

Go&Learn project

Compendium



The Go&Learn project is a Transfer of Innovation LLP supported by the EU LLP Italian Agency, and is linked to the international multilateral network "Go&Learn". It is aimed to organize and manage a catalogue of study visits for teachers and trainers to be carried out inside companies. The visits have training and guidance aims and should be considered as Training Units that can be proposed to a vast range of users. The hosting companies are strongly committed in training and in knowledge propagation, allowing the visiting groups to learn directly from the source of knowledge, experience and innovation, which is the company itself. Detailed and updated information about the network members, the activities and services available are available in the official website of the project: www.goandlearn.eu and www.goandlearn.eu and in the national websites of the project partners.

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Other reference documents of the G&L initiative are available in the official initiative website: www.goandlearn.eu.



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1 THE COMPENDIUM

In the paper we present the results of the mapping done in nine¹ territories involved in Go&Learnnet Project regarding the way of collaboration between educational institutions and companies.

1.1 OBJECTIVES, METHODOLOGY AND TOOLS

1.1.1 OBJECTIVES

In the economy of the project Go&Learnnet, the Compendium has a hinge function between the stage of partners' sharing of the model of company visits of WP2 (that will be experienced within the project Go&Learn), and the implementation in the nine areas involved (WP3).

In order to design a useful and effective in all regions involved in the project it's necessary to learn and share the best practices of interaction between schools and businesses. The purpose of the Compendium is therefore twofold:

- ▶ Describe the best examples of collaboration between educational institutions and businesses in nine territories involved in the project Go&Learnnet, providing a detailed description of the main initiatives and models adopted
- ▶ Adapt to different context and frames the model developed the Friuli Venezia Giulia region.

Adaptation phase is, therefore, a necessary step because the model assumes that local systems of Education and Business are willing to dialogue and cooperate. The level of cooperation among training agencies and companies can obviously vary from one territory to another. In this regard, beyond the obvious differences in institutional, policy and regulatory (macro factors), it is necessary to take into account the factors at the meso level, concerning the relations between actors; the presence of intermediaries that facilitate the match between school and company, the structure of benefits and opportunities for the actors involved, the organizational structure and the partnership, the target audience. Starting from these basic dimensions we have developed the survey instruments and tools to realize the Compendium.

1.1.2 METHODOLOGY

In the initial part of the project it has been planned an inventory of existing relations in various areas between the school system / training and the world of work / business. This will enable the project partners to adapt to the specific territorial needs the format and type of seminars to be offered in the catalogs. The realization of the Compendium provides for the application of a methodology which is structured in the following points (Table 1).

PROSPECT 1 – Compendium methodology overview

Sources	Tools	Analytical techniques	Output
Prior partner's knowledges	Non formal interview and focus group (in presence or by phone)		
External contacts project Go&Learnnet	Asynchronous CMC (e-mail)	<i>Cross-national comparison</i>	Comparative report
Project's Stakeholder	Synchronous CMC (chat, skype, ecc.)		
Desk research	Desk research		

¹ Hungary has not realised the mapping. The territories are only 8.

1.1.3 TOOLS

To realize the Compendium on the way of cooperation between Education / training and production system at the local level we used two assessment instruments:

- The first one [G&L_Compndium_Short_Form] aimed to map the essential information on the forms of cooperation between the education system and enterprises, with particular reference to those who provide career guidance and professional training for counselors, teachers and trainers. Only in case in the area concerned initiatives of this kind are not present, we detected the initiatives aimed at workers and students. The short form had a structure with closed answers.
- The second [G&L_Compndium_Long_Form] was intended to describe in detail the minimum 3 territorial practices which can be relevant to transfer the model Go & Learn. Subject of the survey are the forms of cooperation between educational institutions and businesses targeted to system operators (managers, teachers and trainers, counselors). Only in case in the area concerned initiatives of this kind are not present, we detected the initiatives aimed at workers and students, explaining the choice in terms of relevance. The long form has a structure with open answers.

1.2 STRUCTURE OF THE DOCUMENT

The Compendium is organized into three sections. In the first one we will discuss the quantitative information collected through the short form, in the second the experiences mapped through the long form, in the third the results of the comparative analysis.

2 THE COLLABORATION BETWEEN COMPANIES AND EDUCATIONAL SYSTEM: THE SCENARIO

Using the information collected through the short form it is possible to rebuild the general scenario of cooperation between educational system and companies in the nine areas of the project Go&Learnet. Overall information was gathered on 39 initiatives of collaboration between business and education. Details are shown in Table 1². In numbers, from the region Friuli Venezia Giulia come 7 of 39 initiatives collected, while from Slovenia and the Bologna district 3. To note that some of the projects considered are not independent from one another, but they are variations of the same initiative aimed to different targets or projects with slight changes (this is the case of the three projects of the Vocational School of Constance).

The information available through the short form is synthetic and, as mentioned, concerns partnerships, targets and instruments adopted within the framework of cooperation. Because of the size of the sample collected there are not significant distinctions at local level basis; this is the reason why we present a series of tables summarizing the data on the whole 39 initiatives mapped.

2. The mapping does not include the experiences developed in Hungary because the local partner has not completed the activities planned for this work package.

Table 1 – Initiatives of collaboration between business and education system in the territories of the project Go&Learnet

Territory	Name	Total
Belgium	CISCO Network Academy	5
	LED Projects	
	Masterclass - Entrepreneurship - Training for teachers	
	Professional development and training of teachers working in the study field of construction	
Germany	Professionalization of staff study field Business Management	5
	Vocational school centre Stockach	
	Wessenberg School Constance	
	Zeppelin - Vocational School Constance 1	
Slovenia	Zeppelin - Vocational School Constance 2	3
	Zeppelin - Vocational School Constance 3	
	Developing skills for future jobs (PROGRESS Project)	
Turkey	Faculty of Logistics (Celje UM) Connection of researcher of FL UM with economy	5
	Innovation project within the school agenda environmental technician	
	Human Resources Development through Vocational Education and Training (IKMEP)	
	KOMEK	
Bologna district	Organic Farming and Stock Farming Project (Kelkit)	3
	University Business World Relation Application and Research Center	
	Conoscere le imprese	
Friuli Venezia Giulia region	Il rilancio dell'educazione tecnica (Piano strategico metropolitano Bologna)	7
	Toyota Technical Education Program T-tep	
	GO&LEARN - An International Catalogue of study visits in SMEs (Leonardo da Vinci Multilateral Networks 2012-2014)	
	I seminari di studio in azienda (progetto MARE) + Seminari di sostegno e stimolo all'innovazione	
	I seminari in azienda	
	Progetto STARS Scuola Territorio Azienda Riforma Scolastica	
	Secondo Girls and Boys Day Provinciale	
Toyota Technical Education Program T-tep		
Marche region	Tutor FVG	5
	Apprendistato professionalizzante	
	IRASE Ancona - Formazione Formatori	
	Job Day - Giornata del lavoro e del fare impresa (Job Orienta)	
Umbria region	Laboratorio territoriale	6
	S.OR.PRENDO - Software per l'orientamento professionale	
	A scuola d'impresa	
	EconomicaMente	
	Impresa scuola territorio	
IN.FO.P.O.INT. (Interventi Formativi per l'Occupazione e l'Integrazione)	6	
Polo IN.TEX. - Polo per l'innovazione tessile in Umbria		
	Se Stante	

Source: project partner survey Go&Learnet 2014

Table 2 provides data on the partnerships that have supported projects on the territory. In almost all the projects are present educational agencies/training agencies (76.9%) and private companies (97.4%). Organizations representing business were involved in less than an initiative on two. Less frequent is the partnership with local authorities (28.2%) and the world of non-profit (23.1%). Finally, the collaboration with public bodies at the national level amounted to 28.2% of cases. It is interesting to note that the forms of cooperation between the educational system and the production system occur mostly directly, without the need for mediation, or – if necessary - through social partners in order to get in touch with a larger number of companies without the need to make individual agreements. Quite low is the contribution of local authorities, as well as that of the third sector.

Table 2 – Partnership initiatives of collaboration between business and education system
(multiple responses)

Partnership	Answers		% by cases
	N	%	
Private firm	38	32,5	97,4
Local authorities	11	9,4	28,2
National authorities	10	8,5	25,6
Representative organizations	19	16,2	48,7
School and Universities	30	25,6	76,9
Non profit organizations and foundations	9	7,7	23,1
Total	117	100,0	300,0

Source: project partner survey Go&Learnet 2014

More than half of the interventions mapped involved secondary school students, the same percentage of cases refers to projects aimed at trainers and teachers (53.8%). A rather high percentage (41%) is also found for the initiatives involving leaders of institutions of education and training. In the sample, there is therefore a prevalence of projects aimed at the school system (if you include the 25.6% of initiatives that involved the guidance counselors. The other target groups are present in about one project out of four with regard to students of post secondary education and one in five projects for workers in transition (20.9%). the continuous training of workers, however, is the target of 17.9% of projects considered.

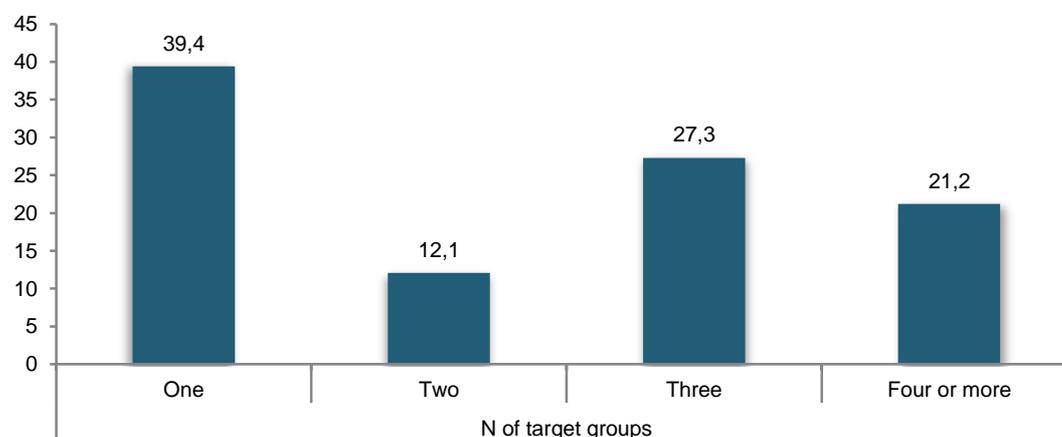
Table 3 – Target of the collaboration initiatives
(multiple responses)

Target	Responses		% by cases
	N	%	
Secondary students	21	21,4	53,8
Tertiary students	10	10,2	25,6
Workers in training (lifelong learning)	7	7,1	17,9
Workers in transition (unemployed)	8	8,2	20,5
Incoming workers (apprentices)	5	5,1	12,8
Directors of education and training institutions	16	16,3	41,0
Trainers/Teachers	21	21,4	53,8
Counsellors	10	10,2	25,6
Total	98	100,0	251,3

Source: project partner survey Go&Learnet 2014

If you look at the data considering the number of target groups (Figure 1) the initiatives mapped are mostly focused only on one group (39.4%), 12.1% involved two targets, while 27.3% of projects considered are addressed to three target groups; only one five involve more than three targets.

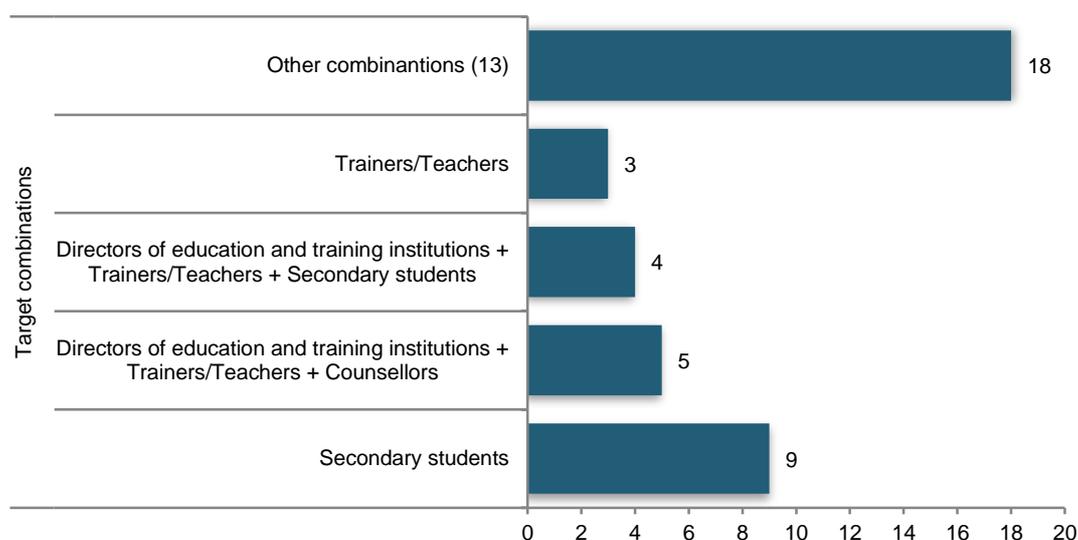
Figure 1 – Number of target groups (%)



Source: project partner survey Go&Learnet 2014

More detailed information can be obtained by considering the figure 2. 9 of 39 projects considered are aimed exclusively at students of secondary education. The most frequent combination of target groups is related to the different actors of the Education (school principals, teachers, trainers and counselors): 5 projects are aimed at this target. Right after there are the initiatives dedicated to students of secondary schools and professionals of the education and training: 4 of the 39 projects. Initiatives aimed exclusively at trainers/teachers are 3. Other 18 projects are related to 13 different combinations of target groups.

Figure 2 – Combinations of target groups (N)



Source: project partner survey Go&Learnet 2014

The data show that the initiatives of collaboration between educational system and companies are primarily aimed at young people, and only secondarily at training providers. Initiatives for working people (or for those who have to re-enter the labor market) are, however, few in number.

The latest information collected by the short form concerns the instruments and tools used. The form asked to distinguish the instruments in function of the target group; this is the reason why the following tables present data for each target.

In projects devoted to students (Table 4) in one case out of five students have been involved in the company visits, with 16.7%; there are, however, the open orientation days, followed by business testimonials in the classroom. According to these figures, it can be said that the main objective of the projects is to put students in contact with the labor market. The importance of experience, of “learning by watching” you could say, in the context of the practices of educational and vocational guidance, is widely recognized³. Visit a place of work, talking with workers, offers students an opportunity to reflect, take decisions and make more informed choices.

Always, among the activities aimed at young people, there are also, with 11.9%, those based on project work and workshops, internships and placements (10.7%). The practice of thematic seminars in the company (complementary with company

3. Cfr. M.L. Pombeni, *Orientamento scolastico e professionale. Un approccio socio-psicologico*, Il Mulino, Bologna, 1990.

visits) is taken only in 8.3% of the initiatives for students; the same percentage is found with regard to the work experiences.

Table 4 – Tools used in initiatives (target students)

Tools	Target		Total	
	Secondary students	Post secondary students	N	%
Guidance days	9	5	14	16,7
Testimonials Classroom representatives of companies	6	5	11	13,1
Internships	7	2	9	10,7
Company visits	13	4	17	20,2
Seminars in company	4	3	7	8,3
Work experiences	3	4	7	8,3
Project work and laboratory projects between schools / universities and businesses	5	5	10	11,9
Other	3	6	9	10,7
Totale	50	34	84	100,0

Source: project partner survey Go&Learnet 2014

Table 5 shows the tools used in the projects aimed at workers. The first important finding is that in 39% of the initiatives considered were provided tools not falling under the proposed classification. As mentioned above (methodology of Compendium), we decided to consider the tools that have in some way characteristics of guidance: in fact, the goal was to reconstruct the spectrum of methodological combinations used to support the practice of company visits. The data suggest that compared to the target of workers, guidance based on direct experience is not particularly popular, not surprisingly the orientation days, are one of the most used (19.5%). Then prevails a perspective that gives priority to guidance information over more structured and complex tools.

Table 5 – Tools used in initiatives (target workers)

Tools	Workers			Totale	
	in training (lifelong learning)	in transition (unemployed)	Incoming (apprentices)	N	%
Guidance days	3	3	2	8	19,5
Testimonials Classroom representatives of companies	1	1	1	3	7,3
Internships		1		1	2,4
Company visits			1	1	2,4
Seminars in company	1	1	1	3	7,3
Work experiences	1	1	2	4	9,8
Project work and laboratory projects between schools / universities and businesses	2	2	1	5	12,2
Other	5	5	6	16	39,0
Totale	13	14	14	41	100,0

Source: project partner survey Go&Learnet 2014

The instruments adopted within initiatives devoted to teachers and trainers (Table 6) are very heterogeneous. Company visits prevail together with laboratories / project work with companies (17.9%), followed by the orientation open days (16.3%), while the testimonials in the classroom are provided in 7.3% of the projects considered.

Table 6 – Tools used in the initiatives (target operators of the education and training system)

Tools	Operators of the education and training system				Totale
	Directors of education and training institutions	Trainers/ Teachers	Counsellors		
	N	N	N	N %	
Guidance days	6	7	7	20	16,3
Testimonials Classroom representatives of companies	4	8	3	15	12,2
Internships	2	3	4	9	7,3
Company visits	5	12	5	22	17,9
Seminars in company	1	5	1	7	5,7
Work experiences	2	6	3	11	8,9
Project work and laboratory projects between schools / universities and businesses	5	12	5	22	17,9
Other	5	5	7	17	13,8
Total	30	58	35	123	100,0

Source: project partner survey Go&Learnet 2014

3 TERRITORIAL EXPERIENCES

The following sections are presented the initiatives, described with the second survey form provided for in the research design (Long Form) For each of the territories involved in Go&Learnet will be described three experiences (in some cases four) which have been considered appropriate by the regional partners, then (section 4 and 5) the results of the mapping will be compared to highlight common elements and differences.

3.1 FRIULI VENEZIA GIULIA REGION

3.1.1 Seminari in azienda in apprendistato FVG

Seminars in company ‘ idea was born in apprenticeship FVG from a original proposal of EnAIP, a training organization of the ACLI (Christian Associations of Italian Workers) shared with the President of the Young Entrepreneurs Assindustria Udine, to promote awareness of business from the inside. The aim is to provide trainees, tutors and teachers the opportunity to learn about a company from within, discovering the dynamics, mechanisms and trends in the local market. The project aims to stimulate the dialogue between the business system and the world of education through meetings and exchange of experience between experts in the company and trainers, all with the support of facilitators, educational-methodological. Finally, the project promotes technical seminars, professionally managed company, made with a model teaching and learning centered on the experiential dimension.

3.1.2. Progetto Stars: Scuola Territorio Azienda Riforma Scolastica

Body creator and promoter of the initiative is the Youth Group Unindustria Pordenone in collaboration with interested schools and with the representatives of the Regional School. The main objective is to promote integration between the systems of education / training and the world of production and work.

The project aims to create an education and training system capable of building the professional skills of the future. The levers of intervention Stars are four: (i) raising the cultural level of the base; (li) enhanced coordination between educational institutions; (lii) the integration of the company in the training process and finally (iv) the link to the application. The beneficiaries of the initiative are the leaders of institutions of education and training, trainers and teachers. Stars includes company visits and schools in order to promote the exchange of experiences. The project also

offers school students the opportunity to be placed in a path of school-work which also includes participation in a design competition.

3.1.3 Tutor FVG

The project aims to increase the success of the initiatives of combined school / work through training projects aimed at improving the skills of teachers in vocational and technical. The training concerns, first, the planning and programming of the paths of alternation. The training provided for the transfer of both theoretical elements, both technical and practical tools. Teachers are involved in a training program of 20 hours which will include a company visit. At the end of the training it is also supported a skills assessment test. These courses are held in Udine, Pordenone and Trieste.

3.2 MARCHE REGION

3.2.1 Apprendistato Marche

The regulations on apprenticeship provides a close link between business and training providers. In the Marche region, including initiatives to support apprenticeships are provided company visits aimed at trainers. Educators can take advantage of a mentoring service which also provides the opportunity to visit companies. The trainer through interviews with entrepreneurs and business mentors have the opportunity to understand and investigate the training needs of the company that sends its apprentices in training. The intermediate figure of the company tutor, as well as fulfilling the role of guardian within the period of training on the job, also has the role of helping the reworking of the visit by the trainer. The network of mentors posted in the companies allows reprogramming of the content and calendars training provided in order to have a satisfactory matching with the expectations of the company.

3.2.2 Job Day: giornata del lavoro e del fare impresa

Each year the Chamber network Marche conduct a Job Day, the day of work and doing business. The initiative is inspired by the experiences of job shadowing (job shadow) born in the United States. This method - used for years with functions of orientation to the world of work - allows students to observe in direct what might be their future profession and is exercised over an ordinary working day. The Job Day lasts a minimum of four hours and can go up to a maximum of eight. The student is involved in a normal working day, experiencing first hand every moment, customs and contingencies that characterize it. The student follows the opening of his mentor observing, asking for information and drawing his own day through the guidance of the statements drawn up for the occasion. While not an explicitly targeted at trainers, the Day Job presents the interest of both the reworking of experiential visit on the farm, and the fact that following the visit there will be a time for reflection on the fact . In this respect it is important the intermediary role played by the tutor: while not participating directly in the job shadowing enters the process of reworking the visit, guiding and supporting students.

3.2.3 Laboratorio Territoriale

Territorial Laboratory aims to support and enrich the offer of career guidance and alternation for high school students and university students. The project aims also to updating and training of those employed. The project is part of the routes of school-

work, required for technical and vocational schools, optional for high schools. The alternation lasts three weeks and is aimed at children of the fourth and fifth year of high school. Companies in which the guys play the way are usually the same province the establishment of provenance. In addition to courses in the company it is provided for side events such as meetings, seminars and training workshops, aimed primarily at strengthening the entrepreneurial skills of the boys. In the course of these efforts is planned also the involvement of the teaching staff. The relevance of the project is in the territorial partnership. The widespread network of local companies engaged in hosting students can focus the most of the experience, identifying for different profiles of students particularly well placed.

3.3 UMBRIA REGION

3.3.1 A scuola d'impresa

The project is an initiative promoted by the Umbria searches, aimed at promoting entrepreneurship in schools, through the definition of experimental measures aimed at supporting integrated syllabuses. "A business school" is a training program based on the role-playing game in which the students of secondary schools in several European cities, take his clothes and entrepreneur, with the technical and organizational support of a network of experts, a plan 'enterprise starting from their own business idea. The main objective is the improvement of knowledge, skills and entrepreneurial skills: know the environment from local socio-economic development of the business idea. Participants are encouraged to use their creativity, working as a team and being confronted with students from other European countries. The beneficiaries of this project are both students, and teachers latter are involved in the activities of information and guidance prior to the conduct of business simulation.

3.3.2 Impresa, scuola, territorio

The promoters of the initiative are the CNA of Perugia, in collaboration with Confartigianato, Confcommercio, Confesercenti and Chamber of Commerce of Perugia. The main purpose of the intervention was to bring the world of education to work. The project allowed a direct comparison of some important Umbrian entrepreneurs and students of secondary level. The goal was to explain to the kids the operation of a business and what it means, in practice, be an entrepreneur. In addition he tried to focus on the peculiarities of the local economy and labor market. In 2013 there have been numerous meetings of orientation. These events have been realized through mornings issues that have provided for the intervention of an expert on the local economy and of some entrepreneurs. The entrepreneur was interviewed by the students, with the support of a journalist. The journalist made available to students for a day of preliminary work in order to schedule an interview with the children, define the questions to ask to learn more about the economic sectors of reference. In addition, we were made a few days of educational visit to local businesses, to learn first hand about the operation of a business, but also to discover unknown works or size of new professions notes. In all activities of the project was also attended by the teachers of the children.

3.3.3 Se stante

The project, funded by the Umbria region, was established in response to needs arising from the socio-economic context. It aims to facilitate the selection of the boys in the transition between school and work. Participants are guaranteed, in fact, an immersion into the world of work to find the most suitable course of study, taking into

account their interests and their aptitudes. The initiative aimed to answer guidance needs of young people who have to manage moments of transition. The route guidance included four stages: (i) two hours reception aimed to raise the expectations of the participants, (ii) 8 hours of orientation training to understand the attitudes and interests of the children involved. (iii) 5 hours of experiential laboratory in which students, under the guidance of a master craftsman, carry a small artistic production and, in so doing, reflect on the balance between creativity and method and especially on how today the artisan must accompany his artistic skills with new skills linked to the promotion and sale. 5 more hours to visit businesses, (iv) Finally 4 hours to draw conclusions, to share together the results of work experience.

3.4 BOLOGNA DISTRICT

3.4.1 Conoscere le imprese

The project was promoted and produced by Fondazione Aldini Valeriani with the aim of reducing the gap between the technical school and the world of production. In this regard, while acknowledging the need to update school curricula and improve the experiences of alternation, it was decided to intervene on the side of the update of the teachers of technological developments of the companies. The main objective of the project was then update teachers with respect to the latest technological developments of the companies, innovations that involve skills and knowledge in new entry for young people entering the labor market. In concrete it has been realized a cycle of free seminars with the cooperation of companies with the aim of offering a broad overview of the local production system to teachers of technical institutes. The series of seminars has affected 5 productive sectors (mechanical, electronic-electrical engineering, business organization, mechatronics for automation, electrical systems for automation). The project involved the construction of 11 training seminars in the company for a period of 3 hours. Each seminar followed a scan from the description production process came the identification of innovative content for teaching.

3.4.2 Rilancio dell'educazione tecnica

The project is part of a wider initiative related to the path of the establishment of the Metropolitan City of Bologna, a process of participatory planning carried out as part of the Metropolitan Strategic Plan (psm.bologna.it) which led to identify 66 projects help revive Bologna and its province as international excellence in work and manufacturing, culture and creativity, quality of life and welfare. Among the priorities of the intervention it has been identified the revival of manufacturing and creative industries, to promote innovative growth of the traditional industry. Within this initiative, the project "The relaunch of technical education" aims to enhance the culture technique starting from the investment in education and training, acting on the structure and content of the entire chain of education and technical training: the paths of education and technical and vocational education and training, apprenticeship, higher technical Education and training "high" and the university. The project is being launched and several stages. (I) The formal creation of a network of technical institutes. (II) The mapping of the features of the institutions involved with respect to the connection with the business realities and other activities relevant to the quality of educational provision. (III) The computerization of the information collected and published on the website "The school I want," in order to facilitate their use outside by students, families, businesses. (IV) Identification of organizational actions, curriculum, teaching, already known or innovative. (V) support the creation of stabilization paths of good practices in schools.

3.4.3 Toyota Technical Education Program (T-Tep)

The T-TEP in Italy began in 1995 with the signing of an agreement between Toyota Motor Italy, the Ministry of Education and the State Professional Institute for Industry and Crafts of Monza. Currently, the project is active in 19 schools distributed in 16 Italian regions. Main objective of the course is to graduate students with certified skills relating to ordinary and extraordinary maintenance of the vehicle: the professional out of the training is called "acceptor workshop". The program T-toe has a cut centered educational on automotive, but also leaves room to issues relating to marine engines. The recipients are mainly students of vocational schools, but the training program has a significant relief for the trainers because the update of study materials goes hand in hand with the technological evolution of Toyota vehicles. Within the project, the planning of the training courses is related to the opportunity to be part of Toyota to present to the teachers of the T-TEP technological innovations and the modifications made in the technical and operational. Therefore of particular interest is the meeting between company representatives and teachers: this phase in fact allows the periodic re-definition and integration of the "portfolio of competences", that is, the booklet that accompanies the student during the training until the acquisition of certification final.

3.5 BELGIUM

3.5.1 Wuytensdag

The project was created by a group of university researchers construction sciences. The two scholars to spread among their colleagues the most current knowledge with respect to the construction techniques for saving energy, in early 2014, have organized training days. The initiative was subsequently supported by the city of Ghent that required to expand the lead, extending it to the teachers of the vocational training system. The project Wuytensdag was then inserted within the activities of the VDAB Hamme, a training institution specialized in training related to the construction industry. The training days include theory sessions and practical experience within construction sites, educational sites within the institution. The theoretical part lasts two hours and is performed by an external speaker; in the afternoon, however, participants can apply the concepts learned in a real building site. During the practical exercises Teachers are confronted with unforeseen difficulties and need to find practical solutions, coming to find out what are the "tricks" to get good results.

3.5.2 LED projects

As part of an initiative to provide services to small and medium-sized enterprises, the Flemish Government has decided to allocate 2.5 million euro for the establishment of a network of companies and universities called LED. The project was first activated in the province of West Flanders to then be expanded to four other Flemish provinces. LED allows clusters of universities and companies to set up service centers and sharing experiences. The goal of the centers is to spread the culture of knowledge and innovation. The project is aimed primarily at companies because small companies often lack the resources to fund research and development. They are part of the provincial networks for innovation also higher education institutions and employers' organizations. Through cooperation between educational institutions (secondary and tertiary) and the world of production, every province has funded only one project. The evaluation criteria of design quality are 4: enhancement and innovation, social relevance, scientific and economic efficiency of the organizational

structure, accessibility. The service offered by the centers is free LEDs, they are currently 17 teams LED, operating in many areas, the choice of the productive sectors has taken place with a view to complementarity, trying to activate networks in areas in which it was possible to develop the productive synergies and operational.

3.5.3 Cisco Networking Academy

Cisco, a world leader in the field of ICT, promoting a platform update and transfer of advanced technology capabilities. The goal is to transfer to the operators of the system of education and training innovations that are followed in the field of information technology. The Networking Academy uses a model of public-private partnerships with the goal of creating "the biggest classroom in the world." The project partners are, in fact, educational institutions, nonprofit organizations, non-governmental organizations that provide space, classrooms, computer labs and equipment qualified instructors. Cisco, however, provides curricula online, virtual learning tools, educational support, teacher training and professional development opportunities for instructors. Teachers, after passing an examination, are allowed to transmit new knowledge and skills to their students. Each year is also instructor organized a nationwide event. The event is functional to better define the themes to be developed during the event for students. This second event of the Cisco Networking Academy aims to provide students with useful elements for entry-level jobs in the ICT sector, offering additional training and certifications recognized globally.

3.6 GERMANY

3.6.1 Wessenberg School Constance

The project builds on an initiative of the headteacher Wessenberg Constance. The idea is very simple: to create the annual assembly of organization with the collaboration of a company in the territory in order to connect the school curriculum with the needs of the local production. The company's choice of school is, from time to time is found for the firm characteristics (type of product, market positioning, production model) is more functional updating of teaching. The Wessenberg is a school with a vocational direction for one of the most relevant and apprenticeship, which is the period of experience in the company that students need to do to get their specialization. The collaboration with the companies on this front is particularly valuable because in the course of the annual meeting will have the opportunity to discuss the real problems that arise in the course of apprenticeship schemes. From a practical standpoint, the annual meeting is divided into several phases, culminating in the discussion at the meeting. Those most affected are the teachers in the first part of the day have the opportunity to visit the company that hosts the meeting. Accompanied by the entrepreneur or other corporate figures teachers can learn about the production plant, testing the type of products, machinery and procedures thus acquiring information on the needs for professional company. The meeting is also open to other local companies. This choice has a reason twofold: on the one hand, companies have the opportunity to meet with the production strategies of its competitors, the other during the meeting may express their views on the theme of apprenticeship.

3.6.2 Vocational School Centre Stockach

The initiative promoted by the Institute of Vocational Training of Stockach is based on a particular form of learning by doing, implemented in collaboration with local

companies. Students are proposed to manage in a totally independent company presentations as part of a career day, an orientation meeting in which companies present themselves to potential employees. Unlike similar experiences, young people do not have purely executive positions (for example, to distribute materials or attend the stands), but have the ability to independently manage the entire process, from making contact with the company, the definition of content and program of the day, from financial planning to the practical management of the career day. As a rule, the implementation of these projects does not need financial resources, however, if students provide for the costs they also have the task of providing the forms of funding, such as donations. In addition, during the career day students also have the opportunity to give a lecture for adults on topics of interest of the workers (in one of the last editions of the project, the topic was the processing of personal data). This approach has different advantages for both students and for companies. First, the company has the opportunity to evaluate the skills of young people in a new way, that is testing in a real working environment potential applicants to an apprenticeship. Students instead have the opportunity to know the company from within and in depth before starting the apprenticeship so get a first impression of what the business needs are.

3.6.3 Zeppelin Vocational School Constance

The training institution Zeppelin Constance is involved in several projects in cooperation with ICT companies. The collaboration is the ability for students and teachers of the school to follow certain periods of in-company training, in three different periods of the year. The choice of dates and topics is the company, which also has the option to select students with the most suitable characteristics. Specifically, the company provides the school a list of courses that intends to activate, that information is circulated in the classroom so that students can run freely, after the company has the option to select the candidates (on average participate in courses about half of the students in each class). Currently, 16 projects are active (with a variable number of students involved). The productive sectors involved are different from web-design to interactive sensory pathways. The collaboration is realized with the most relevant Seitenbau, a software and web services. In general, the characteristics of business education offered to students are: the specialization of the topics and the presence of qualified teachers working in the company. In operating terms, the courses are held at the headquarters of the company at a rate of one or two days a week; in the days of in-company training the students are not required to attend classes in the school curriculum. Teachers also have the opportunity to attend training courses in the company. Upon completion of training the company usually it offers students the opportunity to complete the training with internships and project work specific. An interesting element of the initiative is that the costs of the courses are covered by the company itself, without any load on students and school: it is the Federal Government to support companies by offering them a financial contribution to cover the costs incurred.

3.7 SLOVENIA

3.7.1 Slovene Centre for Training Companies

Slovene Centre for Training Companies is a service that connects all practice firms Slovene⁴ offering them the necessary support for the operation. The initiative has

4. A practice enterprise or "simulated enterprise" is a training facility that typically simulates an import-export. The model of enterprise practice is applied in the training of students of business schools and professional insertion of

been active since September 2003, at the secondary school in Celje, with the task of promoting the development of learning companies through the organization of training-trainers. Since 2007, a reform of the school curriculum has incorporated the model of learning companies within the modules of business administration, as was already the case in Austria. Following this reform, the center began to be financed with resources of the Ministry of Education of Slovenia. The center also acts to support companies 'real', providing a simulation of the different stages of the business life: company registration, office of labor, social security and tax practices. Once a year it organized a workshop for Mentors of learning companies within which are discussed practical elements to bring within the simulations with students. The seminar is animated by the presence of guests from real companies that tell the practical aspects of business life. All teachers in the center are obliged to participate in the seminars.

3.7.2 PUD - Practical training with work

The project is based on the opportunity offered to entrepreneurs to obtain financing for the construction of training in the company. In 2011 the financing structure was changed, introducing to schools the opportunity to participate as promoters of educational projects and transforming businesses in training providers. In this new arrangement the companies have a duty to provide practical training on the job (practical training with work - PUD). The financial support of the initiative is provided by the Ministry of Economy within the measures for the development of entrepreneurship and competitiveness required by 2007-2013. Implementation of the project cooperation between schools and businesses is very narrow: the school in accordance with their training program offers students a practical training in a company. Students, in turn, are inserted into a real work process: the choice is based on a written opinion issued by a mentor. During the training period the student is subjected to a test, functional to gather information on the progress made. Employers are also required to monitor the proper conduct of the internship. At the end of the training period has prepared a report of the learning outcome of the placement, the final evaluation is included in the judgment of the school year-end under the "practical". For boys the last year there is a final exam that can be done individually or collectively is at the school, is the company's headquarters.

3.8 TURKEY

3.8.1 University-Business World Relations Application and Research Center

The Istanbul Chamber of Commerce in collaboration with the local university business in 2012 has been a research center devoted to trade relations with the aim of strengthening the competitiveness of Turkish companies through meetings, conferences, studies and research on key issues of the national economy and internationally. The transfer to the companies of the research and studies carried out within the university is considered a vector of development crucial for 335mila companies registered with the chamber of commerce. In addition to those typical of the study and research activities of the center include the support to companies to the needs of training, skills upgrading and certification training. In order to increase the quality of education and training is expected to involve the students in the University of ongoing trials in companies.

the unemployed and people with disabilities. The model is based on learning by doing: even if it is not used money or real products, the acquisition of business skills is through simulation of real business processes and procedures such as the management of orders, invoices and customs documents.

3.8.2 Human Resources Development through Vocational Education and Training

Human Resources Development through Vocational Education and Training Project (HRD-VET) is a project of the Ministry of Education and the Council for Higher Education, co-financed with funds from the EU Pre-Accession Assistance, which had the objective of strengthen the system of vocational education. The initiative has affected eight provinces and many sectors of the economy in the industrial and tourism activities planned were made as part of 29 educational institutions (secondary technical schools, centers of post-secondary education centers and also for the 'non-formal education). In addition to the strengthening of human capital working in small and medium-sized enterprises, HRD-VET, the project aimed to modernize the system of vocational training turkish, orienting education towards the needs of the labor market. In addition to research and information, a substantial part of the project was dedicated to the development of experimental educational modules (one for each economic sector) for students of the five years of technical schools. Also significant was the attention that HRD-VET dedicated to improving the capacity and skills of teaching staff. In this regard we have been training and updating. It is relevant that these shares were also designed based on the results derived from site visits in other EU member states. The visits were, in fact, made in order to understand the functioning of the institutions of vocational training and getting in touch with best practices.

3.8.3 Konya Vocational Training Courses

KOMEK is the name of the centers of vocational education within the Metropolitan Municipality of Konya. These centers dealing with adult education and overall it's 32 facilities that offer training in 164 different branches (from personal development to job search). Within the KOMEK, every year is organized a meeting planning and coordination between the different entities active in the field of lifelong learning: NGOs, companies, universities, the press. This appointment is the main opportunity for professionals to meet and update their professional practices by comparison with colleagues.

4 A COMPARISON BETWEEN THE DIFFERENT REGIONAL MODELS

After having presented the experiences detected in the eight areas covered by the mapping, this section will provide information based on a comparative analysis of the information collected. It should be observed that even the simple reading of the summary shows a characteristic very clear. At present the experiences of training and upgrading of teachers through experiential and practical methods are not spread evenly: there are cases of extreme importance as well as cases in which more traditional training models are predominant. The model proposed by the project company visit to Go&Learn does not perfectly match with initiatives in other Italian regions or abroad. If you enlarge the perspective there are rather different forms of interaction between education and business, some of which provide interesting methodological solutions. It is to be noted that a substantial part of the experiences analyzed is aimed at students, but this is not to say that as experienced in relation to this target cannot be positively adapted in adult education or re training projects. It is evident that the target distinctions have a weight in the comparison between the different territorial models. For this reason the analysis will be careful limited to the relevant dynamics.

The following analysis is divided into two main topics: the organizational model and operational strategies. In the closing section there are considerations for the transfer of the model Go&Learn.

4.1 ORGANIZATIONAL MODEL

Initiatives mapped in the eight territories present, almost all, a high design complexity. Except for the three cases reported in Germany (structured in quite simple way), the articulation of the initiatives has several stages. It must be stressed that there are two main categories: on the one hand, the projects focused on the educational dimension and retraining; on the other projects of socio-economic development, improving the performance of the labor market even through investments in human capital, implemented by training tools.

The former are promoted mostly by training agencies on public or entrepreneurial initiative in partnership with companies in order to offer a better service to their users, typically students. The projects in the second category are promoted and managed at a higher level, by public entities such as regions, ministries or other technical structures nationwide. In this case, the collaboration between training centers and companies takes place within a broader framework, which provides besides training, other activities. The projects of socio-economic development, as well as those focused on the functioning of the labor market, are therefore characterized by interventions of study and research, information and awareness, networking. These differences also have an impact on the type of partnership: wider and more heterogeneous in local development projects, small and focused on the binomial school-enterprise in training projects.

A special mention should be made to the type of company involved. It is interesting to note that a substantial part of the initiatives mapped provides sharing of SMEs, only two cases have involved multinational companies: Toyota and Cisco. In these two cases the companies are the promoters of training: the reason is easy to guess. Large companies have need for specialized workforce, with a technical education who can act on very complex manufacturing processes, standardized and technologically advanced.

Another important organizational element is the role of mediators. Schools and businesses are actually different because they have working mechanisms and operating logics very distant. This is the reason why they often involve third parties with the tasks of intermediation and facilitation. Representative organizations of companies, for example, often assume the burden of connecting the network of companies with training institutions. In most cases, they are not organizations representing companies operating in a specific economic sector, but those that collect heterogeneous firms, with the same structural characteristics (small companies) or belonging to the same macro-economic sector (trade, manufacturing, tourism). There are only few agreements promoted or supported by organizations representing specific productive sectors. Other entities that operate with an intermediary role are Local Bodies. The role of public authorities is central especially when the projects are financed and supported by the European Union.

4.2 OPERATING STRATEGIES

In examining the operational strategies it is necessary to distinguish two areas of focus: the target of interventions and methodologies.

4.2.1 Target

As said before, the local experiences have not considered only a unique target of beneficiaries. Projects aimed at secondary school students prevail in numbers, especially those devoted to technical and vocational training. A second segment of beneficiaries is represented by university students. The training projects for young people often, as well as a practical function, also serve to provide guidance. It is noteworthy that in some cases, the typical formula of guidance information (events of a single day in which you receive information on options for training and work out of a school curriculum) is combined with direct and full immersion experience, configuring a kind of self-guidance based on experience. The format of the day job or open days is considered inadequate because shallow and superficial. It is rather preferable in direct confrontation with the workplace, including through the contribution of witnesses: the important aspect is that the contact is as direct as possible, with real people and contexts.

A smaller group of initiatives is also aimed at teachers and trainers. In the first instance it should be noted that these projects are often included in broader initiatives also for students. At present there are not widespread actions targeting explicitly and exclusively at teachers and trainers.

4.2.2 Methodologies

The spectrum of methods and tools used in the experiences of collaboration between schools and businesses is probably the most interesting element of the analysis. Although the projects are very heterogeneous and with a wide variety of approaches, however, they have some recurring elements. Before considering the merits, it should be noted that although the methods and tools have been tested mainly in classrooms, the fact remains that their application for adult education can be equally profitable. There is also to say that the tools of experiential education, a hallmark of much of mapped projects, seem to be particularly suitable to be applied in a situation of education-trainers like that prefigured by Go&Learnet. Indeed we must not forget that the professional development of teachers and trainers faces with problems of professional motivation, impatience or simple being unaccustomed against setting educational standards. In other words, encourage trainers professional updating can be very complex if you do not take the measures aimed to engage and stimulate individuals. In this respect, practical experience, contact with situations where the application of knowledge and skills is relevant, can represent a positive reinforcement in motivation and in effectiveness of training.

a. Contact with the frontiers of the discipline

When learning as well as teaching a subject in a school environment, it is not always possible to keep updated, a practice that in times of accelerated progress as the current ones is crucial. This reasoning is even more valid when it comes to technical and scientific disciplines: technological progress is so fast that from year to year the frontiers of knowledge can be radically changed. A company on the contrary has the ability to keep pace with innovations (if not to contribute in their own innovation) a productive life. So those planning experiences that allow teachers and students to make contact with the frontiers of their own discipline represent a substantial value. In the company you can learn new ways of working, experiment equipment and advanced procedures, evaluate product innovations; all experiences that allow the individual (student or teacher who is) to reformulate the relationship with the subject of his study, find motivation and interest in teaching and learning.

b. Interaction with experts in other fields

The specialized training is ambivalent: on the one hand implies depth, on the other the risk is to lose the overall perspective. Specialized learning should be combined with moments where you experience the whole chain of application of knowledge. A business context can be an opportunity to see concretely what are the knowledge processes and skills employed in a given production. Under this profile, get in touch with those that deal with other phases of production compared to that which you already have experience, is an important educational opportunity: the confrontation with experts from other disciplines helps put into context what you are studying or teaching, including the purpose and the potential applications of the knowledge that you are acquiring or transferring.

c. Simulation work

That simulation is one of the elements that recurs across the board in different experiences mapped. This is certainly not a radical innovation in training, but the various applications found in the territories allow to highlight some interesting developments of this principle, almost contiguous to the concept of gamification. Learning factories, role games, contests and other forms of simulation are very effective to drop in their application context knowledge. These instruments have a significant value both for students and trainers. In both instances, the practical application of knowledge and skills in a context in which the error is not decisive, stimulates to experiment, to find new solutions. The simulation has thus the advantage of encouraging creative thinking. In some experiences, such as "A business school" made in the Umbria region (see. 3.3.1) or in a more limited training enterprises experienced in Slovenia (see. 3.7.1), it would be interesting to verify how the simulation can be emphasized even more by introducing explicit gamification elements: the creation of a contest for business ideas is precisely in this direction because it fits the typical elements of the game as the ranking and reward. Similarly, a business simulator acts in a logic like the so-called serious games, the family of educational games in which flight simulators are the most known.

d. Close and full immersion Experiences

The training on the job has the advantage of offering direct experience of working practices: learning by doing allows to deal with the application of knowledge, engines and practical implications, obstacles, solutions and extreme situations. The element characterizing the different projects examined is the preference for situations in which the interaction between trainer and trainee is very narrow. The case study is represented by the project Job Day held in the Marche region (see. 3.2.2). Through the instrument of job shadowing, students have the opportunity to live, if only for a day, immersed in a work situation, being able to observe what is really of interest for the profession. It is a 360 degree experience wherein in addition to the routine work you come into contact with the corporate culture as a whole because there is the possibility to share moments unrelated to work. The student can also interact with the employee acquiring information even on the most minute aspects of the profession.

e. Mentoring and creating a relationship of trust

Some experiences (such as projects of the Marche region) provide a mentoring function, namely the creation of a direct and continuous relationship, one by one, between a person with more experience (senior) and one with less experience (junior). The purpose of this activity is the development of work and social skills. The advantage of these practices is that in addition to guided learning and the transmission of experience between mentor and trainee also another resource can be activate. Confidence in themselves and in others is a fundamental element in the workplace: the student through the relationship with his/her mentor is learning to trust their colleagues and those who have more experience, but also to rely on their own skills taking into account the judgments of others and reducing the fear of making mistakes.

f. Systematize the experience ex post

The last common trait among the projects included in the compendium is the focus on the follow-up training experience. In some initiatives, such as projects for apprentices made in Friuli Venezia Giulia, Umbria and Marche, it is expected to being discussed, often facilitated by a specific figure, designed to systematize the training experience. This option is especially useful because it gives the possibility to assess whether expectations have been fulfilled and how much the training experience has influenced the course of study, the approach to the job market or the professional updating.⁵

4.3 HIGHLIGHTS AND INSTRUCTION TO TRANSFER GO&LEARN

The realization of the compendium gives the following instructions:

- a. Center the design and the local partnership on existing networks: especially if you choose to involve small and medium-sized enterprises is essential to go through the existing networks to have the possibility of widespread communication. The interaction with the business networks is more complex because it involves preliminary agreements and a preparation time higher than direct contacts with individual companies, but ensures greater ability to activate the area and allows you to program in a more structured catalog of company visits.
- b. Emphasize the experiential aspect of company visits: the visit is an experience, a moment in the professional life of an individual can be in some cases "enlightening". However, it is advisable to emphasize the experiential aspect not limited to a simple company visit, but by creating moments of real interaction between teachers / trainers and professionals. Having the opportunity to observe, discuss, exchange opinions is an element that can increase the quality and impact (cognitive, emotional and motivational) of the visit.
- c. Involving businesses with advanced and innovative manufacturing: the visit in the company should be made in particularly progressive firms in order to bring together the teaching staff with experts working on innovation. Contact with cutting-edge productions stimulates the desire to upgrade and the ability to self-reflection on their own teaching methods. Ultimately it can have a positive feedback on students involvement.

5. Gamification means use of elements borrowed from games and game design techniques in contexts outside the games.

- d. Empowering figures of support and assistance: those in charge of the accompaniment and support during the visit must not only have an organizational function and logistics, but it is desirable to also take charge of managing the visit in terms of educational and training, urging the participants, collecting feedback and providing where possible to formulate corrective and improvement measures of the learning experience.
- e. Enhance the follow-up phase of the visit: the model Go&Learn already foresees a phase of reflection on the visit, it seems important to make the most of this time giving participants time and space to discuss the experience. In particular, it may want to suggest to devote a part of the discussion on the method by which you can transfer what we have seen in the company within a traditional educational context.