insert your organization:**

Drop-down: ▼

P1 – IFOA
P2 – SIAV
P4 – WHZ
P5 – GTC
P6 – CTB
P7 – OUZG
P8 - EfVET

- **BQ02 Please specify, which survey you are reviewing now:**

Drop-down: ▼

S1 – Italy 1 (IFOA)
S2 – Italy 2 (SIAV)
S3 – all EfVET
S4 – Sweden
S5 – Croatia
S6 – Romania
S7 – Germany

- **BQ03 Please insert the name of the Best Practice you are reviewing now:**

Drop-down: ▼

Germany - Three track course of study: Electrical Engineering
Germany - Extra-occupational study course: Business Informatics
Italy - ITS Meccatronico
Italy - ITS Turismo
Italy - ITS Maker – Istituto Tecnico Superiore Meccanica-Meccatronica-Motoristica e Packaging
Italy - ITS New Technologies for Made in Italy - Mechanics/Mechatronics (Energy) Apulia “A. Cuccovillo”
Sweden - HVE at Gothenburg Technical College
Sweden - T4 at the Curt Nicolin School in Finspång
Romania - Medical field at Henri Coandă Post-Secondary School, Timisoara
Romania - Commerce-Accountability-Administration field at Economic College F. S.Nitti Timisoara
Croatia - Master Craftsman Exam
Croatia - Short professional degree for Smelter at the University of Zagreb, Faculty of Metallurgy
EfVET/The Netherlands - Bachelor of Science degree program in Nursing
EfVET/Spain
EfVET/Greece



First Questionnaire: own findings and own ideas

Effectiveness

- **AE08 Being “up-to-date” about the regional market demands.**
According to the survey, please rate how quickly the provider of this best practice adapts its training offer to the demands of local companies?
The provider of this Best Practice adapts to the demands of local companies...
Extremely slow Extremely fast / I don't know
- **AE09 Preparation for labor insertion: According to your opinion, please rate how well the graduates of this HVET program are prepared for a direct labor insertion?**
The graduates of this HVET program are...
Not at all prepared Completely prepared / I don't know
- **AE05 Theoretical and practical education: Please rate the balance of theoretical and practical education in this Best Practice:**
Strongly disagree Strongly agree / I don't know
 - The training offer is well balanced according to theoretical and practical education.
 - The training offer needs more practical education.
 - The training offer needs more theoretical education.
- **AE11 Support for Students: Does one of your own Best Practices offer extra support for students?**
(e.g. for students with lower results, for families, preparation classes, psychological help, etc.)?
y/n/I don't know
- **AE12 What kind of support does your education institution offer?**
[open field]
- **AE13 From your own experience, what kind of extra support do learners need mostly?**
Please name some of your ideas and rank them starting with to the most needed.
[open field]
- **AE10 If you have other findings or ideas about aspects which make this HVET program effective, please name them.**
[open field]

Innovation

- **AI01 Which innovative aspect/s did you find in this Best Practice, related to...**
 - the creation/development of the HVET program: [open field] /I don't know
 - the learning pathway: [open field] /I don't know
 - the training methods: [open field] /I don't know
 - external support for the HVET program/institute: [open field] /I don't know
 - support for the learners: [open field] /I don't know
 - the teachers: [open field] /I don't know
 - the quality management: [open field] /I don't know
 - the involved local players: [open field] /I don't know
 - the management of relationships with triple helix stakeholders: [open field] /I don't know



- **AI02 Some other innovative aspects you found and would like to mention:**
[open field]
- **AI03 If some of these innovative aspects would fit to your regional context, which would you like to introduce:**
[open field]
- **AI04 What kind of innovative services (e.g. co-operations) did you find, which the training organization of this Best Practice delivered to the businesses around?**
[open field]
- **AI05 What kind of innovative services (e.g. co-operations) did your training organization implement for businesses around:**
[open field, ranking]
- **AI07 If you had the chance, what kind of service(s) would you like to develop and offer for your local businesses?**
[open field]
- **AI06 Any other comments you would like to mention concerning innovative services for businesses around:**
[open field]

Improvement of continuous training of teaching staff

- **IC11 In your opinion, please rate how important would be an evaluation of teachers**
not at all important very important | I don't know
- **IC12 Please insert how often you would like to see evaluations of teachers:**
 - After every course
 - After every year
 - After the graduation
- **IC14 Does your education institute generally organize evaluations of the teaching staff?**
Yes/no/I don't know
- **IC15 If yes, how are they organized (e.g. how often, how are the results used, etc.)**
[open field]

Involvement of Players

- **IP02 What kind of methods did you use to actively involve local economic players in the training program of your Best Practices?**
Please rate these methods, starting with the most useful for your region.
[open field]
- **IP04 If you had the chance, what kind of method(s) would you like to develop and introduce to involve local economic players actively in the training program of your Best Practices?**
[open field]



Second Questionnaire: time for dialogue with project partners

Effectiveness

- **AE01 Is there any kind of evaluation during or after the end of this HVT Best Practice?**
Time for dialogue! Ask your project partner to find out about the following aspects.
 - Yes
 - No
 - I don't know
- **AE02 If yes, which kind of evaluation is mentioned in the study?**
Please describe shortly, for example how it is executed, how often it takes place, who, what and by whom it is evaluated, etc.
Time for dialogue! Ask your project partner to find out about the following aspects.
[open field] / I don't know
- **AE03 In this best practice, is it possible to get previous work experience in the same field recognized?**
Time for dialogue! Ask your project partner to find out about the following aspects.
 - Yes
 - No
 - I don't know
- **AE04 Is it possible to complement this best practice with other programs, to achieve the next qualification level?**
Time for dialogue! Ask your project partner to find out about the following aspects.
 - Yes
 - No
 - I don't know
- **AE06 Is one or more company directly involved in the learning pathway of this best practice?**
Time for dialogue! Ask your project partner to find out about the following aspects.
 - Yes
 - No
 - I don't know

Local development strategies

- **LD02 Does this Best Practice have a method to involve the demands of local companies?**
Time for dialogue! Ask your project partner to find out about the following aspects:
 - Yes
 - No
 - I don't know
- **LD03 If yes, please shortly describe this method.**
[open field] / I don't know
- **LD01 Please rate, how useful you find this Best Practice for the current market demands:**
 - **of their region**
Not useful at all  Extremely useful / I don't know



- **of my region**
Not useful at all Extremely useful / I don't know

- **LD06 If some of these local development strategies would fit to your regional context, which would you like to introduce:**
[open field]

Improvement of continuous training of teaching staff

- **IC01 Do teachers in this Best Practice need to have a certain (minimum) degree?**
Time for dialogue! Ask your project partner to find out about the following aspects:
 - Yes
 - No
 - I don't know
- **IC02 If yes, which degree(s) or qualification(s) do the teachers need to have?**
[open field] / I don't know
- **IC03 How about the perspectives for teaching staff? How long is the average work contract of the teaching staff?**
Time for dialogue! Ask your project partner to find out about the following aspects and explain them shortly with your own words.
In months:
[open field] / I don't know
- **IC08 Where does the majority of this Best Practice's teachers come from?**
Time for dialogue! Ask your project partner to find out about the following aspects.
 - The training institute itself
 - A Company
 - Other:
- **IC04 Is there an evaluation related to the teachers?**
Time for dialogue! Ask your project partner to find out about the following aspects and explain them shortly with your own words.
 - Yes
 - No
 - I don't know
- **IC05 If there is an evaluation of the teaching staff...**
 - how often: [open field] / I don't know
 - how is it executed: [open field] / I don't know
 - how are the results used later? [open field] / I don't know
- **IC06 Is there a possibility for further training for teaching staff?**
Time for dialogue! Ask your project partner to find out about the following aspects.
 - Yes
 - No
 - I don't know



▪ **IC07 If there is further training for teaching staff...**

Time for dialogue! Ask your project partner to find out about the following aspects.

- what kind of further training is it
(e.g. teacher exchange, workshops, etc.)?[open field] / I don't know
- how often is it possible to take part? [open field] / I don't know
- who organizes it? [open field] / I don't know

▪ **IC09 Is there a possibility to exchange knowledge between teachers of own and other institutes?**

Time for dialogue! Ask your project partner to find out about the following aspects.

- Yes
- No
- I don't know

▪ **IC10 If there is a possibility to exchange knowledge between teachers of own and other institutes...:**

How is it organized?

[open field] / I don't know

Involvement of Players

▪ **IP01 In this Best Practice, are local economic players involved in the training program?**

Time for dialogue! If you cannot find the right information in the study, ask your project partner to find out about the following aspects.

- Yes
- No
- I don't know

▪ **IP05 Which method is used to involve local players in the training program?**

Time for dialogue! If you cannot find the right information in the study, ask your project partner to find out about the following aspects.

[open field] / I don't know

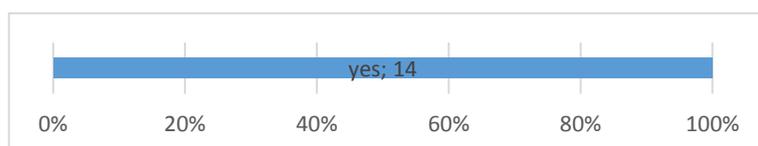


Appendix 2 – Detailed results of Peer Review

For the analysis, the results of both questionnaires have been collected resulting from the previously determined question domains. In the following, the results are documented.

Effectiveness

- AE01 Is there any kind of evaluation during or after the end of this HVET Best Practice?



- AE02_01 If yes, which kind of evaluation is mentioned in the study?

Best Practice	Kind of Evaluation
Croatia - Master Craftsman Exam	The identified HVET best practice is subject to an occasional revision process articulated as follows: the overall quality is assured by specific rules established by an Act issued by the Minister responsible for Entrepreneurship and Crafts and approved by the National Chamber of Trade and Crafts. The Chamber also drafts detailed catalogues establishing the exam standards and questions for each professional profile. These catalogues are revised in accordance with the proposition of Master Craftsman Teachers to the Croatian Chamber of Trades and Crafts, which is then proposing the changes to the Ministry of Entrepreneurship and Crafts. The Master craftsmen exams are nationally recognized. Accordingly the catalogues of questions are designed at national level in line with related professional Laws. As an ongoing review of the above mentioned catalogues is not foreseen, these may be out of date compared with the actual operative habits and educational materials
Croatia - Short professional degree for Smelter at the University of Zagreb, Faculty of Metallurgy	The quality assurance is regulated by the Rulebook on quality assurance and improvement at the Faculty of Metallurgy (adopted by the Faculty Council on the 7th of March 2011). The Commission for quality assurance and improvement at the Faculty of Metallurgy conducts all the affairs related to quality assurance and improvement at the Faculty of Metallurgy. Its constitution is the following: the Dean of the Faculty, the Vice-Dean for teaching, the Vice-Dean for Science and Finance, representative of the Faculty Administration, representative of external participants, faculty representative, representative of non-faculty staff and student representative. The Commission organizes, coordinates and implements assessment procedures and develops internal mechanisms of quality assurance and improvement at the faculty level, as: development of quality indicators; reviewing study performance; improving



Best Practice	Kind of Evaluation
	<p>mechanism of work safety: proof of teaching improvements; defining and introducing standardisation in the administrative department. Apart from the said commissions, the Faculty has appointed heads of study years (head for each year of undergraduate study, one head for both years of graduate study, one head for specialized course and one head for doctoral studies, respectively). Through their work with students, reflected in periodical meetings at which current issues and suggestions concerning the studies and teaching are discussed, the heads are also active in quality assurance and improvement to teaching quality at the Faculty</p>
EfVET - Greece	This is a University programme, so students must undertake regular exams plus a final examination.
EfVET - Spain	Evaluation is carried out by teachers on single subjects, after a theoretica+practical examination
Germany - Extra-occupational study course: Business Informatics	periodical examination
Germany - Three track course of study: Electrical Engineering	/
Italy - ITS Area Nuove Tecnologie per il Made in Italy Sistema Meccanico – Meccatronico (Energia) Puglia “A. Cuccovillo”	There is a national evaluation in which the ITS is ranked 2nd in Italy and 1st among sector courses in 2014.
Italy - ITS Maker – Istituto Tecnico Superiore Meccanica-Meccatronica-Motoristica e Packaging	<p>The Foundation developed its own feedback system. Satisfaction rate is over 85% both for students and for companies (regarding internships carried out in the curricula). The Foundation is also setting up a set of questionnaires for getting companies’ feedback 1 and 2 years after employment of graduates. National feedback: The ITS ranked 9th in Italy and 3rd among sector courses in 2014</p>
Italy - ITS Meccatronico	<p>The Interministerial Decree 07.02.2013 provides specific guidelines, criteria and related indicators for the monitoring and evaluation activity at regional and national level (harmonizing the evaluation process at national level), fixing specific outcome goals in order to access to the national funding mechanism and schemes for the ITS system. These indicators are:</p> <ul style="list-style-type: none"> - attractiveness: o entry selection, defined as n. request/n. of students enrolled o education success, defined as n. of n. of students enrolled/n. of students graduated per school year. - employability: o employment rate at one year after graduation, defined as n. of students working in a field related to their curriculum/n. of students graduated

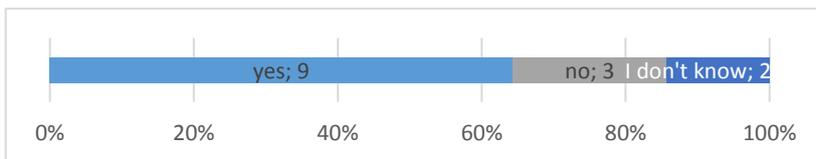


Best Practice	Kind of Evaluation
	<p>- professionalisation: o n. of hours of the training path carried out at company premises</p> <p>- active participation: o n. of teaching hours carried out by a teachers coming from the business world/total n. of teaching hours o n. of teaching hours carried out within a company laboratory or a research center laboratory/ total n. of teaching hours o n. of teaching hours carried out by a teachers coming from university/ total n. of teaching hours</p> <p>- interregional networks: o n. of teaching-stage hours carried out in companies located outside the regional borders or abroad/total n. of teaching hours; o n. of teaching staff components coming from other regions or countries/ total n. of teaching hours.</p> <p>Each performance indicator has a score varying from 1 up to 100 and it is further articulated in several subheadings.</p>
Italy - ITS Turismo	<p>The Interministerial Decree 07.02.2013 provides specific guidelines, criteria and related indicators for the monitoring and evaluation activity at regional and national level (harmonizing the evaluation process at national level), fixing specific outcome goals in order to access to the national funding mechanism and schemes for the ITS system. These indicators are:</p> <p>- attractiveness: o entry selection, defined as n. request/n. of students enrolled o education success, defined as n. of n. of students enrolled/n. of students graduated per school year.</p> <p>- employability: o employment rate at one year after graduation, defined as n. of students working in a field related to their curriculum/n. of students graduated</p> <p>- professionalisation: o n. of hours of the training path carried out at company premises</p> <p>- active participation: o n. of teaching hours carried out by a teachers coming from the business world/total n. of teaching hours o n. of teaching hours carried out within a company laboratory or a research center laboratory/ total n. of teaching hours o n. of teaching hours carried out by a teachers coming from university/ total n. of teaching hours</p> <p>- interregional networks: o n. of teaching-stage hours carried out in companies located outside the regional borders or abroad/total n. of teaching hours; o n. of teaching staff components coming from other regions or countries/ total n. of teaching hours</p> <p>Each performance indicator has a score varying from 1 up to 100 and it is further articulated in several subheadings.</p>
Romania - Commerce-Accountability-Administration field at Economic College F. S. Nitti	<p>Each subject has its own system of evaluation in the period of schooling. At final there is a graduation exam consist in three parts: Practical test, Theoretical test, Degree theses.</p>

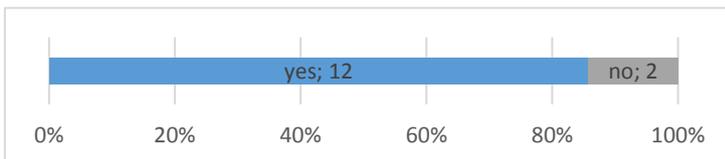


Best Practice	Kind of Evaluation
	After passing the exam the students receive a diploma and a competences certificate.
Romania - Medical field at Henri Coandă Post-Secondary School	Each subject has its own system of evaluation in the period of schooling. At final there is a graduation exam consist in three parts: Practical test, Theoretical test, Degree theses. After passing the exam the students receive a diploma and a competences certificate.
Sweden - HVE at Gothenburg Technical College	they are tailored for a dynamic market situation, i.e. that only programmes and competences requested by the employers are allowed government grants
Sweden - T4 at the Curt Nicolin School in Finspång	An advantage, but also a risk, with HVE and T4 is that they are tailored for a dynamic market situation, i.e. that only programmes and competences requested by the employers are allowed government grants

- AE03 In this best practice, is it possible to get previous work experience in the same field recognized?



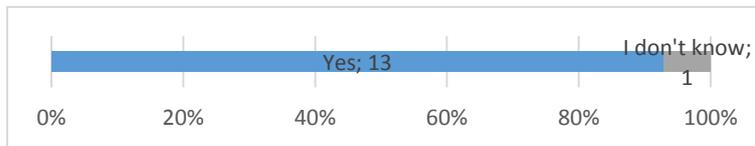
- AE04 Is it possible to complement this Best Practice with other programs, to achieve the next qualification level?



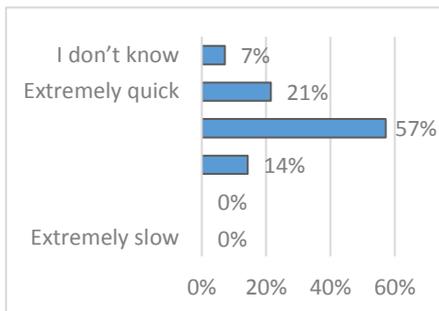
AE05_01: Balance of theory and practice: The training offer is well balanced according to theoretical and practical education:	AE05_02: Balance of theory and practice: The training offer needs more practical education:	AE05_03: Balance of theory and practice: The training offer needs more theoretical education:																																								
<table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>I don't know</td> <td>0%</td> </tr> <tr> <td>Strongly agree</td> <td>36%</td> </tr> <tr> <td>(unlabeled)</td> <td>50%</td> </tr> <tr> <td>(unlabeled)</td> <td>14%</td> </tr> <tr> <td>Strongly disagree</td> <td>0%</td> </tr> </tbody> </table>	Response	Percentage	I don't know	0%	Strongly agree	36%	(unlabeled)	50%	(unlabeled)	14%	Strongly disagree	0%	<table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>(unlabeled)</td> <td>7%</td> </tr> <tr> <td>(unlabeled)</td> <td>7%</td> </tr> <tr> <td>(unlabeled)</td> <td>14%</td> </tr> <tr> <td>(unlabeled)</td> <td>36%</td> </tr> <tr> <td>(unlabeled)</td> <td>29%</td> </tr> <tr> <td>(unlabeled)</td> <td>7%</td> </tr> </tbody> </table>	Response	Percentage	(unlabeled)	7%	(unlabeled)	7%	(unlabeled)	14%	(unlabeled)	36%	(unlabeled)	29%	(unlabeled)	7%	<table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>(unlabeled)</td> <td>7%</td> </tr> <tr> <td>(unlabeled)</td> <td>0%</td> </tr> <tr> <td>(unlabeled)</td> <td>7%</td> </tr> <tr> <td>(unlabeled)</td> <td>43%</td> </tr> <tr> <td>(unlabeled)</td> <td>36%</td> </tr> <tr> <td>(unlabeled)</td> <td>7%</td> </tr> </tbody> </table>	Response	Percentage	(unlabeled)	7%	(unlabeled)	0%	(unlabeled)	7%	(unlabeled)	43%	(unlabeled)	36%	(unlabeled)	7%
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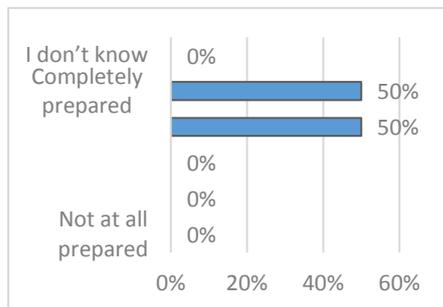
- AE06 Is one or more company directly involved in the learning pathway of this best practice?



- AE08 Being “up-to-date” about the regional market demands. According to the survey, please rate how quickly the provider of this best practice adapts its training offer to the demands of local companies? The provider of this Best Practice adapts to the demands of local companies...



- AE09 Preparation for labor insertion: According to your opinion, please rate how well the graduates of this HVET program are prepared for a direct labor insertion? The graduates of this HVET program are...



- AE10 If you have other findings or ideas about aspects which make this HVET program effective, please name them. (10 answers)

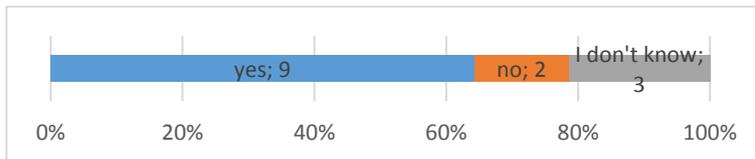
Best Practice	Other aspects which make this HVET program effective
CTB reviewed Germany - Extra-occupational study course: Business Informatics	More international experiences for students
EfVET reviewed Sweden - HVE at Gothenburg Technical College	provided the Digital and Business Administration courses
GTC reviewed IFOA Italy - ITS Maker – Istituto Tecnico Superiore	For ITS Maker the Polytechnic network seems like an important factor for funding. Also linking programmes to smart specialization, when possible to do so on EQF5, is a very good idea.



Best Practice	Other aspects which make this HVET program effective
Meccanica-Meccatronica-Motoristica e Packaging	
GTC reviewed Italy (IFOA) - ITS Area Nuove Tecnologie per il Made in Italy Sistema Meccanico – Meccatronico (Energia) Puglia “A. Cuccovillo”	developing mentorship and creating networks with alumni-activities - old graduates now active in profession, taking on students for WBL and mentoring them. Especially important for groups far from labour market, immigrants without network ecetera
IFOA reviewed EfVET – Greece	The programme is strongly linked to one of most relevant assets of Greece, that is tourism. This makes it pretty effective.
OUZG reviewed Italy (SIAV) - ITS Meccatronico	Increased cooperation with Universities and real sector is needed
OUZG reviewed Italy (SIAV) - ITS Turismo	<ul style="list-style-type: none"> - The employability within 1 year from qualification is 100%, and within 3 months (depending on the season) is above 80%. - Various modern teaching methods and strategies including Educational tours Study trips, Educational outings, Problem Solving, Practical exercises, Research and projects etc.
SIAV reviewed Croatia - Master Craftsman Exam	<ul style="list-style-type: none"> - High-level of flexibility of the system based on the effective Learner expertise and work experience - Formally established procedure of qualitative standards and professional requirements able to effectively involve the relevant stakeholders at different level (triple helix approach), through 25 Sector Skills Councils
SIAV reviewed Croatia - Short professional degree for Smelter at the University of Zagreb, Faculty of Metallurgy	<ul style="list-style-type: none"> - particular attention to seminars and dissemination activities in general (local and international initiatives) - Flexibility of the entry requirement: State Matura is not a requirement for admission to the University Professional part-time course - The limited number of students admitted (max. 15), per each academic year which enhance the impact of the teaching method (dual system)
WHZ reviewed Romania - Medical field at Henri Coandă Post-Secondary School	<ul style="list-style-type: none"> - the structure in modules of theoretical education and modules of practical preparation or clinical probation with the main purpose of the achievement of interdisciplinary (course) - there is a regional strategy: the programme is based on the society’s needs, established according to: the evaluation of the general health condition, the national economy’s state, the scientific and technical level; the program focuses on the basic medical attendances, covering the communities’ primary health needs - the practical modules are accomplished by supplier agents who provide medical services as partners, both public or private - theoretical education and practical preparation; the volume of practical activities rises proportionally - the practical modules are being held in clinics, in real-life conditions



- AE11 Support for Students: Does one of your own Best Practices offer extra support for students? (e.g. for students with lower results, for families, preparation classes, psychological help, etc.)?



- AE12 What kind of support does your education institution offer? (6 answers)

Institute	Support for students
CTB	- Counseling, presenting the benefits of HTVET courses
EfVET	- are financed by the municipality, but education providers who wish to offer a fourth year, apply for government grants from the National Agency for Education
GTC	- for students with lower results - special needs pedagogics - career counseling - psychological help, medical help (for matters concerning studies) - language preparation classes/Swedish for immigrants, - for families - extra students grants available to finance studies for parents
OUZG	- Google groups set up among teachers as well as with students, and a Google Drive platform for uploading teaching materials - Educational tours, Study trips - Monitoring and evaluation activities by the tutors (both supervisors within the company and course tutors)
SIAV	- The University of Zagreb offers student services as: Housing services, specialised assistance for international students, support and assistance to students with disabilities - Student counselling and psychological support/career guidance offered by academic advisors - Health and Wellbeing services as: dental medicine or emergency medical assistance, Student associations - International Scientific and Educational Cooperation with the Faculty of Natural Sciences of Ljubljana and the Faculty of Metallurgy of the University of Košičiach) - International Mobility Programs as: Erasmus+ or Bilateral and Multilateral Cooperation Agreements at EU level
WHZ	- support for students with children, e.g. with events, offering special rooms, offering assistance - support for international students by the international office, e.g. with opening hours for questions - support for students with lower results, e.g. by offering preparation courses and tutorials, offering a buddy system - offering extra-curricular programs at a career service for students, e.g. with consulting hours - there is social and psychological consulting



- AE13 From your own experience, what kind of extra support do learners need mostly? Please name some of your ideas and rank them starting with to the most needed.

Institute	What kind of extra support do learners need mostly:
CTB	<ol style="list-style-type: none"> 1. Presenting in courses the newest technologies 2. Specific IT knowledge
EfVET	<ol style="list-style-type: none"> 1. practical needs 2. well-being mental 3. needs 50% study in college and 50% work in the production industry
GTC	<ol style="list-style-type: none"> 1. Open learning/extra support mathematics 4. Open learning/extra support writing reports 5. Study skills 6. Information about labour market/career counseling 7. Information about networking and how to present yourself as employable, i.e. LinkedIn, writing CVs etc.
OUZG	<ol style="list-style-type: none"> 1. What comes on my mind is the support of local companies in designing of curriculum 2. Advertise strategy or campaign, possibly in english also to attract foreign students 3. Inclusion of foreign students and translation of materials in English 4. Some sort of mobilities of students 5. International activities
SIAV	<ol style="list-style-type: none"> 1. Efficient and responsive placement service, supporting students during their education and training path and at its end 2. Financial incentives such as scholarships, incentives for families with low income (university fee reduction, free canteen or other subsistence and housing service) 3. Career guidance 4. Mobility actions as training experiences abroad 5. International Visiting Professors 6. Incentive measures for Self-employment (financial) 7. Incentive measures for Self-employment (public-funded consultancy and advisory programmes) 8. Strengthen the seamless professional orientation and guidance services (as foreseen in the 2013 Act on CROQF) 9. Establishment of dedicated Entrepreneurial supporting desk at local level (e.g. c/o Chamber of Trades and Crafts)
WHZ	<ol style="list-style-type: none"> 1. to have a special office where they can get a general consultation from where they will be led to the special consultation they really need 2. preparation classes or tutorials parallel to normal classes for extra help with the subjects 3. consultation about possible financial support



Innovation

■ AI01:

Which innovative aspect/s did you find in this Best Practice, related to the creation/development of the HVET program:	
Croatia - Short professional degree for Smelter at the University of Zagreb, Faculty of Metallurgy	HVET Programme has been created in order to offer a concrete answer to the queries and needs of the Croatian economic Industry, focusing on the technological innovation management
Croatia - Master Craftsman Exam	High level of cooperation between the competent ministerial level and the Chamber of Trades and Crafts concerning the standardisation and management of qualitative and procedural aspects, including the participation of the individual local levels
Germany - Extra-occupational study course: Business Informatics	The program HVET is designed for a large frame of interests
Germany - Three track course of study: Electrical Engineering	Integrated vocational qualification certified by the local Chamber of Trade
Italy - ITS Meccatronico	differentiation of this training programme both from high school and from university curricula, providing participants with an in-depth analysis of sector-specific skills
Italy - ITS Maker – Istituto Tecnico Superiore Meccanica-Meccatronica-Motoristica e Packaging and Italy - ITS Area Nuove Tecnologie per il Made in Italy Sistema Meccanico – Meccatronico (Energia) Puglia “A. Cuccovillo”	Local companies active from very beginning – same as GTC
Italy - ITS Turismo	Exchange of information and fair involvement of all parties (universities, industries and institutions)
Romania - Commerce-Accountability-Administration field at Economic College F. S. Nitti	the curricula developed locally in practical activities held with economical suppliers
Romania - Medical field at Henri Coandă Post-Secondary School	The educational programme’s elaboration is based on the society’s needs, established according to: the evaluation of the general health condition, the national economy’s state, the scientific and technical level



AI01 Which innovative aspect/s did you find in this Best Practice, related to the learning pathway:	
Croatia - Short professional degree for Smelter at the University of Zagreb, Faculty of Metallurgy	HVET Curriculum developed adapting and further deepening the previous best practice experiences of European well-known metallurgical universities as: Leoben (AT); Aachen (DE); Birmingham (UK)
Croatia - Master Craftsman Exam	Flexibility of the entry requirements defined in order to take into account the level of work experience in terms of duration and professional profile/previous qualifications
EfVET - Spain	I appreciated very much the attention paid to self-employment and training to starting up one own's company
EfVET - Greece	It looks very well organised, covering not only technical, but also relational and intercultural topics at 360°
Germany - Extra-occupational study course: Business Informatics	Is flexible depending of the background of each student
Germany - Three track course of study: Electrical Engineering	The possibility for students to gain 3 degrees within only 5 years
Italy - ITS Meccatronico	differentiation of this training programme both from high school and from university curricula, providing participants with an in-depth analysis of sector-specific skills
Italy - ITS Turismo	Monitoring and evaluation activities by the tutors (both supervisors within the company and course tutors) allow to constantly evaluate the work in progress of the project and possibly implement any corrective measures “on the run”.
Italy - ITS Maker – Istituto Tecnico Superiore Meccanica-Meccatronica-Motoristica e Packaging	all programmes training for soft, cross and technical skills
Italy - ITS Area Nuove Tecnologie per il Made in Italy Sistema Meccanico – Meccatronico (Energia) Puglia “A. Cuccovillo”	Second table focused on technical competences with the aim to be more flexible in up-dating of content in programme
Romania - Commerce-Accountability-Administration field at Economic College F. S. Nitti	the structure in modules of theoretical preparation in speciality and modules of practical preparation or clinical probation
Romania - Medical field at Henri Coandă Post-Secondary School	The educational programme is held on modules. Each module consists of theoretical and practical instruction. In order to have an adequate coordination, the theoretical instruction precedes the practical instruction.
Sweden - T4 at the Curt Nicolin School in Finspång	Unlike HVE at GTC, which does not stipulate any specific programme on EQF 4 as an entry requirement but builds on working experience and therefore has to start a programme with the theoretic tools for learning and the basics in production engineering, the T4, which builds directly on the technical programme on EQF 4, can go straight to the more advanced courses on EQF 5 and focus on providing new working experience



AI01 Which innovative aspect/s did you find in this Best Practice, related to the training methods:	
Croatia - Short professional degree for Smelter at the University of Zagreb, Faculty of Metallurgy	The use of the dual system at university level for short professional study programmes (150 ECTS)
EfVET - Greece	there are some very hands-in aspects in the training programme, well-structured and making a very good connection between theory and practice.
Germany - Extra-occupational study course: Business Informatics	Both face to face courses and self-study training
Germany - Three track course of study: Electrical Engineering	Flexible requirements
Italy - ITS Meccatronico	interactive lessons and laboratory activities, Project work activities
Italy - ITS Turismo	Simulation and role playing, problem solving, technical workshops, Educational tours Study trips
Italy - ITS Area Nuove Tecnologie per il Made in Italy Sistema Meccanico – Meccatronico (Energia) Puglia “A. Cuccovillo” And ITS Maker – Istituto Tecnico Superiore Meccanica-Meccatronica-Motoristica e Packaging	methods varying depending on learning objectives
Romania - Commerce-Accountability-Administration field at Economic College F. S. Nitti	theoretical education and practical preparation, the practical part gets larger in the second year
Romania - Medical field at Henri Coandă Post-Secondary School	the structure in modules of theoretical preparation in speciality and modules of practical preparation or clinical probation; the volume of practical activities rises proportionally, and the modules are being held in clinics, in real-life conditions
Sweden - T4 at the Curt Nicolin School in Finspång	A minimum of 10 weeks or approximately 25% of the T4 should consist of internship. CNG offers 1/3 of the programme as internship. All students take the course The Upper Secondary School Engineer in Practice and complete a final thesis before graduating. Innovation and entrepreneurship are ensured by the National Agency with the CDIO model (Conceive, Design, Implement, Operate).
Sweden - HVE at Gothenburg Technical College	The faculty is a combination of traditional teachers with a degree from Teachers College and trainers with experience from the industry, who make for great role models in building a professional identity. This makes for a dynamic faculty with focus both on pedagogics and the expectations from potential employers



AI01 Which innovative aspect/s did you find in this Best Practice, related to external support for the HVET program/institute:	
Croatia - Short professional degree for Smelter at the University of Zagreb, Faculty of Metallurgy	International cooperation with foreign leading universities and Research Centers in the field of Metallurgy
Germany - Extra-occupational study course: Business Informatics	Assured by partner companies
Germany - Three track course of study: Electrical Engineering	Training in a professional environment
Italy - ITS Turismo	20% of internships are organized abroad in Germany, Ireland, Austria. Costs are covered by the Foundation also through the use of Erasmus+ mobility projects.
Italy - ITS Maker – Istituto Tecnico Superiore Meccanica-Meccatronica-Motoristica e Packaging	Great number of players involved on all levels, high ranking in national rankings and rapidly growing number of students
Italy - ITS Area Nuove Tecnologie per il Made in Italy Sistema Meccanico – Meccatronico (Energia) Puglia “A. Cuccovillo”	many players on different levels, associates on EQF 4 and 6
Romania - Commerce-Accountability-Administration field at Economic College F. S. Nitti	economical suppliers are involved in the curriculum development; Support from the national authorities
Romania - Medical field at Henri Coandă Post-Secondary School	Support from the national authorities; clinical modules are being held in clinics
Sweden - HVE at Gothenburg Technical College	Gothenburg Technical College is an exception here with almost all HVE teachers employed by the college. While the short term grants from the National Agency for HVE may be beneficial for an evolving market place situation, there is a great risk that the factors listed above will affect the quality of the HVE programmes

AI01 Which innovative aspect/s did you find in this Best Practice, related to support for the learners:	
Croatia - Short professional degree for Smelter at the University of Zagreb, Faculty of Metallurgy	Professional students can benefit of the supporting services, financial incentives and assistance offered by the university campus and offices
Germany - Extra-occupational study course: Business Informatics	Facilities existing in University
Italy - ITS Turismo	Research and projects, discussion and sharing, simulation and role playing, practical exercises, problem solving, educational tours study trips
Italy - ITS Maker – Istituto Tecnico Superiore Meccanica-	Not able to tell what and how, but 0% drop-out rate indicates good support



Meccatronica-Motoristica e Packaging	
Italy - ITS Meccatronico	Google groups set up among teachers as well as with students, and a Google Drive platform for uploading teaching materials
Sweden - HVE at Gothenburg Technical College	the students are able to contribute to supporting innovation in companies after graduating

AI01 Which innovative aspect/s did you find in this Best Practice, related to the teachers:	
Croatia - Master Craftsman Exam	Composition of the Board of Examiners covering the different aspects and areas of an entrepreneurial work: professional skills, legislation, administrative and business management, education and apprenticeship
Germany - Extra-occupational study course: Business Informatics	Academic level- graduate of university studies
Italy - ITS Turismo	Research and projects, simulation and role playing, task laboratories, technical workshops, educational tours Study trips
Italy - ITS Maker – Istituto Tecnico Superiore Meccanica-Meccatronica-Motoristica e Packaging	Sharing of best practice, aiming for TQM-system
Italy - ITS Area Nuove Tecnologie per il Made in Italy Sistema Meccanico – Meccatronico (Energia) Puglia “A. Cuccovillo”	teachers going through two levels of selection and then being included in public roster – supports status of HVE trainers and ensures quality
Italy - ITS Meccatronico	free refreshment courses charge for teachers working in partner schools of the Foundation, google groups set up among teachers as well as with students, and a Google Drive platform for uploading teaching materials
Romania - Medical field at Henri Coandă Post-Secondary School And Romania - Commerce-Accountability-Administration field at Economic College F. S. Nitti	Involvement of qualified educational staff with experience in adult education segment

AI01 Which innovative aspect/s did you find in this Best Practice, related to the quality management:	
Croatia - Master Craftsman Exam	Formally established procedure of assessment and validation of the professional skills by the HR Development Council
Croatia - Short professional degree for Smelter at the University of Zagreb, Faculty of Metallurgy	Institutional mechanisms for systemic assessment and coordination of initiatives and development programs with the ongoing purpose of promoting high standards of professional and specialist development of interested parties
Germany - Extra-occupational study course: Business Informatics	Assured by University



Italy - ITS Turismo	Monitoring and evaluation activities by the tutors (both supervisors within the company and course tutors) allow to constantly evaluate the work in progress of the project and possibly implement any corrective measures “on the run”.
Italy - ITS Maker – Istituto Tecnico Superiore Meccanica-Meccatronica-Motoristica e Packaging	Best practice resulting in TQM-system, developing questionnaire for company feedback 1-2 years after employment of students
Italy - ITS Meccatronico	Quality assurance process is yet to be undertaken
Romania - Medical field at Henri Coandă Post-Secondary School And Commerce-Accountability-Administration field at Economic College F. S. Nitti	Existence of a proficient quality management system inside the educational institution
Sweden - HVE at Gothenburg Technical College	the quality management system after work

AI01 Which innovative aspect/s did you find in this Best Practice, related to the involved local players:	
Croatia - Short professional degree for Smelter at the University of Zagreb, Faculty of Metallurgy	HVET Curriculum developed on the basis of the request of the local Foundry Industry, with particular attention to the technological innovation management
Croatia - Master Craftsman Exam	Local players are involved through the intermediary role of the National Chamber of Trades and Crafts on technical, legislative aspects
Germany - Three track course of study: Electrical Engineering	Companies
Germany - Extra-occupational study course: Business Informatics	Companies from Zwickau
Italy - ITS Turismo	Monitoring and evaluation activities by the tutors (both supervisors within the company and course tutors) allow to constantly evaluate the work in progress of the project and possibly implement any corrective measures “on the run”.
Italy - ITS Maker – Istituto Tecnico Superiore Meccanica-Meccatronica-Motoristica e Packaging	Broad local support with a variety of players; both public and entrepreneurial system being aware and informed of importance of HVE. 10 upper secondary schools involved = important for recruiting new students!
Italy - ITS Area Nuove Tecnologie per il Made in Italy Sistema Meccanico – Meccatronico (Energia) Puglia “A. Cuccovillo”	employers associations involved, innovative from Swedish perspective
Italy - ITS Meccatronico	representatives of the enterprise sector involved
Romania - Medical field at Henri Coandă Post-Secondary School	clinics take over practical education
Romania - Commerce-Accountability-Administration	economical suppliers are involved during the curriculum development



AI01 Which innovative aspect/s did you find in this Best Practice, related to the involved local players:	
field at Economic College F. S. Nitti	
Sweden - T4 at the Curt Nicolin School in Finspång	Players involved in the T4 are the following: The local education counsel which at Curt Nicolin consists of the owners Borggårds Bruk, Coor Service Management, Finspångs Allmekano, Finspångs Finmekaniska, Finspångs Kommun, Grytgöls Bruk, Igelfors Bruk, IUC Öst, KL Industri, Lämneå Bruk, Saab Aerostructures, Gränges, Sapa Profiler, Sapa Technology, Siemens, Toyota Material Handling and Väderstadverken.

AI01 Which innovative aspect/s did you find in this Best Practice, related to the management of the relationships with triple helix stakeholders:	
Croatia - Master Craftsman Exam	The procedural and contents definition process formally established adopts a triple helix approach by means of the 25 multipartite Sector Skills Councils operating at national level and including all relevant stakeholders for each professional profile
Germany - Extra-occupational study course: Business Informatics And Three track course of study: Electrical Engineering	The Win-Win relationship between partners
Italy - ITS Meccatronico	The ownership structure of foundations includes an active triple helix composed by Public Administrations, Academy, Companies
Italy - ITS Turismo	Monitoring and evaluation activities by the tutors (both supervisors within the company and course tutors) allow to constantly evaluate the work in progress of the project and possibly implement any corrective measures “on the run”.
Italy - ITS Maker – Istituto Tecnico Superiore Meccanica-Meccatronica-Motoristica e Packaging And ITS Area Nuove Tecnologie per il Made in Italy Sistema Meccanico – Meccatronico (Energia) Puglia “A. Cuccovillo”	important to communicate with stakeholders on all levels for bottom-up (mentors/teachers working on the factory floor) and top-down (HR managers and CEOs) commitment to partnership
Romania - Medical field at Henri Coandă Post-Secondary School And Romania - Commerce-Accountability-Administration field at Economic College F. S. Nitti	the program is support from the national authorities, clinics take over practical education



AI01 Which innovative aspect/s did you find in this Best Practice, related to the management of the relationships with triple helix stakeholders:	
Sweden - HVE at Gothenburg Technical College	In this way the triple helix share the responsibility in meeting the structural challenge of matching education and competence needed by the employers and for ensuring competence, employability and growth in the region

- AI02 Some other innovative aspects you found and would like to mention:
 - Conduction of analysis of the type of industries respectively relevant in the Veneto, evaluating a set of indicators such as
 - the number of students obtaining their post-secondary diploma;
 - their employment situation and correspondence with their qualification;
 - the teachers’ background (school, university, enterprise sector);
 - the quality of laboratories;
 - any connection with other Italian regions and with the European Union
 - Financial support assured by ESF
 - The development of transversal skills
 - the change in the balance of theory and practical modules for the second year: more theory on economics in the first year, more practical training in the second year
 - The ITS planning to provide (applied) R&D for SMEs that cannot afford internal research
 - Co-operations with local universities enabling identification of credits for recognition of prior learning – facilitation of transfer from HVE to academic pathway (and vice versa?)
 - The Faculty raises general social awareness on the position and role of its field of expertise, contributing to the development of the local industry specialization
 - Formal recognition of knowledge and abilities developed during the work experience of the Learner (not compulsory preparation courses).

- AI03 If some of these innovative aspects would fit to your regional context, which would you like to introduce:

Institute	Reviewed best practice	Which innovative aspect they would like to introduce in their institute:
CTB	Germany - Extra-occupational study course: Business Informatics	The international mobility activities
CTB	Germany - Three track course of study: Electrical Engineering	<ul style="list-style-type: none"> ▪ The flexibility of pathway ▪ The very good external support for HVET schools
EfVET	Sweden - HVE at Gothenburg Technical College	Blended learning in the sense that the combination of working experience and theoretical studies and the fact that the young employees do not have to quit their jobs to go back to schools
GTC	Italy - ITS Maker – Istituto Tecnico Superiore Meccanica-Meccatronica-Motoristica e Packaging	<ul style="list-style-type: none"> ▪ TQM system ▪ Strategies for stable, durable structure as to funding, human resources etcetera



Institute	Reviewed best practice	Which innovative aspect they would like to introduce in their institute:
GTC	Italy - ITS Area Nuove Tecnologie per il Made in Italy Sistema Meccanico – Meccatronico (Energia) Puglia “A. Cuccovillo”	<ul style="list-style-type: none"> ▪ employers associations more/formally involved ▪ facilitation of transfer from HVE to academic pathway (and vice versa?)
IFOA	EfVET - Spain	the one about self-entrepreneurship
IFOA	EfVET - Greece	I like very much the direct involvement in practical activities for students
OUZG	Italy - ITS Meccatronico	<ul style="list-style-type: none"> ▪ the quality of laboratories ▪ the teachers’ background (school, university, enterprise sector)
OUZG	Italy - ITS Turismo	<ul style="list-style-type: none"> ▪ Simulation and role playing, ▪ Problem solving ▪ Technical workshops ▪ Educational tours Study trips
SIAV	Croatia - Short professional degree for Smelter at the University of Zagreb, Faculty of Metallurgy	<ul style="list-style-type: none"> ▪ Management of the relationships with triple stakeholders and involvement of local players: improvement/simplification of the professional standards and curricula at regional level stressing the adoption of a participatory procedure ▪ External support for the HVET program/institute: HVET providers at regional level should promote the establishment of european networks of HVET organisations, fostering knowledge and best practices exchange initiatives such as student mobility activities (also for trainships), and the use of visiting professors
SIAV	Croatia - Master Craftsman Exam	Management of the relationships with triple stakeholders and involvement of local players: improvement/simplification of the professional standards and curricula at regional level stressing the adoption of a participatory procedure
WHZ	Romania - Commerce-Accountability-Administration field at Economic College F. S. Nitti	to involve economical suppliers in the curriculum development



- AI04 What kind of innovative services (e.g. co-operations) did you find, which the training organization of this Best Practice delivered to the businesses around?

Best Practice	Innovative service delivered to businesses around
Croatia - Master Craftsman Exam	Chamber of Trades and Crafts: formal interlocutor and intermediary to the Croatian Ministry of Science, Education and Sport of the relevant stakeholders at any level
Croatia - Short professional degree for Smelter at the University of Zagreb, Faculty of Metallurgy	HVET Curriculum developed on the basis of the local Foundry Industry gaps in terms of technological innovation for cast making, melting and pouring, ICT application to the productive process
EfVET - Greece	Actually the best practice describes a national system, so I am not able to answer this question.
EfVET - Spain	N/A
Germany - Extra-occupational study course: Business Informatics	The concept of extra-occupational study course
Germany - Three track course of study: Electrical Engineering	<ul style="list-style-type: none"> ▪ Possibility to get international certification ▪ Management of relationships with triple helix stakeholders ▪
Italy - ITS Area Nuove Tecnologie per il Made in Italy Sistema Meccanico – Meccatronico (Energia) Puglia “A. Cuccovillo”	Hard to tell from survey? Competent employers ready for labor insertion
Italy - ITS Maker – Istituto Tecnico Superiore Meccanica-Meccatronica-Motoristica e Packaging	<ul style="list-style-type: none"> ▪ Representing the local economy in national networks for mechatronics trying to gain influence on national level, ▪ Introducing transversal skills, ▪ Being a hub for education and work ▪ Being innovation service providers for SMEs
Italy - ITS Meccatronico	Project work activities developed during the apprenticeship period are actually an on-the-job programme, which is also a major component of the final oral examination
Italy - ITS Turismo	<ul style="list-style-type: none"> ▪ Project work activities developed during the apprenticeship period are actually an on-the-job programme, i.e. an element of primary importance in this interaction with working environments. ▪ Producing quality workers as a service, since they claim a 100% employability score.
Romania - Commerce-Accountability-Administration field at Economic College F. S. Nitti	to offer a quick answer to the frequent modifications of accounting-financial legislation and especially to those related to the accommodation to the European legislation by creating new curricula together with the help of local players
Romania - Medical field at Henri Coandă Post-Secondary School	the institute and local clinics work together closely, also the National Agency monitors the local situation and needs so that it can develop a regional strategy



Best Practice	Innovative service delivered to businesses around
Sweden - HVE at Gothenburg Technical College	a close collaboration with the local industry, which in different ways participate in the programmes by taking part in steering committees/education counsels, ensuring learning outcomes and offering internship
Sweden - T4 at the Curt Nicolin School in Finspång	business models and arenas for sustainable system solutions, smart internet-integrated communication systems, simulation and visualization and advanced materials, e.g. graphen. The University of Linköping is an important player in driving smart specialization and regional innovation strategies in Östergötland together with East Sweden Business Region and approximately 40 regional companies and organizations.

- AI05 What kind of innovative services (e.g. co-operations) did your training organization implement for businesses around:

Project Partner	Innovative services implemented for businesses around
CTB	<ul style="list-style-type: none"> The cooperation with partners connect the students with real issues from economical environment The possibility to apply deducible taxes The implementation of knowledge into the job practice
CTB	Connection with the newest information in each domain
EfVET	a close collaboration with the local industry, which in different ways participate in the programmes by taking part in steering committees/education counsels, ensuring learning outcomes and offering internship
GTC	<ul style="list-style-type: none"> Ability to combine work and part-time/computer based studies = career development for employees and up-to-date competences without having to recruit new staff for employers Communicating/marketing education/HVE training, creating interest in possible future jobs in technology/industrial sector to children, teenagers and young adults. Hard to recruit students for technical programmes on all levels in Sweden, GTC is contributing towards this on a long term perspective with projects such as “The Volvo Step” (Volvosteget) and “A Word of Possibilities” (Möjligheternas Värld) Offering validation of prior learning and/or real experience for formal acknowledgement to employees followed by, when needed, additional training as part of a LLL-project and as a way for employers to ensure practical and theoretical competences amongst employees
GTC	<ul style="list-style-type: none"> Ability to combine work and part-time/computer based studies = career development for employees and up-to-date competences without having to recruit new staff for employers Communicating/marketing education/HVE training, creating interest in possible future jobs in technology/industrial sector to children, teenagers and young adults. Hard to recruit students for technical programmes on all levels in Sweden, GTC is contributing towards this on a long term perspective with



Project Partner	Innovative services implemented for businesses around
	projects such as “The Volvo Step” (Volvosteget) and “A Word of Possibilities” (Möjligheternas Värld)
IFOA	<ul style="list-style-type: none"> ▪ If the questions refer to IFOA, we have many: recruitment services ▪ "ethical" internships ▪ a permanent table performing common development of new training programmes ▪ same permanent table assessing outcomes of training programmes
OUZG	Allowing people from the real sector to transfer their knowledge to students
OUZG	<ul style="list-style-type: none"> ▪ B.U.GS platform for info about energy reductions ▪ Providing worker training and certification for development of new skills ▪ EBCL business education and certification ▪ Vitalisation of rural areas
SIAV (2 times these answers)	<ul style="list-style-type: none"> ▪ Development and implementation of innovative continuing training courses at regional level for manufacturing SMEs and Large Companies ▪ EU project design and implementation under different programmes focusing on Competitiveness and Innovation topics (technological, organisational and process innovation) ▪ Regional networking activity amidst local innovation actors, organising and managing formal and informal networks, business and technological matching events or offering intermediary, consulting and advising services to simplify companies (in particular SMEs) access to EU funds and calls ▪ Development and animation of regional, national and EU networks involving major organisations active in the field of Innovation and Company Competitiveness, as PAs, Business Associations, SMEs/Large Companies, R&I centers, Universities, HVET Bodies ▪ Organization of mobility activities for entrepreneurs and VET Organisation staff to European centers of excellence in different sectors (primarily related to Regional Smart Specialisation areas), such as: Creative Industries or Digitalisation and Automation in manufacturing processes
WHZ (2 times these answers)	cooperative studies with other companies, e.g. Volkswagen education center

- AI06 Any other comments you would like to mention concerning innovative services for businesses around:
 - EfVET about Sweden - HVE at Gothenburg Technical College: The University of Linköping is an important player in driving smart specialization and regional innovation strategies in



Östergötland together with East Sweden Business Region and approximately 40 regional companies and organizations

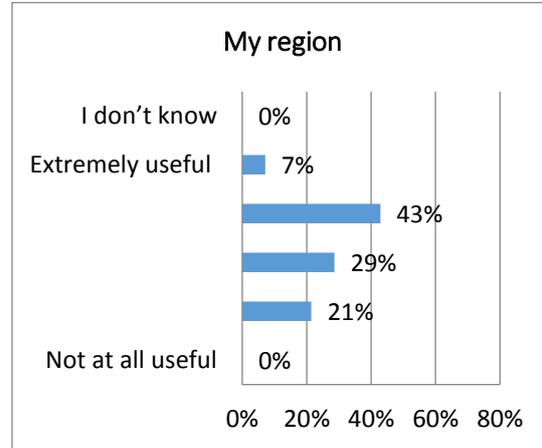
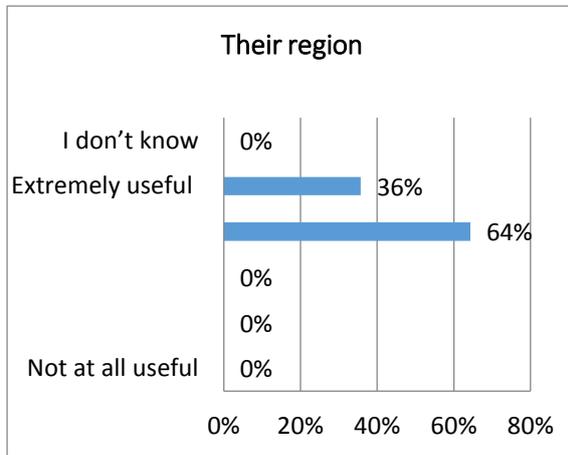
- AI07 If you had the chance, what kind of service(s) would you like to develop and offer for your local businesses?

Project Partner	service(s) you would like to develop and offer for your local businesses
CTB	The implementation of knowledge into the job practice could highlights the importance of HTVET studies
CTB	More support by national authorities
EfVET	a close collaboration with the local industry, which in different ways participate in the programmes by taking part in steering committees/education counsels, ensuring learning outcomes and offering internship
GTC	Introducing immigrants with degree/experience from industrial sector (engineers and technicians) to Swedish labour market while training Swedish and, if needed completing education, for employability in Sweden
IFOA	I am not fully aware of programs for tourism delivered in my region. As far as I know, paying attention to sustainable tourism is very high on the agenda at present here, thus this could be a point to be carefully taken in consideration from the best practice.
OUZG	Upgrading worker skills on a CNC machine (we don't have our own cause of the costs)
OUZG	<ul style="list-style-type: none"> ▪ A centralized data base connecting craftsmen, universities and students for EU project collaboration ▪ Consulting services for craftsman in the filed of EU funds and lifelong learning
SIAV	<ul style="list-style-type: none"> ▪ Supporting and advising services for the selection, design and drafting of project under the SMEs and writing projects to the value on the European SME Instrument ▪ Supporting and advising services for Regional Innovation Networks (clusters), as Training programmes for clusters development and growth, including cross border aspects
WHZ	<ul style="list-style-type: none"> ▪ yearly (or at least systematic) surveys about the demands of local businesses: ask them what would be attractice for them to include in our own curricula, so that we could provide professional graduates with new/needed knowledge ▪ create get-togethers within a common field to exchange knowledge, experiences and demands ▪ yearly observations/monitoring of other institutes' innovative methods (to learn from each other) ▪ ask new staff coming from other institutes about their knowledge on innovative methods (to learn from each other)



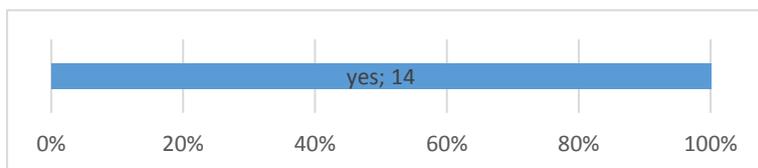
Local development strategies

- LD01 Please rate, how useful you find this Best Practice for the current market demands of...



- Rated as “extremely useful” (point 5 on scale) for my region: GTC about Italy’s (IFOA) best practice ITS Maker – Istituto Tecnico Superiore Meccanica-Meccatronica-Motoristica e Packaging
- Rated as “rather useful” for my region (point 4 on scale): WHZ about Romania’s best practice Medical field at Henri Coandă Post-Secondary School, CTB about Germany’s best practices Three track course of study: Electrical Engineering and Extra-occupational study course: Business Informatics, OUZG about Italy’s (SIAV) best practices ITS Meccatronico and ITS Turismo, GTC about Italy’s (IFOA) best practice ITS Area Nuove Tecnologie per il Made in Italy Sistema Meccanico – Meccatronico (Energia) Puglia “A. Cuccovillo”

- LD02 Does this Best Practice have a method to involve the demands of local companies?



- LD03 If yes, please shortly describe this method:

Best Practice	Methods used to involve demands of local companies
Croatia - Master Craftsman Exam	The Master Craftmen Exams programme regulation is approved by the Croatian Chamber of Trades and Crafts. The Chamber is an umbrella organisation composed by 20 regional chambers and abt. 120 business associations representing the economic environment. Each local chamber foresees Guilds and each Association is divided in professional sections. These bodies are established for all sectoral branches and local SMEs are invited to participate to related meetings at different levels. Emerging demands and needs for formal revisions of the Master Craftmen Exams programme are



Best Practice	Methods used to involve demands of local companies
	collected at local and national level and afterwards addressed to the competent Public Bodies by the local chambers and business associations
Croatia - Short professional degree for Smelter at the University of Zagreb, Faculty of Metallurgy	The Short Professional Degree is the result of the emerging demands and needs from the Steel and Metal Casting Industry. Companies demand in these sectors are collected through the University and Faculty bodies and then articulated in specific curriculum (Short Degree, Bachelor Degree and Master Degree/Ph.D.). The best practice under review focuses on the immediate employability into the labor market
EfVET - Greece	When Universities revise their programs, they usually call up companies for the definition of new/updated pathways. More, local actors are involved for practical parts of the programme, as they co-operate in the delivery of internships.
EfVET - Spain	Companies are involved either during the programme design phase and during internships. They are approached thanks to previous contacts already in force between the training institutions and the local players.
Germany - Extra-occupational study course: Business Informatics	The collaborative study program of 2 organizations can offer the support in future development
Germany - Three track course of study: Electrical Engineering	Introducing more information events to disseminate all possible offers the University has for students
Italy - ITS Area Nuove Tecnologie per il Made in Italy Sistema Meccanico – Meccatronico (Energia) Puglia “A. Cuccovillo”	The Steering Committee stands as a permanent table, who first defined profiles and competences when the programmes started, and now meets on a yearly basis to officially review the curricula
Italy - ITS Maker – Istituto Tecnico Superiore Meccanica-Meccatronica-Motoristica e Packaging	The learning pathway has been designed together with companies from its very beginning. The Steering Committee, representing all stakeholders, stands as a permanent table, who first defined profiles and competences when the programmes started, and now meets on a yearly basis to officially review the curricula.
Italy - ITS Meccatronico And ITS Turismo	Local companies are involved at different levels: 1. the training path and Curriculum is the result of the demands and needs expressed by companies within the statutory bodies, in particular the Technical and Scientific Committee and the Steering Committee; 2. part (50%) of the teaching staff come from the business world related to the Curriculum; 3. Stages at companies premises are compulsory for at least the 30% of the training path.
Romania - Commerce-Accountability-Administration field at Economic College F. S. Nitti And	In General Medical Practitioners training HVET the partners are hospitals.



Best Practice	Methods used to involve demands of local companies
Medical field at Henri Coandă Post-Secondary School	
Sweden - HVE at Gothenburg Technical College	A student from, for example Volvo Cars, who works day time in production and studies part time at Gothenburg Technical College can easily take on the roll as production engineer at Volvo after graduating, as he or she is already familiar with production engineering at Volvo
Sweden - T4 at the Curt Nicolin School in Finspång	Steering committee and local education counsel composed by 4 local companies

- LD06 If some of these local development strategies would fit to your regional context, which would you like to introduce:

■

Project Partner	Best Practice	Local Development Strategies used by others and would fit to own institute and region	
CTB	Germany - Three track course of study: Electrical Engineering	Internationalization of the program and extension into other study fields .	International mobility activities.
CTB	Germany - Extra-occupational study course: Business Informatics	The collaboration with all economical actors involved in HVET	
EfVET	Sweden - T4 at the Curt Nicolin School in Finspång	blended learning consisting of carrying out the working experience and attending classrooms and lectures at the same time	
EfVET	Sweden - HVE at Gothenburg Technical College	not at all	
GTC	Italy - ITS Area Nuove Tecnologie per il Made in Italy Sistema Meccanico – Meccatronico (Energia) Puglia “A. Cuccovillo”	The co-operation with local economy is very similar to the way GTC works, so in that sense it would be useful to our region.	
GTC	Italy - ITS Maker – Istituto Tecnico Superiore Meccanica-Meccatronica-Motoristica e Packaging	Foresight system	TQM system
IFOA	EfVET - Spain	I think our local strategies are already well in line with those put in action in the described practice.	
OUZG	Italy - ITS Meccatronico	Stages at companies premises are compulsory for	

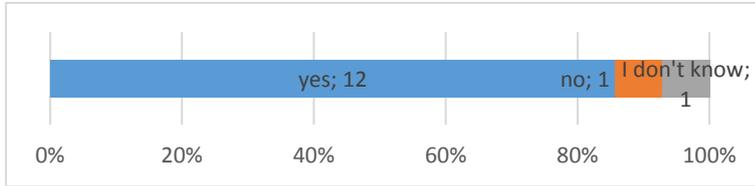


Project Partner	Best Practice	Local Development Strategies used by others and would fit to own institute and region	
		at least the 30% of the training path.	
OUZG	Italy - ITS Turismo	Stages at companies premises are compulsory for at least the 30% of the training path.	
SIAV	Croatia - Master Craftsman Exam	The access system to the examination based on the complementarity between the educational qualifications and professional experience of the candidate	
SIAV	Croatia - Short professional degree for Smelter at the University of Zagreb, Faculty of Metallurgy	The possibility to train students in a shorter period of time compared to the graduated metallurgy and mechanical engineering studies, which allows them to easily enter and being employed in the labor market. The ITSs provide a similar results for different professional profiles	
WHZ	Romania - Commerce-Accountability-Administration field at Economic College F. S. Nitti	The companies are asked to give experiences and cooperate with the schools in designing a Local Development Curriculum depending of their needs.	
WHZ	Romania - Medical field at Henri Coandă Post-Secondary School	to work together with hospitals to get to know the current needs of the market	



Improvement of continuous training of teaching staff

- IC01 Do teachers in this Best Practice need to have a certain (minimum) degree?



- IC02 If yes, which degree(s) or qualification(s) do the teachers need to have?

Best Practice	degree(s) or qualification(s) do the teachers need to have
Croatia - Master Craftsman Exam	Master Craftmen Schools are not part of formal education and can be established under provision of the Act on Trades and Crafts. This in accordance to the fact that preparatory studies to attend the Master Craftsman exam are not compulsory, but can be organised by institutions for Adult Education or other training bodies. At the present there is none specific Craftman School (public/private) in operation (only start-up phase). The above mentioned act states the following minimum level of qualification for teachers: Higher education (II cycle) and/or Master Craftmen Exams qualification
Croatia - Short professional degree for Smelter at the University of Zagreb, Faculty of Metallurgy	The teaching staff is composed by both university professors and company trainers. Company trainers are not required to prived specific written qualifications. he Company needs to have registered business activity in the field of Foundry and provide a student enough practical knowledge which are in accordance with learning outcomes of the Practical part of the Learning pathway for Smelter published on University website. The assigned mentor will check fulfillment of the learning goals through practical part of the study
EfVET - Greece	Teachers are university professors, so they must undergo a regular academic pathway.
EfVET - Spain	Theory teachers must have a MD relating to subjects they deliver. Trainers from companies are not required to have any specific degree.
Germany - Extra-occupational study course: Business Informatics	Academical Degree
Germany - Three track course of study: Electrical Engineering	Academic Studies
Italy - ITS Area Nuove Tecnologie per il Made in Italy Sistema Meccanico – Meccatronico (Energia) Puglia “A. Cuccovillo”	3 years’ teaching, if coming from schools/university; or 5 years’ experience, if coming from the labour market.
Italy - ITS Maker – Istituto Tecnico Superiore	3 years teaching, if coming from schools/university; or 5 years experience, if coming from the labour market.



Best Practice	degree(s) or qualification(s) do the teachers need to have
Meccanica-Meccatronica-Motoristica e Packaging	
Italy - ITS Meccatronico	ITS teachers are professionals from different academic and working environments as Universities, companies and schools. The teacher structure is as follows: 38% from companies, 20% from school, 14% from universities, 6% from training agencies, 2% research centers, 20% other.
Italy - ITS Turismo	ITS teachers are professionals from different academic and working environments as Universities, companies and schools. The teacher structure is as follows: 38% from companies, 20% from school, 14% from universities, 6% from training agencies, 2% research centers, 20% other.
Romania - Commerce-Accountability-Administration field at Economic College F. S. Nitti	they have to be graduate of University
Romania - Medical field at Henri Coandă Post-Secondary School	they have to be graduate of University

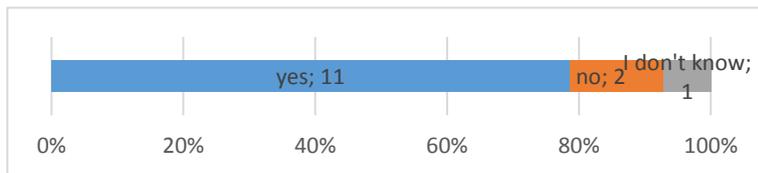
- IC03 How about the perspectives for teaching staff? How long is the average work contract of the teaching staff?

Best Practice	average work contract of the teaching staff
Croatia - Master Craftsman Exam	The majority of teachers in Public/Private Craftsmen Schools normally are employed under temporary service contracts in HVET, while in IVET Schoolste majority of work contracts are long-term contracts or permanent. In HVET the work contract average duration is 12 months. As stated in Question AE01, at the moment there is only one Craftmen School in start-up phase in Croatia
Croatia - Short professional degree for Smelter at the University of Zagreb, Faculty of Metallurgy	The majority of the teaching staff assisting the students during their training path has a permanent work contract. In addition, a large part of the teaching staff also worked/is still working in the Steel and Metal casting Sector outside the university, favoring the linkage between the university and the business world
EfVET - Greece	Teachers are university professors, so they have a "life-long" contract.
EfVET - Spain	For theory teachers, it is a regular contract by the Ministry of Education. For trainers, usually the work contract is renewed year by year.
Germany - Extra-occupational study course: Business Informatics And Three track course of study: Electrical Engineering	Professors have unlimited contracts, but many lectures are executed by other University staff with contracts sometimes from semester to semester (only 6 months)



Best Practice	average work contract of the teaching staff
Italy - ITS Area Nuove Tecnologie per il Made in Italy Sistema Meccanico – Meccatronico (Energia) Puglia “A. Cuccovillo”	24
Italy - ITS Maker – Istituto Tecnico Superiore Meccanica-Meccatronica-Motoristica e Packaging	Uncertain, because of short time contracts
Italy - ITS Meccatronico	12
Romania - Commerce-Accountability-Administration field at Economic College F. S. Nitti	at least 24
Romania - Medical field at Henri Coandă Post-Secondary School	at least 24

- IC04 Is there an evaluation related to the teachers?



- IC05 If there is an evaluation of the teaching staff...

Best Practice	How often	How is it executed	How are the results used later
Croatia - Master Craftsman Exam	With regard to the VET programs allowing to attend the Master Craftsmen exam, the quality assurance system varies between IVET and HVET and it is defined by specific legal frameworks, in line with the EQAVET provisions (EQARF). For IVET (from 1year to 4years VET programs - EQF 2 to 4), a yearly evaluation document has to be filled in by VET Schools. The evaluation process	The quality assurance evaluation is performed on the basis of a specific standard plan, designed by AVETAE. Self-assessment is performed for the following key areas: planning and programming of the work; teaching and learning support; student achievements; material conditions and human potential; employee professional development; human	The Quality Assessment at VET provider level is used by AVETEA and by each training institution to redesign their VET curriculum. At VET provider level, this process is used to align the training offer with the evolution of the labour market. At system level, the evaluation of teaching complement the revision process promoted by the Chamber of Trades and



Best Practice	How often	How is it executed	How are the results used later
	<p>is managed by the Agency for VET and Adult Education (AVETAE). In Public/Private Colleges there is no legal and mandatory evaluation. However almost each school carries out an own evaluation and quality assurance process</p>	<p>relations in the institution for vocational education; management and leadership; cooperation with other stakeholders. The priority areas are based on eight self-assessment key areas defined in the Vocational Education and Training Act. The self-assessment approach, which was developed by AVETAE, used the logic and methodology of the EQAVET. Self-assessment of VET institutions is monitored and evaluated by the Quality Commission, a body named by the VET institution governing board</p>	<p>Crafts on exam catalogues</p>
<p>Croatia - Short professional degree for Smelter at the University of Zagreb, Faculty of Metallurgy</p>	<p>The teaching staff evaluation is part of the overall quality assurance system of the University of Zagreb (Rulebook on quality assurance and improvement at the Faculty of Metallurgy, 2011). The monitoring and evaluation process is carried out on yearly basis and a the responsible Commission for quality assurance submits to he Faculty Council an annual reports on its activities. It is actively involved in the work of</p>	<p>The above mentioned Commission organises, coordinates and implements assessment procedures, developing internal detailed and specific mechanism of quality assurance and improvement at faculty level. It is responsible for the annual planning of the quality improvement strategy, implementing assessment program and quality improvement program at the Faculty and coordinating implementation of</p>	<p>The Quality Assessment monitoring and evaluation results, described in the annual report submitted by the responsible Commission, are used by the Faculty Council in order to review: training contents, teaching methods, staff (teaching/administrative) updating programmes</p>

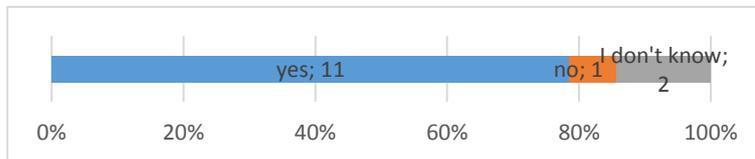


Best Practice	How often	How is it executed	How are the results used later
	each Faculty Council session	programs for professional and specialized development of employees in the field of quality	
EfVET - Greece	once per year	by their deans, headmasters and students as well	results are presented to individual teachers for quality improvement
EfVET - Spain	once per year	by students through a questionnaire	results are presented individually to teachers and used for continuous improvement
Germany - Three track course of study: Electrical Engineering and Extra-occupational study course: Business Informatics	Every 6 months, but only 10% of each module must be evaluated	Through questionnaires handed to students	Results can only be seen by the teachers themselves
Italy - ITS Maker	Every 6 months	BY students, steering committee and mangement	PDCA (Plan-Do-Check-Act)
Italy - ITS Area Nuove Tecnologie per il Made in Italy Sistema Meccanico – Meccatronico (Energia) Puglia “A. Cuccovillo”	Once a year	BY students, steering committee and mangement	PDCA (Plan-Do-Check-Act)
Italy - ITS Meccatronico	Once a year	through dedicated questionnaires submitted by students, and also each teachers is directly evaluated by the Coordinator of the training course at the end of any module.	
Italy - ITS Turismo	Every 6 months	through dedicated questionnaires submitted by students, and also each teachers is directly evaluated by the Coordinator of the training course at the end of any module.	



Best Practice	How often	How is it executed	How are the results used later
Romania - Commerce-Accountability-Administration field at Economic College F. S. Nitti	o several inspections during the school (usualy 2/year)	inspections	o The conclusions are part of the Annual Evaluation System of each teacher.
Romania - Medical field at Henri Coandă Post-Secondary School	o several inspections during the school (usualy 2/year)	inspections	o The conclusions are part of the Annual Evaluation System of each teacher

- IC06 Is there a possibility for further training for teaching staff?



- IC07 If there is further training for teaching staff...

Best Practice	what kind	how often is it possible to take part	who organizes it
Croatia - Master Craftsman Exam	VET teaching staff benefit of updating courses and training as classroom, job shadowing and on-site training	The resources to plan, organise and implement updating training courses are limited and the overall situation has worsened in the last five years. Accordingly the frequency of these courses is not high	Updating courses are organised by the Chamber of Trades and Crafts system. The reduction of the mandatory membership fee (abt. 70%) in the last 3 years has further limited the resources allocated for training update. To complement the above mentioned system, a national plan was established but due to the limited resources it was cancelled 6 years ago
Croatia - Short professional degree for Smelter at the University of Zagreb, Faculty of Metallurgy	The updating plan is integrated in quality management system which has been regulated in the above mentioned "Rulebook on quality assurance and improvement at the Faculty of Metallurgy"	On a yearly basis	The staff improvement strategy and the related updating plan is designed and managed by the Commission for quality assurance, in line with the decisions of the Faculty Council and with



Best Practice	what kind	how often is it possible to take part	who organizes it
	(2011). The Commission for quality assurance designs a detailed strategy for administrative/teaching staff improvement, answering to specific needs highlighted during the monitoring and assessment phase		the support of the heads of study years
EfVET - Greece	Being university professors, teachers follow their regular further training programmes, by attending conferences, meetings, etc.	variable	partly the University, partly teachers themselves.
EfVET - Spain	it depends on the institution: usually methods include participation in seminars/conferences/meetings, attendance to specific further training courses, self-learning	variable	partly the training institutions, partly external providers
Germany - Three track course of study: Electrical Engineering and Extra-occupational study course: Business Informatics	workshops, conferences	variable	University
Italy - ITS Area Nuove Tecnologie per il Made in Italy Sistema Meccanico – Meccatronico (Energia) Puglia “A. Cuccovillo”	A small amount of events with certian topics		
Italy - ITS Maker – Istituto Tecnico Superiore Meccanica-Meccatronica-Motoristica e Packaging	The Foundation is strongly investing on training of trainers and of internal staff. For instance, a labour psychologist is supporting the staff in their work with students, and several		The ITS

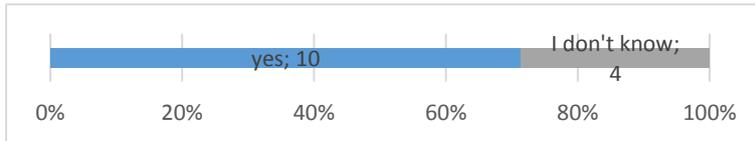


Best Practice	what kind	how often is it possible to take part	who organizes it
	initiatives for sharing of best practices are in force, with a view to the development of a TQM system		
Italy - ITS Meccatronico	The ITS Meccatronico offers an annual updating catalogue included updating courses on different topics related to all the training areas. In addition, the ITS also applied for Erasmus+ Programme funds in order to offer professional development activities abroad to the teaching staff.	There isn't a specific timetable settled. The participation to the above mentioned courses depends on the availability of the teaching staff.	Each ITS organises updating plans on its own.
Italy - ITS Turismo			Each ITS organises updating plans on its own.
Romania - Commerce-Accountability-Administration field at Economic College F. S. Nitti	Teacher exchange, workshops, interassistences at didactical activities like examples of good practice	3or 4/year	Universities, Didactical House companies or schools
Romania - Medical field at Henri Coandă Post-Secondary School	Teacher exchange, workshops , interassistences at didactical activities like examples of good practice	3or 4/year	Universities, Didactical House companies or schools

- IC08 Where does the majority of this Best Practice's teachers come from? (multiple choice)
 - The training institute itself: 5/14 (35%)
 - A Company: 5/14 (35%)
 - Other: (5/14) (35%)
 - 1x University
 - 2x Hired on short contracts with other employment in Upper Secondary School or University
 - 2x universities, research centers, school, etc.



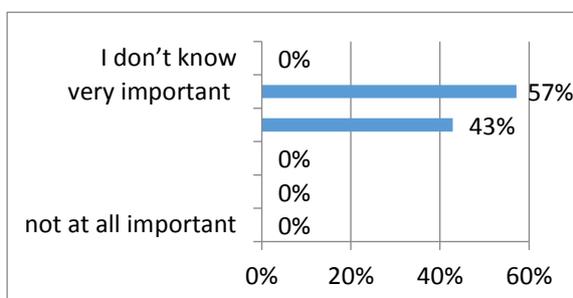
- IC09 Is there a possibility to exchange knowledge between teachers of own and other institutes?



- IC10 If there is a possibility to exchange knowledge between teachers of own and other institutes... How is it organized?

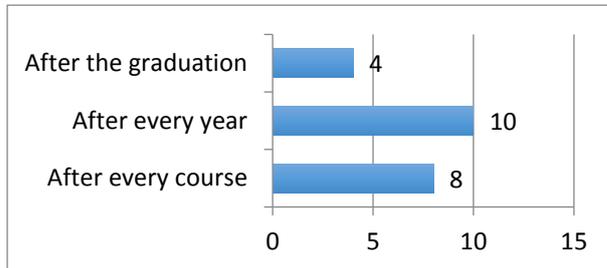
- There are several mobility initiatives organised by single teachers and principals but it lacks a comprehensive plan. National exchanges are mostly organised by AVETEA, while at international level the Erasmus National Agency (Agency for Mobility and EU Programmes - AMPEU), supports VET providers to apply to EU funds as Erasmus+ KA1 and ESF
- International workshops
- The curriculum of the best practice under review has been designed and furtherly update basing upon the experiences of renowned metallurgical foreign universities, as: Leoben (MUL), Austria; RWTH Aachen and Technische Universität Clausthal (TUC), Germany; University of Birmingham, England; Faculty of Science and Technology, University of Ljubljana, Slovenia and Hutnicka Faculty in Košičiach, Slovakia. A periodical revision and knowledge exchange process is implemented in order to keep the curriculum in line with similar degrees in other universities at EU level
- Being university professors, teachers have the chance to meet with others, discuss and exchange.
- There is a national network, started in 2014, for ITS pertaining to Mechanics/Mechatronics, to which this ITS belongs.
- There is a national network (started in 2014) for ITS pertaining to Mechanics/Mechatronics, aiming at gaining more power at a national level, to which ITS Maker belongs. The Foundation's efforts are also targeted to local upper secondary schools and universities. Also, Maker is investing in events for sharing best practices, which are then processed in the TQM system
- The knowledge Exchange activities are organised independently by each ITS, establishing collaboration and Agreement with other ITSs or different relevant organisations. At national level, the ITS Foundations developed a joint coordination foreseeing teacher exchanges amidst ITSs.
- Interassistences at didactical activities like examples of good practice

- IC11 In your opinion, please rate how important would be an evaluation of teachers:

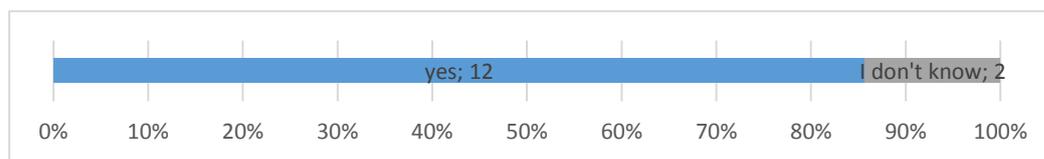




- IC12 Please insert how often you would like to see evaluations of teachers: (multiple answers are possible)



- IC14 Does your education institute generally organize evaluations of the teaching staff?



- IC15 If yes, how are they organized (e.g. how often, how are the results used, etc.)
 - A lot of our strengthening through continuous training comes from EU projects where we update our transversal skills, this year alone we were involved in a minimum of 5 educations, and results are used to enhance our own courses.
 - The teaching of staff is usually conducted through the use of EU projects, in this year alone there was a minimum of 5 educations for all employees
 - mostly after every course with paper evaluation sheets; the results are usually used for individual improvement purposes and within the quality management system
 - mostly after every course with paper evaluation sheets; the results are usually used for individual improvement purposes and within the quality management system
 - Didactical degrees, once at 3-4 years and current evaluation each year
 - Improvements and new content and/or educational or business methodologies are reported and proposed to the competent PAs. A KTT process at local level is also operated within the Regional Industrial Association system and then to companies (12k)
 - There are professional degrees (once at 4-5years), and evaluation each year
 - Teachers are evaluated after every course, every year and as part of a large evaluation after graduation. Results are analyzed by the teacher her/himself and by HVE management. Results of evaluation are put in a matrix able to show trends in quality for individual teachers and/or modules/courses. The results and the analysis are presented to the steering committee four times a year and the committee make decisions for quality improvement based on this.
 - Teachers are evaluated after every course, every year and as part of a large evaluation after graduation. Results are analyzed by the teacher her/himself and by HVE management. Results of evaluation are put in a matrix able to show trends in quality for individual teachers and/or modules/courses. The results and the analysis are presented to the steering committee four times a year and the committee make decisions for quality improvement based on this.
 - Referring to IFOA, teachers are evaluated by: students, tutors, and programme co-ordinators. Each of them fills in a questionnaire evaluating several teaching aspects. the whole process is carried out in the framework of our EN ISO 9001:2008 quality management system. Results are then communicated to each teacher/trainer by the programme co-ordinator and discussed for further reference. More, depending on score achieved, trainers and teachers are divided into three performance levels, with corresponding maximum hourly salary (of course, the higher the

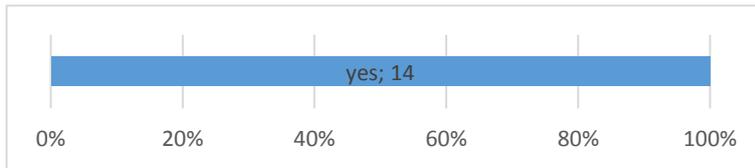


level, the better the salary). In this way, teachers and trainers can move up and down through these levels from one course to another and from one year to another. If a teacher/trainers does not achieve a sufficient score to remain in the lowest level, he/she will get a first advice; if this happens two times in a row, he/she cannot be employed any more, until he/she demonstrates improvements in possible future shorter courses.

- As far as I was able to understand, once per year.

Involvement of local players

- IP01 In this Best Practice, are local economic players involved in the training program?



- IP05 Which method is used to involve local players in the training program?

Best Practice	Method
Croatia - Master Craftsman Exam	There are three main modalities/moments involving local players (in particular SMEs) in the training programme. 1. IVET and HVET providers are directly involved in students' training paths with compulsory periods at companies premises; 2. Relevant economic stakeholders promote the reviewing process of the Master Craftsman exam catalogues; 3. The identified best practice represents a formal way to recognise acquired competences through work experience (minimum 2 years)
Croatia - Short professional degree for Smelter at the University of Zagreb, Faculty of Metallurgy	At the overall level, the Short Professional Degree for Smelter is designed basing upon the experience of similar renowned faculties in Europe as above mentioned and it allows to overcome the problems that the University of Zagreb is facing in renewing their training pathways and staff. The specific and particular structure of the best practice allows to establish a functional and effective linkage with other EU university and Stakeholders, keeping the curriculum update and intensifying the collaboration – with the local Steel Industry and the economic environment
EfVET - Greece	Universities use their regular channels, that is agreements with companies, possible internships, one-to-one contacts by professors.
EfVET - Spain	Direct contacts by training institutions, involvement of representatives of local players as trainers, co-operation to internships in companies.
Germany - Extra-occupational study course: Business Informatics	Attract the economical actors in training scenario, for the purpose of their benefit
Germany - Three track course of study: Electrical Engineering	Due to collaboration with local companies, the students have the chance to improve their network, their professional interaction, get to know the newest developments. It offers a chance for companies to build and preserve experts for a long term



Best Practice	Method
Italy - ITS Area Nuove Tecnologie per il Made in Italy Sistema Meccanico – Meccatronico (Energia) Puglia “A. Cuccovillo”	The Foundation includes 19 local and national companies and relationship of stakeholders is kept on many levels; from tutors to executive board. 40% of all programmes are delivered through WBL in local companies
Italy - ITS Maker – Istituto Tecnico Superiore Meccanica-Meccatronica-Motoristica e Packaging	43 primary local and national companies (including Maserati, Ferrari, etc.) are involved. 40% of all programmes are delivered through WBL in local companies
Italy - ITS Meccatronico	- Both the ITSs are strengthening students' mobility initiatives applying to private and EU funds (e.g. Erasmus KA1), so they are forced to enlarge and wide their local, national and EU networks.
Italy - ITS Turismo	- Each ITS training path foresees internship periods (in Italy or abroad). This implies an ongoing relationships with companies and stakeholders at different levels, boosting the creation and development of contacts and stable networks.
Romania - Commerce-Accountability-Administration field at Economic College F. S. Nitti	Creating Local Development Curriculum, organizing the practical activities in the companies workshops
Romania - Medical field at Henri Coandă Post-Secondary School	Creating Local Development Curriculum, organizing the practical activities in the companies workshops
Sweden - HVE at Gothenburg Technical College	A steering committee or a local education counsel with representatives from the industry is connected to every programme in order to secure that the curriculum is relevant and the students employable
Sweden - T4 at the Curt Nicolin School in Finspång	Players involved in the T4 are the following: The local education counsel which at Curt Nicolin consists of the owners Borggårds Bruk, Coor Service Management, Finspångs Allmekano, Finspångs Finmekaniska, Finspångs Kommun, Grytgöls Bruk, Igelfors Bruk, IUC Öst, KL Industri, Lämneå Bruk, Saab Aerostructures, Gränges, Sapa Profiler, Sapa Technology, Siemens, Toyota Material Handling and Väderstadverken. The education counsel plays a role similar to the one of the steering committee of the HVE programmes, i.e. it ensures that the education is relevant and the students employable.



- IP02 What kind of methods did you use to actively involve local economic players in the training program of your Best Practices? Please rate these methods, starting with the most useful for your region.

Institute	Methods used to actively involve local economic players in the training program				
	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5
CTB	Cooperation in designing the local development curricula	Organizing the specific workshops			
CTB	The possibility to offer qualified graduates who know in advance the specify of the next workplace.				
EfVET	The local education counsel	Steering committee			
EfVET	learning outcomes and offering internship				
GTC	Starting out with only the owners Volvo group and Volvo cars as active players from local economy, GTC has during the years attracted several more SMEs in automotive and manufacturing. With more companies taking active part in the steering committee, GTC has become a meeting place for HR managers and CEO:s, creating added value in being a HVE partner.	Visiting companies already involved in GTC's ESF projects, which have been very positively received, inviting them to take part in/send employees to the HVE programmes at GTC	Visiting students during work placement at companies not yet actively involved in GTC , talking to mentors and managers and offering them our services		

Institute	Methods used to actively involve local economic players in the training program				
	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5
GTC	a. Starting out with only the owners Volvo group and Volvo cars as active players from local economy, GTC has during the years attracted several more SMEs in automotive and manufacturing. With more companies taking active part in the steering committee, GTC has become a meeting place for HR managers and CEO:s, creating added value in being a HVE partner.	b. Offering validation of prior learning and/or real experience for formal acknowledgement to employees followed by, when needed, additional training as part of a LLL-project and as a way for employers to ensure practical and theoretical competences amongst employees.			
IFOA	Setting up a permanent table -including local economic players- for needs analysis, programme design, assessment of programme outcomes.	setting up a steering committee, involving local players, for general guidance of future activities	including in our courses trainers coming from local players	carrying out regular needs analysis in companies we work with	
IFOA	The training programme is a national one, so players are involved by Universities through their regular contact channels				
OUZG	Word of mouth, recommendations				





Institute	Methods used to actively involve local economic players in the training program				
	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5
OUZG	Direct contact	Craftsman database	Contact through various Associations and NGO's		
SIAV (twice the same answers)	The Technical-Scientific Committee, part of the statutory bodies foreseen by each ITS, is composed by members belonging to the local economic environment, as companies, relevant business associations, universities and training organisations and PAs. It is in charge of supporting the Directory Board in designing and updating the training courses, providing scientific guidance. Accordingly the CTS has advisory and proposal functions, with a specific focus on the areas of autonomy and organisational flexibility	The ITSs periodically organise meetings with the local manufacturing enterprises in order to design/update training content and to enable a mutual knowledge amidst companies and students. These meetings are held at each ITS premises	Each ITS training path foresees internship periods (in Italy or abroad). This implies an ongoing relationships with companies and stakeholders at different levels, boosting the creation and development of contacts and stable networks	Both the ITSs are strengthening students' mobility initiatives applying to private and EU funds (e.g. Erasmus KA1), so they are forced to enlarge and wide their local, national and EU networks	The best practices identified offer training courses for trainers and company tutors, strengthening the relationships with local companies
WHZ (2 times the same answers)	to work closely together during the development/creation process and involve the needs and experinces of the local comanies				

- IP04 If you had the chance, what kind of method(s) would you like to develop and introduce to involve local economic players actively in the training program of your Best Practices?

Institute	Methods which the participants would like to introduce to actively involve local economic players in the training program:					
CTB	International mobility activities					
CTB	Involving economic players in designing the Local Development Curricula					
EFVET	Steering committee					
EFVET	by taking part in steering committees/education counsels, ensuring learning outcomes and offering internship					
GTC	In a perfect world, employers would hand-pick employees for training at GTC, communicate which position in the company they would be offered after graduation and let them keep their full salary while training. This would create not just the financial possibility to study, but a clear motivation and a drive for the employee/student to finish the HVE programme as he/she has a very clear goal ahead.					





Institute	Methods which the participants would like to introduce to actively involve local economic players in the training program:					
IFOA	It would be great to have resources enough to involve more players in our needs analysis					
OUZG	A connected data base of active craftsmen unable to get support alone, but wanting to get involved into EU projects					
OUZG	Some sort of database in which loacal players can login and search through the active courses and apply for one which is relevant to their business					
SIAV	Applying to the ECHE accreditation (Erasmus Charter for Higher Education). This will contribute to further enhance ITSs return of image and exposure, raising awareness and favoring the involvement of local economic players	Increasing the regional/local Major Industrial Associations promotional initiatives, highlighting the ITSs peculiarities regarding the professional training paths and emphasizing the high employability level (81.1% within an year after graduation), recognised at	Increasing the regional/local PAs commitment in developing dedicated and systematic promotional initiatives towards local companies and high schools (also with formal agreements). No relevant information campaigns have been conducted addressing enterprises and	Further increasing the number of meetings with companies, along with the testing of new modalities and different locations (e.g. at company premises)	Encouraging the creation and further development of a functional and multilevel network among the various ITSs on the basis of the “National Technological Areas” identified within the Jointly Decree n.8327/2011 Ministry of Education, University and	Widening the range of training services offered by the ITSs (also on the market), as training courses for trainers and company tutors working with students carrying out an internship and business simulations. ITSs should also increase their role in supporting professional schools (EQF 4)

Institute	Methods which the participants would like to introduce to actively involve local economic players in the training program:					
		national level by the Ministry of Education, University and Research (INDIRE Performance Analysis - 2015). The promotional activity should be addressed primarily to the associated companies and relevant PAs, thanks to their lobbying activities and direct linkages	high schools (EQF 4), leaving each foundation with the task of organising orientation activities on their own		Research - Ministry of Labour and Social Policies. This in order to activate a seamless and formally established confrontation/knowledge transfer process on the training path design and related contents	implementation of the dual system (L. 53/2003, as amended by the L. 107/2015)
WHZ	organize get-togethers with institutes and companies from the same work field	organize surveys among local organizations to get more insights into their needs	cooperate with local chambers of trade and crafts to profit from their knowledge as multipliers with a large network of local companies			





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www.obrtnicko-uciliste.hr

EfVET – European forum for Vocational Education and Training
www.efvet.org

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