

PROJECT VET-EDS

OUTCOME 5

COMPENDIUM of NATIONAL and REGIONAL CASE STUDIES

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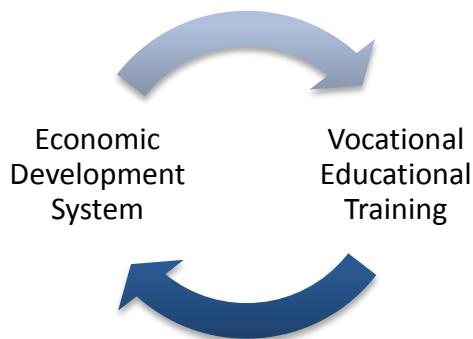
General introduction

In the following pages will be presented the structure of this document in order to explain the main contents of the *Synthesis Compendium of Case Studies*.

The compendium is a collection of all the Case Studies selected and analysed by the Partners of the project during the whole duration of it, in two stages: in the first stage of the project the focus of the analysis was the regional/local level, and consequently also the Case Studies were sought and identified at this territorial level. During the second stage the perspective was the National level: the partners had the possibility to explore also a different country for the choice of the Case Study to describe.

Each Case Study is a mini-report of 10 - 12 pages that allows subject experts (forecasters, etc.) and labor market analysis/practitioners to be able to understand the rationale, implications, reproducibility and day-to-day practices of the chosen examples.

The identification of the Case Studies was always made on the base of one criterion: the coherence with the goal of the project, i.e. the suggestion – by the production of the final Toolkit – of effective ways to connect the VET and the Economic Development System to generate a strong link in a virtuous cycle, also understanding the differing ways that labour market and skills intelligence and measures has been used. Other regions and countries could adopt these practical methods and approaches to help the better linking VET policy to economic development strategy.

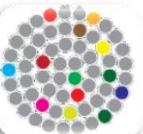


At the beginning of the project, after the selection of the Good Practices at regional level, 5 main topics were identified to help the classification:

1. Forecasting
2. Matching the education with employers' needs
3. Sector Specific Training
4. Integration of social excluded/immigrants into the labour market
5. Monitoring & Analysis

The following table shows how the Case Studies were categorized:



TOPIC	Country	Case Studies
<i>Regional/Local Level</i>		
 Forecasting	SE	The Forecast on Education and Training in the County of Skåne (UAPS)
 Matching the education with employers' needs	SE	Teknikcollege Skåne
	NL	MyTec Noorderpoort
	ES	Agreement between the regional authorities, training centers and the University of the Basque Country to support action plans in Gipuzkoa' SMEs on a vulnerable situation
 Sector Specific Training	DE	The "Bildungswerk" as intermediary VET actor in the logistics sector in Hesse
	UK	Local Sectoral Skills Analysis
	UK	Hinckley Nuclear Plant Construction (and associated use of LMI)
 Integration of social excluded/immigrants into the labour market	DE	Labor market integration as part of the General Concept for Securing Skilled Workers in Hesse. A regional approach;
	NL	Working in Germany; a cross-border partnership of the Netherlands and Germany
 Monitoring & Analysis	IT	WollyBi
	CZ	The Observatory of competitiveness and Labour Market in the Moravia-Silesian Region
	CZ	Regional Innovation Strategy – Ústecký region
<i>National Level</i>		
 Forecasting	SE	The occupational compass – a way of showing results
	UK	Scottish Skills Planning Model
 Monitoring & Analysis	CZ	Infoabsolvent (Information system on the employment situation of school leavers)
	IT	MySkillsMyFuture
 Integration of social excluded/immigrants into the labour market	DE	The Recognition Act in Germany – Integrating Foreign Professionals in the German Labour Market
	ES	Work Integration Social Enterprises (WISEs)
	NL	Municipal Companies for Work and Income

Aside from the differentiation between territorial levels, here's the complete list:



TOPIC	COUNTRY	Case Studies
 <i>Forecasting</i>		The Forecast on Education and Training in the County of Skåne (UAPS)
		The occupational compass – a way of showing results
		Scottish Skills Planning Model
 <i>Matching the education with employers' needs</i>		Teknikcollege Skåne
		MyTec Noorderpoort
		Agreement between the regional authorities, training centers and the University of the Basque Country to support action plans in Gipuzkoa' SMEs on a vulnerable situation
 <i>Sector Specific Training</i>		The "Bildungswerk" as intermediary VET actor in the logistics sector in Hesse
		Local Sectoral Skills Analysis
		Hinckley Nuclear Plant Construction (and associated use of LMI)
 <i>Integration of social excluded/immigrants into the labour market</i>		Labor market integration as part of the General Concept for Securing Skilled Workers in Hesse. A regional approach;
		The Recognition Act in Germany – Integrating Foreign Professionals in the German Labour Market
		Working in Germany; a cross-border partnership of the Netherlands and Germany
		Municipal Companies for Work and Income
		Work Integration Social Enterprises (WISEs)
 <i>Monitoring & Analysis</i>		WollyBi
		MySkillsMyFuture
		Infoabsolvent (Information system on the employment situation of school leavers)
		The Observatory of competitiveness and Labour Market in the Moravia-Silesian Region
		Regional Innovation Strategy – Ústecký region

One of the most interesting aspects of the Case Studies is the description of both Impact and Replicability: after the consideration about the interest of the practise in question, this will allow the stakeholders/experts of the Labour market to evaluate if it is transferable (totally or partially) and eventually how to do to replicate it.

Following a brief summary of replicability potential of the case studies presented.



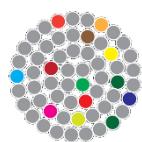
TOPIC	Case Studies	
 <i>Forecasting</i>	The Forecast on Education and Training in the County of Skåne (UAPS)	<ul style="list-style-type: none">• It was not realized until a formal directive was given to all the public administrations at the regional level to establish it from the highest political level.• REPLICABILITY: possible with public support
	The occupational compass – a way of showing results	<ul style="list-style-type: none">• REPLICABILITY: it depends on how other countries are organized around labour market and education systems today.
	Scottish Skills Planning Model	<ul style="list-style-type: none">• The drivers are similar to those found within most European regions• REPLICABILITY: It could easily transfer to the drivers for most European Observatories.
 <i>Matching the education with employers' needs</i>	Teknikcollege Skåne	<ul style="list-style-type: none">• Teknikcollege Skåne is a good example of how the regions can work with competence and labour supply in cooperation with companies.• REPLICABILITY: it provides a clear structure that could be used as a blueprint for other regions and projects of this kind
	MyTec Noorderpoort	<ul style="list-style-type: none">• Critical factors of success: Organizational commitment, support of regional economy and government, the involvement of regional companies and the presence of a sufficient amount of (external) financial resources.• REPLICABILITY: It won't be useful to directly duplicate MyTec's educational approach to other regions, as it is specifically developed for the region of East Friesland and its labour market. What does matter, however, are the critical factors which contribute to MyTec's success.

	Agreement between the regional authorities, training centers and the University of the Basque Country to support action plans in Gipuzkoa' SMEs on a vulnerable situation	<ul style="list-style-type: none"> The conclusions of the pilot projects could bring light for providing further guidance on the designing of future institutional support plans. REPLICABILITY: the transferability of this practice to other European regions could not be so easy depending on the collaborative network available at regional level.
 <i>Sector Specific Training</i>	The “Bildungswerk” as intermediary VET actor in the logistics sector in Hesse	<ul style="list-style-type: none"> Approach is to be very well embedded into the network within the sector (also by holding official positions in relevant committees and holding relevant positions in strategic decision making processes) This approach does not make use of the classic means labor market observatories use to monitor regional labor market developments and gain intelligence from REPLICABILITY: such an approach is not easy to replicate by a labor market observatory with its standard routines.
	Local Sectoral Skills Analysis	<ul style="list-style-type: none"> It combines quantitative with qualitative intelligence from a mixture of academic and non-academic sources alongside interviews and sector intelligence. REPLICABILITY: the approach is replicable where similar data can be found.
	Hinckley Nuclear Plant Construction (and associated use of LMI)	<ul style="list-style-type: none"> In doing so, they will be considering a wide range of market signals and projections of future demand, including the quantitative tools described REPLICABILITY: the practice is strictly linked to the specific event of Nuclear Plant opening, but the methodology to adapt the territory is replicable.
	Labor market integration as part of the General Concept for Securing Skilled Workers in Hesse. A regional approach;	<ul style="list-style-type: none"> The strategy requires a high amount of coordination work and close communication with each of the administrative districts.

 <p><i>Integration of social excluded/immigrants into the labour market</i></p>	<p>The Recognition Act in Germany – Integrating Foreign Professionals in the German Labour Market</p> <p>Working in Germany; a cross-border partnership of the Netherlands and Germany</p> <p>Work Integration Social Enterprises (WISEs)</p>	<ul style="list-style-type: none"> ● Having target agreement negotiations with each one of them, is time and resource consuming but according to ministry officials very rewarding in terms of successful labor market policy. ● REPLICABILITY : it's possible with the public support <ul style="list-style-type: none"> ● Big efforts have been made to build up an information and counselling network structure as well as centralizing competences and knowledge required in new organisational units. ● REPLICABILITY: It could be difficult because it's a brand new practice <ul style="list-style-type: none"> ● Willing to collaborate on both sides of the border ● Starting on a small scale; ● Qualifying vocational education and training; ● Sharing knowledge of skills; ● Sharing information about laws and national systems ● REPLICABILITY: possible taking into account the critical factors <ul style="list-style-type: none"> ● Activation of policies targeted towards Potentially Claimants active in the labour market ● Adoption of a somewhat restrictive criterion towards access to unemployment benefits and subsidies ● Development has extended to unemployment subsidies ● Programmes targeted to favour access to the labour are also taking into account incentives for workfare activation of those Sectors of socially excluded population. ● To optimise both labour activation policies by employment services and those carried out by social services for purposes of social insertion ● REPLICABILITY: quite demanding in terms of policies
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	Municipal Companies for Work and Income	<ul style="list-style-type: none"> Growing number of connexions between the elements of both economics and care aspects in our economy. REPLICABILITY: reforms on the labour market as described in this case study are to some extend replicable in other countries with similar economies and demographic development.
 <i>Monitoring & Analysis</i>	WollyBi	<ul style="list-style-type: none"> Technical realization of the tool (emphasis on the graphic representation of results and the visualization of information) REPLICABILITY : it's possible
	MySkillsMyFuture	<ul style="list-style-type: none"> <i>"conditio sine qua non"</i> = the public support of the Ministry of Labour or the Agency responsible to deal with employment policies REPLICABILITY ability: possible everywhere with the Ministry support
	Infoabsolvent (Information system on the employment situation of school leavers)	<ul style="list-style-type: none"> Main issue = to provide accurate information about educational sector Crucial: combination and matching with the labour market expectations REPLICABILITY: Can be broadly used in any other country
	The Observatory of competitiveness and Labour Market in the Moravia-Silesian Region	<ul style="list-style-type: none"> REPLICABILITY : the presented labour market information tool is easy to transfer on the regional level, as evidenced by its transfer to the regional labour market observatory in the Malopolska region (Poland) in 2015
	Regional Innovation Strategy – Ústecký region	<ul style="list-style-type: none"> REPLICABILITY : The Strategy is easily replicated in the other region.

Case Studies at National level



Municipal Companies for Work and Income

Harry Piepers & Tessa Schoot Uiterkamp

Introduction

Since 2015 municipal companies for Work and Income are responsible for the reintegration of all citizens who have a distance to the labour market and depend on welfare.

In total there are 89 of these companies some of which operate at regional level. Together they are responsible to reintegrate a group of about 500,000 people into a paid job within a few years.

The companies lead their client groups towards jobs in existing commercial businesses and institutions. Candidates placed on a job receive for, the extend that they are able to work, a salary based on the statutory defined minimum wage.

The key to the success of these companies is the broad toolbox of support options, based on the capabilities of the employee, that they can offer to employers.

Summary

The new system of labour induction in the Netherlands, which was introduced in 2015, contains a number of new instruments that facilitate the insertion of people with a distance to the labour market.

Examples of this are grants that supplement the salary value of an employee to the legal minimum wage, and no-risk insurances for employers in case of illness.

Another important tool is the use of work learning pathways aimed at acquiring the necessary job skills.

Support also can be offered by job coaches providing in company training programs.

A final important element in the approach is the use of assistive technology in the workplace that allows disabled people working at a regular employer.

Context and setting

Economy geography

Municipal companies for Work and Income ('Bedrijven voor Werk en Inkomen') are new companies recently set up by local authorities in the Netherlands. Actually seen these companies are continuations of existing social work enterprises where currently 105,000 people in the Netherlands work in a fixed subsidized workplace. These new companies have been established as a result of the introduction of the new Participation Act ('Participatiewet'). This law requires all new entrants far away from the labour market will be carried out at workplaces in regular businesses. A small group of up to 30,000 people will remain qualified for some form of social work facilities.

Nature of the VET concerned

Municipal companies for Work and Income organizations take their clients through the entire range of labour market oriented activities. At first each client is screened and assigned a profile on the so-called participation ladder. Dependent on the determined gap to the labour market the following tools may be applied:

- Participation in collective basic facilities such as libraries, nursing homes, etc. performed as voluntary work;
- Participation in employment-like forms of daytime activities in a sheltered workplace
- Participation in educational work courses in existing companies set up by the social work enterprises (landscaping, woodwork sites, mail and parcel delivery and so on);
- Participation in educational work courses in existing private companies that hire the social work enterprises secondment staff (cleaning, child care, etc.);
- Gaining employee competences and work experience through a form of subsidized employment in private enterprises together with a wage subsidy and of no-risk insurance policies;
- Direct mediation to work in the regular labour market.

The above mentioned operations are often supported with training programs aimed at developing the (professional) competence of the candidates and programs for the development of the Dutch language.

Nature of the economic development

Until 2015 the Dutch government had several arrangements to guide people towards the labour market. Municipalities used to be responsible for channelling of public benefit recipients to work. In situations where public benefit recipients had insufficient capacity to work, they used to be appointed in Social Work.

The law preceding the Participation Act came into existence when, just after World War II, numerous disabled people had to be assigned to adapted work. The jobs being created mainly consisted of simple manual labour in industrial environments. Between 1950 and 1980 most of the bigger social work companies had been transformed into companies having a legal mandate to reflect the working conditions in the common companies as much as possible.

Nowadays, social labour work is mainly financed by the national government providing a subsidy per full-time job. In 2015 the government paid € 26,300 per employee. In addition, the yields of the social work companies marketing their products on the mainstream market, were used to cover costs of

government supported employment. Whenever these state grants and company yields are insufficient, the shortfall is made up by the local municipalities. In addition to these local work arrangements the national 'Wajong' arrangement had been introduced to support young partially disabled people having limited prospects of work. This is administrated by the national institute for employee insurances ('Uitvoeringsinstituut Werknemersverzekeringen', also known as 'UWV').

During the autumn of 2008 the consequences of the economic recession were experienced in The Netherlands. One of the effects was that the available resources of guiding people to the labour market significantly decreased. As a result of the recession and the increased inflow of incapacitated, the number of young partially disabled people increased with 43,000 people between 2008 and 2012. Eventually, in 2014 105,000 people were having a subsidized job, of whom 25,000 remained to have an indication of young disabled ('Wajong').

In 2014 6 percent of the entire social labour population works on a supervised work place for a regular employer. The other part works individually or in groups seconded to other companies and institutions, or working externally with guidance of social work companies, such as Park Services. In total, 42 percent of the population works for a social work company itself.

In the year 2012 the government enacted a system change with the introduction of the Participation Act. The basic principle of this law is that the employment market of people with a distance to the labour market, is entirely administrated by local municipalities. That means municipalities no longer are only responsible for the public benefit recipients, but also for the group of new young partially disabled people who have some degree of ability to work. Thus, the group of public benefit recipients supported by municipalities has increased. At the same time the social employment facilities on national level are gradually being phased out; since 2015 no new persons are enrolled in the old system.

Altogether this means that in the future all jobseekers with a distance to the labour market are mediated to work in regular business jobs.

A direct consequence of the introduction of the Participation Act is that many municipal organizations have adjusted their organizational structures of income and work. In the classical model the Social Services provided the payments and guidance to regular work. Besides that there used to be a Social Work Company that was responsible for the organisation of government support labour.

In the new situation the organisation 'Companies for Work and Income' execute the main part of reintegration tasks. This organisation is responsible for the guidance towards regular work, supervised work and sheltered workplaces. Social Services departments keep control of employment programs and continues to be the main responsible for the income of the applicable citizens. The total target audience for these municipal companies for work and income consists of the current 105,000 people who currently have a social labour employment and a group of an estimated 400,000 people with an arrearage to the labour market.

Description

This case study describes about 80 Municipal companies for Work and Income that are founded in the Netherlands in recent years. The origin of these companies lies in the system of social sheltered employment, where 105,000 people are employed, which will be phased out entirely in a period of 20 years.

These new style municipal companies for Work and Income are responsible to guide people to the labour market at local and regional level. The way the reintegration is becoming shaped is interesting because this is an approach that focuses exclusively on providing guidance in finding jobs in regular companies. Guidance to work is partly done by letting the candidates participate in different kind of jobs in order to let them gain and develop job-related skills and competencies. Another important element in the approach is the employers' approach whereby the demand for staff of local and regional employers are matched with the labour supply.

Because a part of the targeted audience will have insufficient labour capacities and other limitations, supporting tools are deployed to enhance the success of employment. These instruments reduce the risks for employers when they hire a candidate.

In this case study we first describe the national infrastructure of the current companies for Work and Income. Then we describe the business plan for 2016 of the company "Deventer Werktaalent" (work talent) as the remaining part of this case study.

National overview

At the moment 89 Municipal companies for Work and Income are currently operating in the Netherlands. The starting point are the results as published by the industry association Cedris, regarding the year 2014. About 75 percent of the activities of these companies are related to the tertiary sector of the economy. This involves matters such as maintenance of public space, maintenance of landscaping, collection, processing (for reuse and recycling) of electronics, thrift stores for furniture and clothing, cleaning, mail and parcel delivery.

The total revenue for Municipal companies for Work and Income was € 3,190,000,000 in the year 2014 and € 3,170,000,000 in the year 2013. A total of 73 percent of sales came from wage subsidies. Revenues from secondments to regular employers amounted to € 286,000,000; together that accounts to nearly 9 percent of operating profit. The revenue from its own production and services equalled to € 572,000,000, or 18 percent of the total operating income. The total operating profit of the sector was € 81,000,000 negative. This loss on the operating budgets has been fully compensated by the local municipality authorities.

For each individual full-time job an amount of € 26,300 wage subsidy was received from the national government. The nett operations income per job was € 9,500. This makes a total amount of € 35,800. The average labour costs per employee equalled to € 27,800, while € 5,900 was spent for professional counselling and € 3,400 for material costs. This sums to a total amount of € 37,100. This means that per single job an average additional sum of € 1,300 should be added by the local government, annually.

The current employees of the Municipal companies for Work and Income are covered by their own collective agreement which paid up to 120 percent of the statutory defined minimum wage in the Netherlands. Within the range of 100 and 120 percent of the statutory defined minimum wage, the actual wage depends on the number of years of service of the employee. The salary of new employees placed on a job by Municipal companies for Work and Income starts with 100 percent of the statutory

defined minimum wage. Labour costs per job in the context of the new Participation Act are about € 24,000. That means a decrease of 14 percent compared to the system before the Participation Act was introduced.

When taking a closer look at the workplaces of the employees, it is shown that 37,000 employees (which equals to 36 percent) are working at an external company. More than 43 percent works on a location outside the work company. Currently another 42 percent works in a socially sheltered work environment.

Policy

In the municipality of Deventer, a city with 100.000 inhabitants, the target audience of the Participation Act consists of approximately 2,600 persons. Each year around 1,000 new people are assigned governmental support, while also 1,000 find their independence from government aid and reintegrate. For the year 2016 “Deventer Werktaal” is having a budget of € 3.700.000 for reintegration. Thus the following tasks must be realized:

- In total 525 people have to be placed on a temporary or permanent workplace.
- Each of the 1,800 persons who are guided in closing the gap to find employment, have to rise 0.5 points on the participation ladder. The ladder scale with a minimum value of 1 and maximum value of 6 represents the distance to employment.
- 50 percent of all public benefit recipients is socially participating.

Deventer Werktaal focuses on mediation and matching jobseekers (whether or not receiving public benefit with employers. The public benefit system should be considered as a safety net for those who need support. This imposes a responsibility on the individual to provide for their subsistence. The method of “Working with a Solution Approach” (‘Oplossingsgericht Werken’) candidates are supported to develop their skills and competences. Main starting points are the abilities of the candidate, not the candidates’ restrictions. Because of this approach all candidates are expected to maintain and develop their qualities, skills, experience and expertise.

Because operating from within a network and learning from each other is very important for candidates, the organisation of Deventer Werktaal focusses on groups instead of the individual.

This means that courses are offered in groups as much as possible. Only in particular situations candidates are guided individually, in case greater benefits are to be expected.

Target groups

The Municipal companies for Work and Income in The Netherlands focus on finding employment and social participation of the following groups:

- Public benefit and social assistance recipients who are not able to earn a salary equalling at least 100% of the statutory wage minimum on their own;
- Young partially disabled people with labour potency;
- People on other subsidized jobs;
- People who are qualified for social sheltered work but were still on a waiting list

Type of VET and supporting instruments

The following supporting instruments are being applied:

Labour cost subsidies

Municipalities receive funds for integration to be used for counselling and the application of services. Dependent on the performance of the employee, the labour cost subsidy may cover up to 70% of the statutory defined minimum wage.

No-risk insurance

Another important tool is the application of no-risk insurance policies by the employer. The no-risk insurance guarantees to cover all kind of risks such as disease and failure issues of the candidate.

Job coaching

If additional assistance is needed, the support of job coaches can be applied. De job coach takes care of the necessary guidance of the employee on the workplace, such as practical guidance related to work planning, structure and routine. The job coached also teaches social skills and communication skills, to improve the interaction with colleagues and superiors.

VET trails

To guide people to work and increasing job opportunities different kinds of routes and trails can be applied. Regular trails, individual reintegration agreements, apprenticeships, educational programs and skill training

Other instruments

Other instruments include mobility and transport services (such as taxi services and required modifications to cars), audio-visual equipment (such as hearing aids and Braille screen readers) and intermediate facilities (such as support through a sign language interpreter and workplace adaptations).

Organisations involved and stakeholders

The municipal companies for Work and Income are mainly dealing with three groups of stakeholders. They are either demand or supply sided. The first stakeholder to be mentioned is the business market, the employers. The second and third one are the job seekers and the local government client. Other stakeholders include: The National Institute for Employee Insurances (UWV), employer associations, trade associations, educational organizations, social institutions and unions for social interest.

All municipal companies for Work and Income in The Netherlands don't just operate entirely individually but regionally cooperate and exchange through umbrella work organizations, of which 35 exist in Netherlands. In cooperation at regional level the main concern is the implementation of joint employers services. Besides that, an important role for these umbrella organizations is the focus on and expression of national projects, campaigns and initiatives. Two examples of this include sectoral plans for employment and the national Youth Unemployment Action Plan.

How it has been organized

Below the entire work process of a municipal Company for Work and Income is described, from the moment a citizen requests and registers for income support.

Registration for income support

The registration of a request for public benefit is being initiated either through online registration or registration at the so-called Work Square ('Werkplein') of the municipality. The candidate signs up for a request for income support through public benefit. Then he is invited for a group information session or

personal interview. The approach during these sessions and interviews is always focussed at the ability to work and finding a job.

Looking for a job

After signing up, the candidate is expected to find a job by himself for a period of four weeks. During this period the candidate may have several job interviews at the municipal companies for Work and Income, which also assist finding a suitable job. During the third interview the actual request for public benefit is registered.

Questionnaire and plan of action

After the request for payment has been approved, the candidate will be categorized according to the answers given through a questionnaire. Subsequently a Plan of Action will be set up together with the candidate.

Categorization of target groups

Most of the companies for Work and Income in The Netherlands maintain the following target groups categorization of candidates who qualify for mediation to work and social participation. The categorization is based on a residual earning capacity, the expected capacity of the employee related to statutory defined minimum wage. The following table defines five different target groups:

Target group category	Earning capacity	Description
Labour	80% to 100%	<p>The category closest to regular employment.</p> <ul style="list-style-type: none"> - Keywords: own strength and self-reliance; - The candidate is able to earn more than 80% of the statutory defined minimum wage; - He is able to find a regular job by himself within three months and therefore has access to job vacancy files; - The company for Work and Income keeps track of his job application activities and obligations of the job seeker, such as the commitment to voluntary work.
Labour and participation	60% to 80%	<p>The job seeker receives extended help and support for a period from 3 to 6 months.</p> <ul style="list-style-type: none"> - He is expected to find a job and be able to keep the job; - The candidate has access to job vacancy files of the company for Work and Income while his consultant proposes appropriate jobs; - Job application activities are being tracked.
Labour and participation	30% to 60%	<p>The job seeking candidate receives consultancy for a longer period.</p> <ul style="list-style-type: none"> - Support is focussed on increasing the self-reliance and job skills of the candidate; - Educational group sessions are being organized in order to develop job application skills and finding appropriate vacant places; - Mediation and information about mandatory activities is provided; - Job application activities are being tracked. This only applies when the job seeker is able to arrange and register his activities; - Whenever the candidate is not able to participate in this, a customized program will be set up; - Whenever the candidate does not seem to pursue reciprocity, he will be signed up for an external program for the development and maintenance of competences;
Care and activation	< 30%	<p>For people with a limited ability to work, social participation is emphasized and labour-oriented day care applies.</p> <ul style="list-style-type: none"> - Wage oriented labour participation does not apply (yet); - Stakeholders cooperate to keep (or take) the candidate out of social isolation and stimulate social participation; - The company for Work and Income keeps track of the development of the candidate on a more remote distance.
Sheltered labour	-	<p>People in sheltered labour places (part of the former government facility called WSW) who entered this facility before 2015, keep their position and corresponding rights. No new people are entering this facility. The company for Work and Income mediates in order to get the existing candidates in this target group towards individual secondment or supervised labour. The earning capacity is determined at the workplace and is part of the used rate (in case of secondment) or subsidy rate (in case of supervised labour).</p>

What worked and why

The new uniform PES system for all people with a distance to the labourmarket in the Netherlands only exists as of January 2015. Therefore we simply do not know yet how successful it is or will be.

What we do know is that the old system with three different types of measurements did not work. We see this reflected in the increasing numbers of people with a distance to the labour market, currently around 200,000 who can work full or in part but have no jobs and therefore are depending on social benefits.

Another important issue in the failure of the old system was the split in responsibilities on local and national level to reintegrate partly the same target groups. The result of this was that the different implementing organizations lead their target groups partly to other arrangements.

An important element in the new approach is that clients are guided towards jobs in existing companies and institutions. For that reason, the so called employers approach in creating new jobs is probably the key factor for success of this new way of working.

Finally the key elements in this approach are that the PES system works on a local level, that the target groups are local citizens and that the jobs are also recruited in nearby areas.

Constraints

The introduction of the new local PES system for people with a distance to the labour market has been accompanied by cuts by the central government. In total, is this a structural saving of € 1,600.000.000 over 40 years.

Estimates show that the deficit for municipalities will rise from -81 million in 2016 to -220 million in 2020. In practice, this may mean that the companies for Work and Income, in an effort to meet to meet their quotas, particular focus on the mediation of the groups with a relatively short distance to the labour market.

Another risk is that in the short term more people with a very great distance to the labour market are reallocated from the Wajong act to the Participation act. This may lead to the situation that more long term assistance is needed to mediate this people to a job and above that to insure that they can continue working. If this situation really occurs this target group will probably remain in their current beneficiary situation.

Another obstacle is that the cooperation in the regional Werkpleinen where the employers approach is situated is not yet fully implemented in many regions. This may lead to a lack of jobs for the clients of the companies for Work and Income.

Impact and Replicability

The reform of the labour market in the Netherlands as described in this case study leads to the situation that the wage value of people with disabilities is utilized better than in the current situation. The mediation towards regular jobs also leads tot a substantial contribution of these people to the economic development of the country. Exploiting the wage value of this group of people also leads to a reduction of the use of social benefits. Beyond the economic aspects reallocating these people there are also substantial effects in terms of a better social live and in terms of health and wellbeing.

The link between economic development and VET is evident. The companies for Work and Income offer pathways for their clients that target for a significant part on gaining personal, social and work aimed skills that are needed for the specific circumstances and demands of different jobs.

In the economic development of the Netherlands we can distinguish a line which leads from separation towards inclusion of both the upper and the lower side of the labourmarket. We also see a growing number of connexions between the elements of both economics and care aspects in our economy. This situation can also occur in other West European countries with similar economies and demographic development as in the Netherlands.

The national policy to increase the degree of participation on the labourmarket combined with a longer working career and a reduction of the number of youngsters without sufficient start qualifications (from 45.000 5 years ago towards 25.000 last year) is not only a typical Dutch approach. These themes also emerge in a number of other West European countries. For these reasons we think that the reforms on the labourmarket as described in this case study are tot some extend replicable in other countries.

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Infoabsolvent (Information system on the employment situation of school leavers)

Věra Havlíčková, Marta Sobková

Introduction

The Labour market information system Infoabsolvent helps young people to decide about their professional career and includes also basic information about the expected future developments in individual economic sectors and related occupations to provide orientation in possible employability. It is an important tool for teachers, career guidance counsellors, pupils, students and their parents.

1. How this fits with the aim of VET-EDS:
 - It supports the alignment of VET policy and economic development strategy
 - It is fit to be propagated through an existing network of labor market observatories and through "open access"
2. Why it is a successful good practice:
 - It brings useful information to help young people to make valid decisions about secondary and higher education for their professional career
 - It meets the demand for detailed information about *the provision of education in the Czech Republic, fields of study* (excerpts from Framework Educational Programmes) and *the employment situation of graduates of various study programs*, on the part of school counsellors providing educational and career guidance, pupils and their parents.

Summary

Infoabsolvent presents an information system on the situation of graduates in the labour market, designed as an internet tool focused on the VET Policy, helping to understand one way of how the labour market and skills forecasting can be used.

Activities undertaken within the information system are addressing the development of a career counselling system as well as the support of the elementary and secondary schools pupils, who decide on their educational journey and on career opportunities on the labour market.

The civil servants employees, employers, trade unions, Labour Office of the CR, the Regional Authorities and Czech School Inspection were identified as secondary target group.

The homepage of the ISA+ system (<http://www.infoabsolvent.cz>) is designed as a directory which incorporates all the information.

- The system has been running for several years now; web statistics show that there are many visitors to this site.
- It is getting very positive feedback from users as well as policy stakeholders.

Context and setting

The chapter is focused on three topics:

- Economy and demography
- Nature of the VET concerned
- Nature of the Economic Development (national/ sector etc...)

The Czech Republic is a fully-fledged parliamentary democracy, and is one of the faster growing economies as well as one of the ten countries that entered the European Union on 1 May 2004. The country's economic policy is consistent and predictable.

The Czech Republic features a well-educated and skilled workforce. It combines a good level of general education with strong science and engineering disciplines. Technical education in the Czech Republic has a long tradition. The availability of technically educated graduates at a fraction of the cost of western labour creates a perfect environment for both manufacturing and R&D-oriented industries. About one-third of the Czech students study economics, finance or IT.

The structure of economy has changed considerably since 1989 when the transformation of social system started. The share of agriculture and heavy industry in the economy has decreased while the share of services has increased. The share of manufacturing in the economy (gross added value and employment) is significantly higher than on average in the EU-28. The business service sector is developing rapidly.

The industrial economy traditions date back to the 19th century. VET that is related to industry also has long history and traditions. During transition to the market economy after 1989, extensive foreign investments have been made, particularly in electrical engineering and the automotive industry. The economic recession, which began in 2008, hit manufacturing and construction the hardest. Employment in the service sector, however, was growing even in the recession. During the recovery period some manufacturing branches have expanded (e.g. metal products, machinery, automotive, repair and installation) and in 2012 the share of manufacturing had almost reached the level of 2008.

The Czech Gross Domestic Product per capita (GDP) is on level of 79% within EU. GDP decreased for 4.5% in 2009 and after short recovery it started to fall down again in 2012. However, there was positive development of GDP in 2014 and the dynamic of the Czech GDP was in the year comparison with the EU bigger (+ 1.3%). The positive economic development has been continuing in 2015. Based on domestic demand mainly the GDP growth is expected to be about 2.7%.

The recent economic recession has caused a significant growth of unemployment after a period of low levels. However, the unemployment rate was 7.2% in the first quarter of 2013, which was still below the EU-28 average. The general unemployment rate of the aged 15 – 64 years, seasonally adjusted, reached 6.0% in April 2015 and decreased by 0.4 percentage point, year-on-year.

The population of the Czech Republic increased during the 2014 by 25.9 thousand and reached a total number of 10,538.3 thousand at December 31, 2014. Both balance of natural change and balance of net migration got back to positive numbers after a year. 14% of total population are less than 15 years old, 71% are aged 15 – 64 years and the group 65+ forms 16 % of the population.

The number of inhabitants of the Czech Republic increased during the year 2014 by 21.7 thousand thanks to the positive balance of net migration. The number of immigrants was 41.6 thousand; it was the highest number after 2008. Citizens of Ukraine dominated in both directions. Besides Ukrainians, citizens of Slovakia and Russia were the most frequent immigrants and citizens of the Czech Republic and Vietnam belonged to the most frequent emigrants.

The population will continue to increase until 2018 due to the growing life expectancy¹. Like most countries in Europe, the Czech Republic's population is aging. The proportion of the 65+ age group will increase from current 16% to 24% by 2030 and up to 32% before 2065. Because of population ageing the Czech government has introduced several programmes of controlled immigration from relatively "safe" geographical regions. Recently foreigners represent 4% of the whole population in the Czech Republic, 41% of them with permanent residence permit.

The ageing of the population will have impact on sectors of education and training². The role of adult education and training will increase considerably and especially basic and secondary schools are already facing the problem of less young students. Secondary VET schools are supported by national and regional authorities and by national and European structural funds to develop their capabilities for adult education.

Education reforms are focused mainly on better quality of education and next on harmonizing secondary and tertiary education with labour market needs. Vocational education and training programmes do not appear to be fully providing the skills demanded by the market, largely because there is no system to correctly identify labour-market needs. The VET system is largely school based, with upper secondary students' participation significantly above the EU average (73.1 % compared to 50.1 % in 2012). While the employment rate of recent upper secondary graduates is above the EU average (75.4 % compared to 69.4 %), skills mismatches have grown significantly, mainly in particular regions. Binding rules for work-based training, as well as assessment standards to secure transferable skills and to strengthen interaction with private employers should be a first step to improve vocational education and training programmes.

¹ Source: The Projection of the Czech Republic Population (Projection 2013), czso.cz

² The education system of the Czech Republic comprises nursery schools, basic schools, secondary schools, conservatoires, language schools entitled to administer state language examinations and tertiary professional schools – all these institutions are codified by the School Act. The highest level of education within the education system is represented by higher education institutions, which are subject to the act on higher education institutions.

Description

Why this has been included

The information system www.infoabsolvent.cz offers comprehensive information about supply of secondary and higher education institutions. This facilitates the orientation not only for teachers, and career guidance counsellors on the one hand but also for pupils, students and their parents on the other hand. All education programs are user friendly elaborated for searching purposes. The main advantage of the website is the interconnection of information about schools with employability of graduates of individual fields of studies on the labour market.

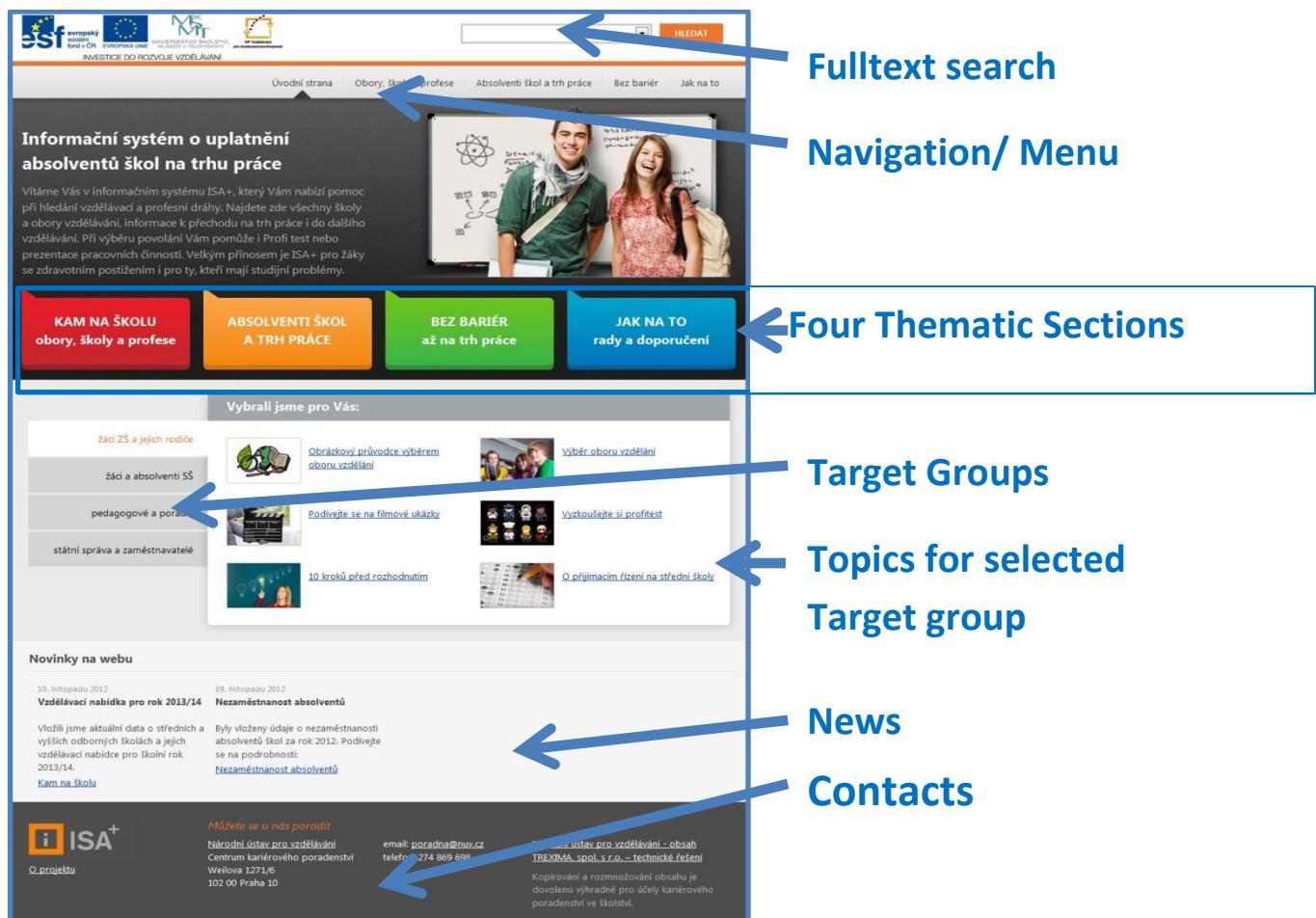
The system is accompanied by a self-assessment test for pupils and students as an efficient support for their choice of a future profession. A current issue of the Czech labour market is promoting interest in technology and technical fields of study which is very important for economical development, in particular of construction and industry. The interest is currently not sufficient therefore the websites comprise 60 multimedia spots about selected professions in practice and a suitable way of teaching of these fields in schools. The aim of the information system is contributing to an increase in the overall level of career guidance in schools and to prevent dropouts from education. The usefulness of this tool and its use is demonstrated by the statistics of visitors of its website.

Describe national setting

The homepage of the ISA+ system (<http://www.infoabsolvent.cz>) is designed as a directory which incorporates all the information. From the front page the visitor can enter to any of the four basic thematic sections, which are represented by four different coloured panels (see the picture on the next page):

- **Red panel** “To which school” includes broad scale of educational options, video presentations from the real work and school environment and Profitest for the basic orientation.
- **Orange panel** “Graduates and the labour market” contains information about the transition and placing graduates in the labour market and information appropriate for career decision-making. All is in the form of dynamic and/or static pages, as well as downloadable publications
- **Green panel** “Without barriers to the labour market” section aims at the problems of physically and socially disadvantaged, containing the results of number of surveys, examples of good practices and publications.
- **Blue panel** “How to do it, advices and recommendations” is focusing on career counselling - how to choose school and school subject/discipline, how to deal with problems during studying, etc.

Infoabsolvent - Homepage



The screenshot shows the homepage of the Infoabsolvent website. At the top, there is a header with logos for ESF, MŠMT, and others, along with a search bar and navigation links. Below the header is a main banner with four thematic sections: "KAM NA ŠKOLU", "ABSOLVENTI ŠKOL A TRH PRÁCE", "BEZ BARIÉR až na trh práce", and "JAK NA TO rady a doporučení". A large image of two students is displayed next to the banner. The page then transitions into a main content area with several sections:

- Target Groups:** A section titled "Vybrali jsme pro Vás:" featuring icons for "základní škola a jejich rodiče", "záci a absolventi SŠ", "pedagogové a poradcové", and "státní správa a zaměstnancové".
- Topics for selected Target group:** Sub-sections include "Obrázkový průvodce výběrem oboru vzdělání", "Vyběr oboru vzdělání", "Podívejte se na filmový úkazky", "Vyzkoušejte si profitest", and "O přijímacím řízení na střední školy".
- News:** A section titled "Novinky na webu" with links to news articles from November 2012.
- Contacts:** A footer section with contact information for the Counselling Career Guidance Centre, including email (poradna@nuv.cz), phone (274 869 699), and address (Národní ústav pro vzdělávání, Centrum kariérkového poradenství, Wellova 1271/6, 102 00 Praha 10).

Source: NIE

The visitor can also skip Thematic Sections and simply scroll through the page above and choose a target group in the Section “We have chosen for you” and enter into one of the pre-selected topics relevant for particular target group (basic schools students, their parents; secondary schools students and graduates; teachers and counsellors; state sector and employers).

The news can be found at the bottom of the front page and in the footer there are contacts to the Counselling Career Guidance Centre, which is providing expert advice on the choice of educational paths. The website content is regularly updated and supplemented.

Tematic Sections – full expand



The expanded thematic sections are shown below:

- KAM NA ŠKOLU** (obory, školy a profese)
 - Výběr podle oboru
 - Výběr podle školy
 - Výběr podle povolání
 - Výběr podle videa
 - Výběr podle obrázku
 - Profitest
- ABSOLVENTI ŠKOL A TRH PRÁCE**
 - Vzdělávání a volba oboru
 - Uplatnění vzdělání
 - Požadavky zaměstnavatelů
 - Nezaměstnanost
 - Zaměstnanost
 - Publikace
- BEZ BARIÉR až na trh práce**
 - Volba školy pro žáky se ZP
 - Absolventi se ZP a trh práce
 - Předčasné odchody ze vzdělávání
 - Statistické přehledy
- JAK NA TO rady a doporučení**
 - Jsem na základce
 - Jsem na střední
 - Jsem už dospělý
 - Jsem poradce

Source: NIE

- **Searching of an education orientation, school and job position step by step**

When activating the red panel “To which school” section an expanded menu of individual paths appears. At this moment the visitor can see selection of educational paths according to the

- field of study,
- school,
- profession,
- video presentation,
- pictures (primarily for basic schools students), or so called
- Profitest which offers certain educational possibilities based on the tests’ results

- *Education selection according to the field of study*

The traditional and most widely used way of finding a suitable education is a careful selection of a field of study. Therefore, the panel menu “To which school” is mentioning this as the first point. After clicking on the “Selection of a field of study”, the category of education must be selected and then the overview of relevant discipline groups is displayed with school curricula of corresponding educational programmes and also the list of schools providing education in selected field. Schools can be selected according to the location within the Czech Republic.

Among other information available here belong characteristics of preparation in the field and opportunities for graduates. Even more information the visitor can find under the section “Learning Documents”, where the characteristic of education in Framework Education Program (FEP) is mentioned. If opening the section “Graduates Profile in FEP” closer information concerning the key competences and professional competences which the student will obtain during the studying appears.

- *Education selection according to the school*

Another possibility how to work with the webpage is to search through school choice. The starting page and the way of work is the same as in the previous case. It is possible to switch between an educational offer of secondary schools (including upper secondary schools) and universities. Visitor can also use the map of the Czech Republic or list of regions to filter the selection.

- *Education selection according to the profession*

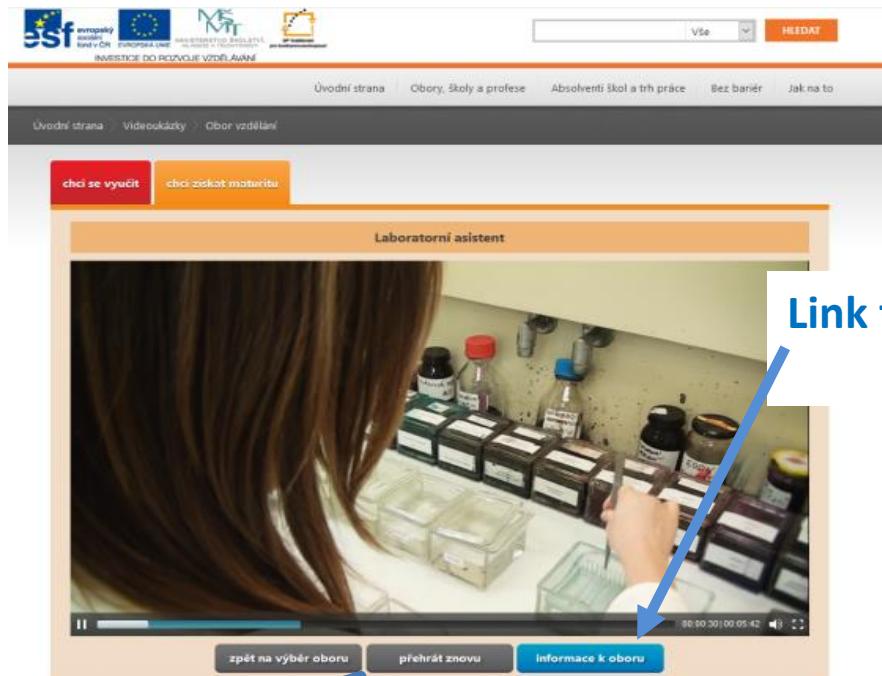
The website visitor can reach the information about the appropriate education path selection also via choosing the profession. This section contains basic information about occupations and activities that are characteristic for them. Also the median gross monthly earnings in the private and public sectors and other relevant information about the occupation, such as health requirements etc. can be found here, as well as the link to the Catalogue of Typical Working Positions which is part of the National System of Occupations.

- *Education selection according to the video presentation*

Video presentations are provided to help to make the right educational choice. The idea is to get familiar first with the labour market and particular professions and then to search for the education related to the selected profession. Videos are arranged according to the profession or according to

the workplace characteristics. The visitor is navigated to the fields of study and disciplines connected to the video.

Example of videopresentation – Laboratory assistant profession



Source: www.infoabsolvent.cz

Link to the relevant sectors

New video search

- **Profitest**
The panel “To which school” incorporates also the first profession orientation test, so called Profitest. This test is not a usual diagnostic test and it should be used more as a supplemental test which provides basic orientation for the first entrance to the educational offer. The test is suitable for students of 9th grade of a basic school.
- **Information about the position of graduates on the labour market**
To be able to make an informed decision concerning the future field of education it is important to take into account the possibilities of succeeding at the labour market after the graduation. Therefore information about the requirements of employers represents one of the key parts of the system. The employability of graduates in the technical fields, for example, is generally better than employability of arts graduates. There are also many vocational fields in which a student can be very successful at the labour market and this is an important information for those who prefer practical activities rather than years of theoretical studies.

Those and many other topics connected with labour market are incorporated into the section “Graduates and labour market”. Static part of this section contains brief articles while dynamic part is equipped by filters so the visitor can select specific information. Data presented in this section are gathered from several sources and its core comes from the graduates’ and employers’ surveys that

are conducted by the National Institute of Education (NIE) and an analytical study on future developments in employment structure in the Czech Republic. Some of these surveys are regular part of the Institutes activities, while some were realized in recent years within some national projects. The information at the portal is arranged according to the six various aspects how to approach the issue (the data provided within approaches may overlap to some degree):

- Education and educational choice
- How the education is used in practice
- Requirements of employers
- Employment rates including projection
- Publications (related analytical and statistical studies)

▪ *Students with health or social disadvantage*

The section “Without barriers to the labour market” focuses on the problems of disabled and socially disadvantaged students and also early school leavers. The organization of this section is pretty similar to the one in the section “Graduates and the labour market”. The information can be sorted according to the target group and the topic of interest. Relevant analytical studies are also included.

▪ *Career Guidance*

To make the information system enough comprehensive the section devoted to the career guidance and counselling is incorporated as well. The title of the section is “How to do it, advices and recommendations”. The section is organized by target groups (students of basic schools, secondary school students, adults, counsellors).

Type of VET and policy

Vocational education and training is provided by secondary vocational schools and secondary technical schools. The upper secondary education is generally open to all applicants who have fulfilled the compulsory school attendance of nine years and meet the admission criteria (they are usually set by the school director). The basic school performance is a principal criterion and in most cases an entry examination must be undergone.

Applicants choose from 281 VET programmes that prepare for specific professions or groups of professions. The school can further develop the programme specialisation (e.g. according to local labour market needs), so in reality there are even more options to choose from. The programmes are specialized from the beginning, but they content high share of general subjects in all grades (in higher grades the share of specialized subjects rises). There are mainly three (ISCED 3C) or four (ISCED 3A) year programmes.

Three-year vocational programmes (ISCED 3C) enable graduates to perform manual work in crafts, services and similar occupations. They are usually provided by secondary vocational schools and concluded by the final examination and a vocational certificate. Graduates leave directly for the labour market or may enrol in a two-year follow-up programme (ISCED 4A) to pass maturita examination and continue to higher education.

Four-year technical programmes (ISCED 3A) entitle their graduates to apply for higher education or to perform mid-level technical, business and other similar jobs. They are usually provided by the secondary

technical schools and are concluded by the *maturita* examination. The successful graduate gets a *maturita* certificate which is a prerequisite for higher education studies and acknowledges the technical qualification for the labour market.

As a response to high demand for *gymnasium* programmes³, four-year *lyceum* programmes have been developed at the secondary technical schools in addition to vocational programmes.

Next there are conservatoires as a specific type of secondary vocational school for students with music, dance and drama talents. The graduates achieve tertiary qualification (ISCED 5B).

Marginal part of the IVET system are the lower secondary programmes(ISCED 2C), which are designed primarily for students with mental disabilities of various severity or other disadvantaged students.

The main body holding executive powers in the field of education (IVET and CVET) at the national level is the Ministry of Education, Youth and Sports (MEYS). Its key responsibilities include especially the development of national education strategy and priorities, development of curricular policy and care for the quality of education on the basis of the objectives and content of education, coordination of public administration and funding in the area of education.

The responsibility for retraining under the public employment services is borne by the Ministry of Labour and Social Affairs. The systems of statutory training are administered by the line ministries (e.g. the Ministry of Health responsible for training of medical staff members, Ministry of Interior Affaires responsible for public administration staff training, etc.).

Social partners can influence vocational education at national and regional levels particularly through the co-operation on the preparation of curricula. Their representatives participate in the final exam committees of upper secondary vocational programmes (ISCED 3C), cooperate at the newly introduced uniform assignments for final examinations (ISCED 3C), and profile (vocational) parts of *maturita* exams (ISCED 3A).

Target groups

Activities undertaken within the information system are addressing the development of a career counselling system as well as the support of the elementary and secondary schools pupils, deciding on their educational journey and on career opportunities on the labour market. Also children with special educational needs and pupils at risk of dropping out of the education are included. Information support is provided also to the career counsellors and to the teachers.

As secondary target group the civil servants employee, employers, trade unions, Labour Office of the Czech Republic, the Regional Authorities and Czech School Inspectorate staff were indentified.

Organisations involved and stakeholders (demand and supply side)

There are two main institutions standing behind the idea of the project *Career Guidance and Counselling in the Context of Curricular Reform* and the idea to develop an information system connecting education

³*Gymnasium* provides general secondary programmes completed by *maturita* examination (ISCED 3A) and prepares students primarily for higher education. The studies may last four years (upper secondary education), six or eight years (lower and upper secondary education).

and labour market. First of all it is the Ministry of Education, Youth and Sports (MEYS) which is the owner of the project and provider of finances.

National Institute of Education (NIE) is an organisation directly managed by the MEYS and has responsibility for the practical implementation of the project. The general mission of NIE is to promote the development of general secondary education, vocational secondary education, art and language education and to support schools in the pedagogical-psychological, educational and career counselling and to promote continuing education of teachers.

A part of the project activities focused on innovation and development of the existing information system was realized with the help of an external contractor selected within public procurement. Another huge part of work stands on filling in the system with data which is ensured in-house. For this purpose mainly official central statistics are used (e.g. MEYS, MoLSA, Czech Statistical Office), sample survey data as well. Those "external" data are combined with in-house data which are collected every 2-3 years (e.g. Elementary and Secondary Graduates Survey, Employers Survey, Career Counsellors needs). Close co-operation is also established with the representatives of the Labour Office.

The main actors who established and who are maintaining the system are located at the national level however the main actors-users are located at the regional and local level at individual schools and the Labour office local units which use the system for career guidance. The schools have on the other hand an important role to provide an information about new study programmes which are about to be open in each new school year, description of the programme and future work for that the students are prepared and/or further study possibilities connected with the programme. The founders of schools (the Regional Authorities) are also playing an important role.

How it is organized

ISA+ system permanently available on www.infoabsolvent.cz represents the primary information source for all users, it is free of charge and its database includes about 1 million data on educational offer of all schools in the Czech Republic, in addition there are 66 analytical publications related to the topic: curricula, structure of students and pupils, labour market needs, employability of graduates and school leavers on the labour market, transition of graduates from the school to the labour market and to the tertiary education, to the labour market without barriers and career guidance and counselling – concept, methodology, information. Based on them, several hundreds of simple information web sites have been created focusing on specific target groups.

The ISA+ system gathers the labour market intelligence from various sources. Among the most important belong the field surveys of graduates conducted regularly by the NIE. This Institute also realizes surveys of employers and examines selected aspects of graduates' transition to the labour market. Other data sources are also used (e.g. the statistical data of MEYS, Czech Statistical Office and Eurostat). These data are then processed complemented with commentaries and published at the Infoabsolvent portal, where they are available for all internet users.

Besides, the analytical publications are posted to the MEYS officers, representatives of the employers as well as the employees, experts involved in the area of education, school departments' officers, pedagogical libraries, etc.

The members of the project team of VIP Kariéra II-KP present the project on various occasions and conferences. The project workers process specific partial outcomes or provide information to those who are interested, e.g. journalists. Press releases and media reports are being issued, several posters have been created, various conferences and workshops organised, promotional material used and distributed.

Also video trailers are used for the purposes of dissemination of information; they are included in the system and have been also provided to all the schools. In addition, CD "Which school to choose..." (Kam na školu) is distributed to all the schools on yearly basis. These CDs include simplified version of educational offer, findings and outcomes of analytical publications are every year processed in summary publication the Employability of Graduates on the Labour Market which is also distributed to all the schools and other interested professionals.

With the help of the Infoabsolvent portal the schools can expand and improve their career guidance and career education, better reflect the labour market skill needs and also to better shape their School Educational Programmes. The Regional Authorities (school founders) can draw information from the system to support their policy decisions related to the local schools system (e.g. what study fields should be promoted in the future).

What worked and why

All monitoring indicators of the project *Career Guidance and Counselling in the Context of Curricular Reform* (including those concerning *Infoabsolvent*) were successfully reached and no significant problems appeared. The biggest problem appeared during the implementation and it concerned the ISA+ creating, development and fulfilling the whole scale of technical requirements on the system as such. This was one of the reasons why the implementation of the project was prolonged from September 2012 till June 2015. In general, the complex and time consuming tenders with continuously changing regulations constituted the biggest obstacle. Within additional time, all tasks related to the project were fulfilled and no other significant problems occurred.

Basic success factors of the project stem from the fact that it fulfils the expectations and needs of the target groups, in this case primarily those of pupils and students of the schools and their parents, career counsellors and the teachers (mainly those who teach subject "Man and the world of work" which introduces pupils to the area of labour market, employment and jobs). The actual successful implementation was reached thanks to the co-operating team composed of experts in suitably overlapping areas who were motivated to achieve the best result possible.

Analyses performed by the NIE before the project started showed that one third of secondary schools graduates are not satisfied with their school choice and only a minor proportion of students took into account the future employment perspective. It was also proved that staff providing career guidance did not have enough information and materials for providing relevant information to students. From the preliminarily numbers (project is still under the implementation and no hard checking has been made so far) and reactions there is a positive effect. One significant signal is the frequency of the web page use which is bigger than expected and feedback from the career counsellors (see the graph bellow). They

are appreciating the tool as an instrument enabling to make their work easier, modern and precise on top of this several e-learning courses that were prepared for them under the project.

Constraints

It is necessary to develop in more systematic and regular base the system of skills need prediction (including the long one) and to mirror the results of those predictions in the education offer. The Infoabsolvent portal provides comprehensive and useful information on current labour market while the information about the future of jobs is rather limited. More systematic, in depth analytical information about future skill needs, including detailed sector studies, would be needed in regular manner. On the other hand sometimes there are activities undertaken which overlaps or their aims are pretty similar which leads to ineffective use of money, time and human resources. Better co-operation would be needed in this respect.

The Infoabsolvent was co-financed from the ESF, therefore there is an obligation to maintain this system at least for 5 years. As it is performed under the Ministry of Education, Youth and Sports, this obligation will be fulfilled and if this tool is evaluated as efficient also after this period the financing will continue.

Impact and Replicability

Infoabsolvent presents an Information system on the Situation of Graduates in the Labour Market, designed as a tool focused on the VET Policy, helping to understand one way of how the labour market and skills forecasting can be used. From the users' feedback it is clear that the tool is being broadly used by all target groups involved. Unfortunately no direct evidence about impact on VET or economic development exists. There is only indirect information about effects coming from studies and surveys regularly conducted and relating mainly to unemployment of graduates and a match between a field of qualification and real employment of individuals.

In spite of the fact that an effect of the Infoabsolvent is measurable with difficulties it is possible to expect its positive influence on the VET and economy. It is the only information and guidance tool of this kind in the Czech Republic, focused on such a broad group of users within education, labour market and economy itself:

- Pupils of primary schools in the decision-making process of field of education and secondary school
- Students of secondary education in the decision-making process between continuing the education or transition to the labour market
- Career guidance counsellors and teachers for their services of career guidance and teaching of the course "Introduction to the world of work"
- School management for assessment and updating of supply of education and innovative education programs
- Labour offices and other institutions of public administration for orientation in education supply and their conceptual work,

- Employers for orientation on and communication with the educational sphere.

One of the most important factors for the success was the effort to design user friendly system which presents up to date information and can provide different target groups with tailor made approaches, services and information also with significant practical component. There are also audio-visual material incorporated which made some messages very accessible and easy to understand especially for the young users. The tailored made approach can be recommended, as well as the up to date solution and user friendly environment.

For the success of the Infoabsolvent tool was crucial a planning of the overall action and each particular step within the action. It was necessary to know the environment within the elementary and secondary schools, students and teachers and/or career guidance needs as well as the reality of the labour market with the stress to the regional labour markets in the connections with schools located in the region. A set of discussions and meetings with the schools representatives took place where the main needs and parameters to the newly created system were formulated.

The internet tool Infoabsolvent was created in two steps. The first one is being perceived as the pilot one and the second one was perceived as the project where all activities must be finished according the outcomes from the pilot version. Feedback from the target groups was always taken into account and system builds on the opinions and needs of the final users of the tool.

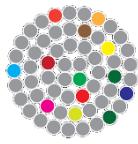
Crucial for the future of the system is for all actors to keep in mind that it is continuous work and new data must be incorporated while the old, not valid must be inactivated. Also the technical features of the system should be always up to date and new methods or tools for sharing of information should be implemented.

This tool can be broadly used in any other country; the principal issue is to provide full scale of accurate information about educational sector – its conditions, possibilities and perspectives. The combination and matching with the labour market expectations is important. The crucial thing is to update system regularly.

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The Recognition Act in Germany – Integrating Foreign Professionals in the German Labour Market

Daniel Kahnert

Introduction

Due to an increase in demand for skilled professionals in Germany, the political focus shifted more towards resources, which foreign professionals provide for the German labour market. This includes persons already living in Germany with a foreign professional degree as well as persons living in other countries, maybe considering moving to Germany to work there.

As a result, the *Recognition Act* was introduced in 2012 to make it easier for foreign professionals to have their professional qualifications formally acknowledged in Germany.

Therefore, the *Recognition Act* is a good example of national labour market policy concentrating on skill supply for the German labour market.

The *Recognition Act* provides:

- Easier acknowledged foreign professional skills
- More transparency within the formal procedure
- Largely increased access to acknowledgement procedures for more professionals and a larger group of foreigners from more different countries
- A comprehensive and unified legal basis, replacing several singular rules and regulations

Summary

The integration of foreign professionals into the German labour market is an important factor in the general strategy to secure skilled professionals for the German labour market and economy. This aim is especially today, with regard to the demographic developments on the one side and the very current development of many refugees coming to Germany on the other side.

As a result, the Recognition Act was introduced in 2012 to make it easier for foreign professionals to have their professional qualifications formally acknowledged in Germany.

It provides a legal framework as well as guidelines for a recognition process to transfer a foreign into a German VET certificate for a larger number of foreigners, also from non-EU countries.

What makes the Recognition Act an interesting, good practice in the political field of VET and labour market-related issues is that it is a targeted approach to tackle the important problem of scarce supply of skilled professionals in several branches, while integrating aspects of migration, economic and to a certain extend social policy.

Context and setting

The labour market situation in Germany is marked by several different developments in the past few years. On the one hand, unemployment figures are declining and due to a relatively healthy state of the national economy, many people have less problems finding a job than in many other European countries today. On the other hand, over a large range of industries, companies are having trouble finding suitably skilled personnel. While there is indeed a lack of supply of skilled professionals today in many industries and professions, projections show that this lack of supply is even going to become bigger in the foreseeable future.

Three major challenges largely contribute the current labour market situation in Germany:

Demographic Change – The demographic development in Germany shows that the population is aging. There is a static decline among the age groups of younger than 20 and 20 to 40 year olds, as well as an increase in the older age groups. The age structure in Germany is changing according to these developments: currently the biggest group is the 40-50 year olds with a population share of 30.7%. The under 20 year olds only represent the third largest group with 18.1 %. After a long period of declining birth numbers in the past three years the total number of births has risen again. Correspondingly, the birth rate has gone up in the past 3 years with a current average value of 1.4 children per mother. Nevertheless, the projected population development in Germany is going to see a large decline in population to a minimum of about 67.6 million or a maximum of about 73.1 million – depending on the number of immigrants. As described above, the demographic change in Germany could lead to a situation of a lack of skilled professionals for key industries in the future. Strategies to meet this challenge include a structured approach of securing high-standard trainings for professions with anticipated lack of supply in the future, life-long learning strategies to secure that skills of well-trained professionals are up to date and meet current needs of the economy, as well as attracting foreign professionals to migrate and work in Germany. This leads to:

Securing supply of well-trained personnel – Well trained professionals are one of the absolute key factors for German economic success based on high-quality production and innovation for export-oriented businesses. Demographic changes as well as structural changes to the economy and the system of professions lead to a lack of well-trained professionals in some industries today and even more in the future. The Federal Government together with the business community, the trade unions, the Federal Employment Agency and the Länder has agreed on the *Alliance for Training* to improve vocational training. An important part of this strategy is:

Integration of foreign professionals – The integration of foreign professionals is another one of the key strategies to meet the challenges of an undersupply of skilled workers in the German economy. Making it more attractive and easier for foreigners to move to Germany and work there is a key challenge to achieve this. Campaigns aiming to establish a welcome culture, to foster mobility as well as new regulations to accept and acknowledge foreign qualifications – such as the Recognition Act – have been launched.

Other challenges are not as directly coupled to the labour market but still are of relevance for the economic state of Germany. Some of these challenges are for example *fighting long-term*

unemployment, distributing economic benefits more equally among the people and energy and sustainable economic development.

As described above, the integration of foreign professionals into the German labour market is an important factor in the general strategy to secure skilled professionals for the German economy. This aim is now even more pressing than ever, with regard to the demographic developments on the one side and especially with the very current development of many refugees coming to Germany. Integrating these people into the labour market is very important as it will contribute to solving problems directly related to the labour market as well as other economic challenges, such as the ones mentioned above. The Recognition Act can help with that by making it easier to have foreign professional skills acknowledged in Germany and thus, making it easier to integrate into the German labour market and society.

Figure 1: Unemployment Duration and Qualification in Germany



Source: Own elaboration based on Arbeitsagentur 2015: <http://statistik.arbeitsagentur.de/Statistischer-Content/Arbeitsmarktberichte/Personengruppen/generische-Publikationen/Langzeitarbeitslosigkeit.pdf>

This argument is supported by current statistics on the relevance of a formal professional and certified education. While only about 17% of the population in Germany does not have a certified professional education, the share among unemployed lies at about 45%. In addition, not only the risk of becoming unemployed is higher with a certificate, the duration of phases of unemployment are also much longer. Figure 1 illustrates in more details on how the level of certified professional education and unemployment duration relate.

Description

Why this example has been included

This example shows how a national initiative and a new legal framework can be launched to meet one of the most pressing challenges of the national economy. Policy described this example represents one of the few national examples of a policy act where skills and economic development are closely connected and where skills-related policy – in this case foreign skills – and development of the national economy are purposefully brought together on the national level. Due to the federal structure of education and skills policy in Germany most of such kind of policy is not made on the national but on the level of the different federal states, which are responsible for VET and educations related issues.

Foreign professionals, their migration to Germany and their integration into the German labour market on the other hand is seen as one of the answers to the problem of shortage of supply of skilled personnel in several industries, which demands urgent means now and even more in the future. To secure their integration and provide adequate positions according to their level and kind of skills, a smooth and easy transition of foreign skill sets into the German system is very important.

For the individual professionals the recognition is important, as it increases the acceptance of their qualifications in the German labour market. Therefore it becomes more likely for them to find a position adequate for their skills and qualification level. This in turn, most likely leads to a better overall integration into German society and increases opportunities of taking part in social life and activities.

For the companies, the recognition of foreign qualifications is important because it provides transparency. It makes it much easier for companies to understand, in which fields of work foreign professionals can be employed. The task of translating a foreign qualification into a set of skills, knowledge and abilities is usually much more difficult than to do the same with a German qualification, which the company is used to and has experience with. In addition, the recognition makes it much easier for companies to plan further education or qualification of their employees, even if they have a foreign qualification.

For providers of further professional education it is also easier to deal with professionals with a full recognition of their qualification. Based on a full recognition they can plan and conceptualize courses and trainings much more efficient and suited for the needs of the individuals and the companies employing them.

National setting

The Recognition Act in the here described example regulates professions, which are acknowledged and regulated on the national level ("Anerkennungsgesetz des Bundes"). There is also a large number of professions, which are acknowledged and regulated on the level of the federal states. The corresponding legal framework is the Recognition Act of the States, the "Anerkennungsgesetz der Länder". A third large group of professions is not regulated by such a legal framework at all.

The Recognition Act was introduced in 2012. Before that, the procedure of having foreign qualifications acknowledged and the corresponding steps were scattered over several different levels of administrative institutions. It was rather non-transparent and complicated as well as inconsistent among

different regions and professions. Access to the process and required steps was so difficult that it proposed a major burden for foreign professionals to obtain a job according to their highest foreign level of qualification in Germany.

Type of VET and policy

The Recognition Act is not aiming at the national VET-system in a way that it modifies current VET-regulations, introduces new programs or seeks to enhance existing initiatives in the targeted at vocational education and training done in Germany. It therefore is only an indirect intervention in VET-policy, but nonetheless a very specific and very focus action to align existing skills and skill potentials in the labour market (supply side) with open positions (demand side). The Recognition Act spans its scope and influence over various policy fields such as integration policy, labour market policy, VET-policy and economic development policy. Until this point, no detailed evaluation of the new regulation and its effectiveness exist. As a result, this case study will focus on the formal changes it brings, the political intent and implications for the future.

Target groups

Individual level

Generally, the target group of the Recognition Act are people with foreign professional qualifications, who seek to have these acknowledged in Germany. Most of the time these people are foreigners. The target group can be differentiated according to special legal conditions for each of the following subgroups:

- Asylum Seekers
- Citizens from Third Countries
- Citizens from Third Countries with Qualifications from EU / EEA states
- Citizens of States, Germany has a Bilateral Agreement on the Acknowledgement of Professional Qualifications with
- EU-Citizens
- Expellees
- Late Repatriates
- Refugees

For each of the above listed subgroups, the 2012 Recognition Act brought legal changes in the way their access to an acknowledgement procedure is organized. With the new legal basis, each of these groups now has the right to access an acknowledgement procedure, which was not necessarily the case before.

Level of professions

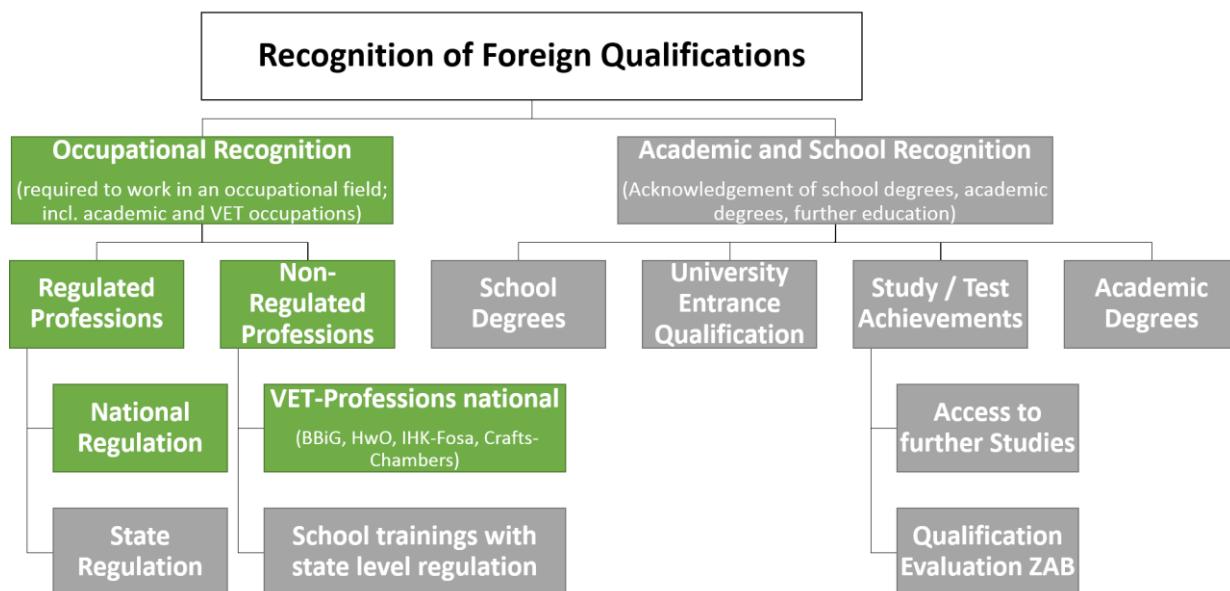
The general idea is to have foreign qualifications acknowledged as equal to a German reference profession. These reference professions are divided into two subgroups:

- a) Regulated professions
- b) Non-regulated professions.

For regulated professions an acknowledgement of the qualification and therefore a successful recognition procedure is mandatory. Otherwise one will not be allowed to work in the respective professional field as a skilled professional. These professions are again divided into those, which are regulated on the national level, and those regulated on the state level. The Recognition Act directly covers regulations on the national level, although in consequence of its introduction, many state regulations have undergone some changes, too.

For non-regulated professions a successful recognition of occupational qualifications is not mandatory. Most of the jobs that require vocational training in the dual system belong to this category. Nevertheless, formal acknowledgements of professional skills is definitively helping, when trying to find a job, especially one on an adequate level according to the jobseeker's abilities and qualifications. The 2012 Recognitions Act therefore also covers non-regulated professions to make finding a proper job easier also for foreigners in non-regulated occupational fields. Figure 2 provides information about the scope of the 2012 Recognition Act.

Figure 2: Recognition of Foreign Qualifications and the Recognition Act*



*green fields mark the scope of the 2012 Recognition Act

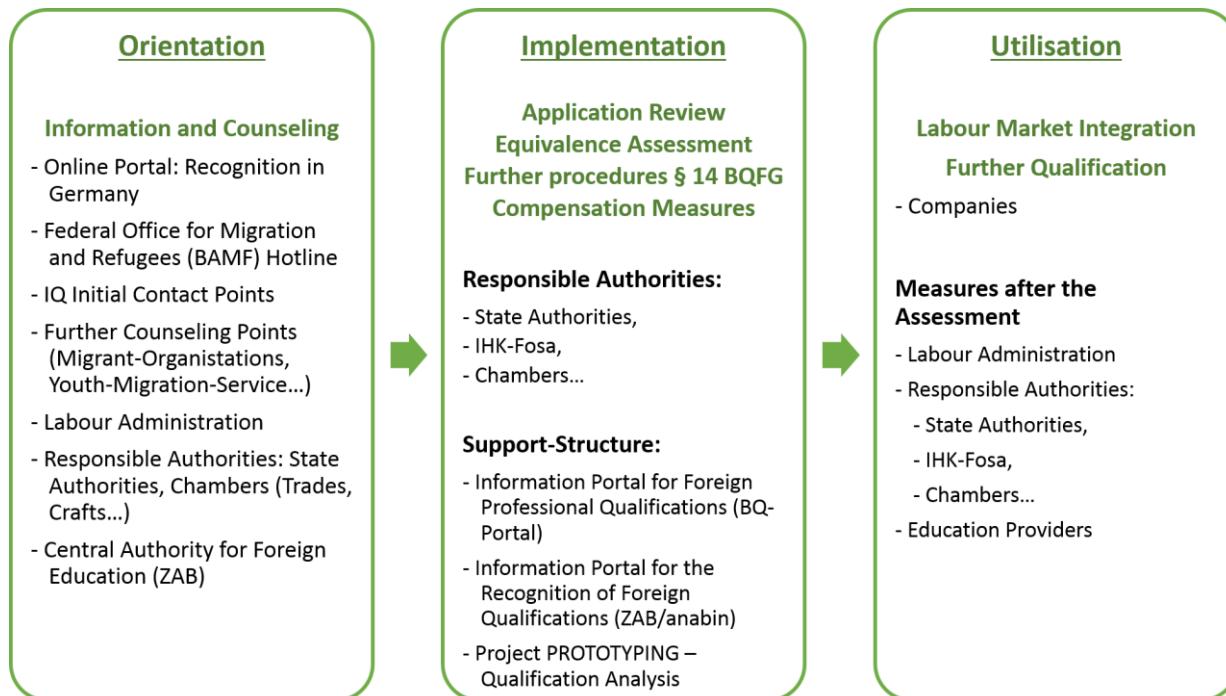
Source: Own elaboration based on BMBF 2012 pp. 6

Organisations involved and stakeholders (demand and supply side)

Several organizations are involved on different levels of the process of introducing and proceeding the Recognition Act. The discussion about introducing a new legal framework making it easier for foreigners to have their professional qualifications acknowledged started in 2008 in a joint initiative of the national government and the heads of the state governments. The final draft was resolved in the Federal Cabinet in 2011. In 2012 the Federal Council finally passed the new law.

Figure 3 shows the actors involved in the different stage of the recognition process from initial orientation phase and information provision to implementation including assessments and finally the utilisation stage including labour market integration of the foreign professionals.

Figure 3: Actors Involved in the Procedures of the Recognition Act in its Different Phases



Source: Own elaboration based on BMBF 2014, pp. 26.

How is it organized

As shown in Figure 2, the recognition process is divided into 3 phases:

1. Orientation Phase
2. Implementation Phase
3. Utilization Phase (BMBF 2014 pp. 27 ff.)

Ideally, these phases are gone through as follows:

During the *orientation phase*, interested people use information and counselling opportunities to individually assess their qualifications, their situation and upcoming steps to achieve a recognition or other means to get to a successful labour market integration. Usually this phase is supposed to finalize the initial application for the recognition of the foreign qualification.

Here, three major offerings with three respective actors involved are made. These are the telephone hotline of the Federal office for Migration and Refugees (BAMF), the internet-portal “Recognition in Germany” hosted by the Federal Institute of Vocational Education (BIBB) and the central point of initial contact run by the IQ-Network, a program supporting “Integration via Qualification”. Another possibility for initial counselling is provided by the Central Authority for Foreign Education (ZAB).

During the *implementation phase*, after the application, the responsible authorities evaluate the application and assess whether or not the foreign qualifications equal those required for the matching German reference profession. This phase ends with the result of the assessment proceedings and a decision as well as the notification (full/partly/not recognized) and recommendations for (if necessary) further qualification means, to get a recognition.

Different authorities are responsible for different cases. For all non-regulated professions in the dual system of vocational education and training the chambers (crafts (HWK), trades (IHK-FOSA), etc.) are responsible.

The trade-chambers have set up a central unit, the IHK-FOSA (Foreign Skills Approval), which manages and proceeds the complete recognition process in cases that lie in their responsibility. 77 of the 80 regional chambers in Germany joint the initiative to form this unit and provide a competent body for all foreign qualification and recognition related issues.

In the case of the crafts-chambers, a decentral approach is pursued. Each local chamber is responsible for the recognition process in their respective areas. Considering the large number of professions in crafts and a large number of foreign qualifications, a higher level guidance system with higher level guidance chambers was established. These guidance chambers provide expertise for single foreign countries and the matching qualifications. Today, 36 different guidance chambers for different foreign countries exist. They are responsible for the qualification assessment of foreign applicants.

In most other branches, also the chambers are responsible for the proceedings. In many cases central units have been set-up or joint approaches of regional authorities manage the recognition process, similar to the examples of the trades- or crafts chambers. Responsibilities for regulated professions are regulated by state-laws. Important examples and the largest groups here are professions in the medical and care sectors such as doctors, nurses and other health care professionals.

During the *utilization phase*, professionals with a recognition are to be integrated into the labour market and professionals without a full recognition take part in further means, putting them into a position to achieve a full recognition at a later stage.

What worked and why as well as constraints

As the introduction of the Recognition Act did only happen 2012, evaluations of it are not yet comprehensive. By now, there is no safe way of telling how beneficial a successful, full recognition is for the integration of professionals with a foreign qualification into the German labour market.⁴ Nevertheless, there are first monitoring results available, providing number on usage of counseling and results of the recognition processes.

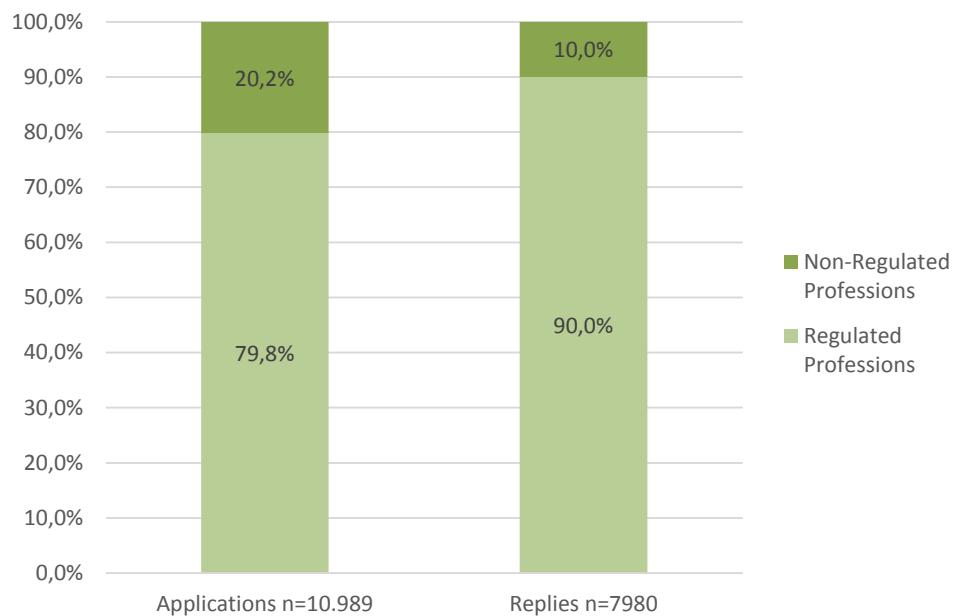
On the other hand, it is obvious that the implementation of the Recognition Act has been successful in the sense that functioning structures among the involved and responsible actors have been established, new, comprehensive offers for information and multiple co-operations spanning different regional

⁴ A new project is going to be launched in late 2015, which aims to evaluate the effects of the Recognition Act on labour market integration in great depth. IWAK is going to be one of the research partners in the project. Until then, the success of the Recognition Act can rather be estimated than safely be determined.

actors have been formed. Such infrastructural success makes a solid foundation for the successful application of the act and its intended outcomes itself.

In the following section, some numbers will be presented to describe how the Recognition Act has been applied since its introduction so far. Figure 4 shows the share of regulated and non-regulated professions among the processed cases in 2012.

Figure 4: Regulated and Non-Regulated Professions among Processed Recognition Cases in 2012

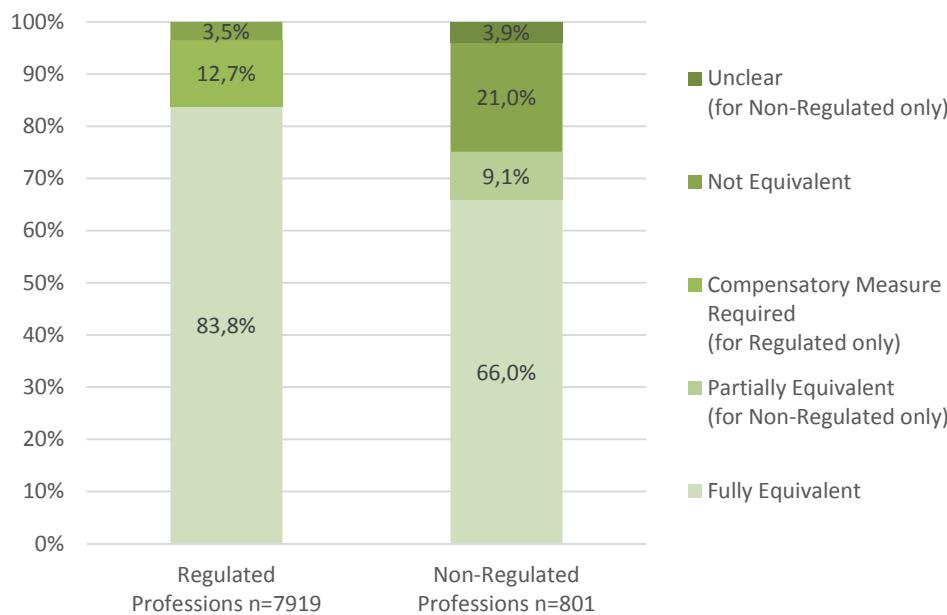


Source: Own elaboration based on BMBF 2014, pp. 44.

It is interesting that the largest part of the applications come from regulated professions, where a successful recognition is mandatory to work as a professional. This might indicate that a full recognition in a profession where it is not mandatory is not seen as very valuable and integral for finding an adequate position and successfully integrate into the labour market by the foreign professionals – at least in relation to the rather high hurdles there still are for many to enter such a process and successfully complete all stages of it.

Figure 5 shows the results of the recognition processes in 2012 for regulated and non-regulated professions in Germany.

Figure 5: Results of Recognitions Processes in 2012 for Regulated and Non-Regulated Professions



Source: Own elaboration based on BMBF 2014, pp. 45.

The share of assessments resulting in “Not Equivalent” is much higher among the non-regulated professions (21% vs. 3.5%). Even when taking the results for cases with a compensatory measure required into consideration (12.7%) the share of non-successful recognitions is much lower for regulated professions. Reasons for this significant difference remain unclear yet and should be investigated further in the future.

The two major sources of information and counseling, the BAMF-Hotline and the IQ-Services, are both used frequently by interested professionals. According to experts from these institutions, about half of the persons seeking counseling applies for a recognition later. This number is larger among regulated professions compared to non-regulated (BMBF 2014).

Impact and Replicability

We are not able to estimate the full impact of the Recognition Act just yet. The law is relatively new and no impact evaluations about the direct effects of the law on labour market integration of foreign professionals and closing supply gaps in certain professions have been made so far. We can only assume that it has positive effects, due to increased transparency it provides for employers and increased value of formal vocational education obtained in foreign countries it provides for job seekers.

The intended impact of the Recognition Act is to make it easier for workers with a foreign vocational education or training certificate to get this acknowledged with an equivalent German professional degree and therefore make it easier to integrate into the labour market and find an appropriate position. This could also attract more foreign professionals to move, live and work in Germany and contribute positively to the economy and the social welfare system.

Looking at what is done to supply help and support in the recognition process from initial information to an appropriate employment in the end, one has to make the point that the organisational changes that have been made and the new structures that have been built to support the processing, seem reasonable and effective. Big efforts have been made to build up an information and counselling network structure as well as centralizing competences and knowledge required in new organisational units. First numbers from initial monitoring activities show a good usage of these new structures and hint at a successful start.

What makes the Recognition Act an interesting, *good practice* in the political field of VET and labour market-related issues is that it is a targeted approach to tackle the important problem of scarce supply of skilled professionals in several branches, while integrating aspects of migration, economic and to a certain extend social policy.

That said, it is quite clear that the German society in general and especially the labour market can largely profit from the intake of foreign professionals, especially in those professions with a big lack of supply of professionals already today and others even more so in the future.

From a strategic point of view, this approach makes very much sense. Several factors to consider support this:

- Demographic change: Due to aging population and fewer young people, supply for professionals can't be provided without the intake of foreign professionals in many industries. Making immigration to Germany more attractive and recognition of foreign professional trainings easier addresses this issue.
- Certain industries today fail to attract young people to pursue a career in their field, due to issues with their public image in Germany, but in reality still provide good opportunities. Foreign professionals might be less deterred and could make up for the lack of German young people.
- Immigrants immensely contribute to economic growth and social welfare in Germany already, with a total surplus amount of 22bil. € in 2012 (Bonin 2014). This positive contribution could even become larger with easier and better integration into the labour market due to successful recognition of foreign professional trainings and education.

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Scottish Skills Planning Model

Andrew Dean

Introduction

The Scottish Skills Planning Model was fairly recently established, with sector reports first being created in 2011, and ongoing. The model identifies the need for a strong evidence base to inform planning and delivery of skills to meet economic demand.

The evidence base and planning generated through the Skills Investment Plans (SIPs) and the Regional Skills Assessments (RSAs) is central to the Model. RSAs provide an evidence base to help inform skills investment planning.

SIPs go further by outlining a strategic plan, based on the evidence, with key strategic priorities and an agreed action plan. The SIPs are developed (in partnership with business, unions and government) by Skills Development Scotland (SDS) who are the national skills body supporting the people and businesses of Scotland to develop and apply their skills.

The SIP and RSA programme is an increasingly central driver of SDS' service delivery and investment and that of partners, in particular the Scottish Funding Council and regional colleges. It is at the centre of SDS' corporate strategy and both SIPs and RSAs have been heavily referenced in the recommendations of the Commission for Developing Scotland's Young Workforce and the recently published Youth Employment Strategy.

They are a core component of SDS work and an essential part of providing evidence and planning with its partners.

Summary

This case study looks a replicable skills planning model that embeds significant input from the skills 'demand side' in the planning of skills delivery – with the intention of better aligning skills supply to the needs of an expanding and successful economy.

Skills Investment Plans and Regional Skills Assessments have been pivotal to the planning. The latter provide the detailed evidence base and the former are developed in partnership with business unions and government.

This is a form of tri-partite planning common to much of Europe, but contrasting with the 'hyper-flexible' approach taken in England.

These two outputs are central to the work of Skills Development Scotland whose role is to drive the development of Scotland's economy.

In this study we look at the role of Skills Development Scotland and in particular the Regional Skills Assessments and Skills Investment Plans.

The National Policy Setting in Scotland

The UK labour market is demand-led, but skill shortages exist in sectors such as medicine, health, social work, science, secondary education teaching, IT/computing, engineering and certain other specialist, technical and arts occupations⁵. The liberal and highly marketised UK economy is now returning to sustained recovery but there is some distance to make up after such a sharp recession and delayed return to growth. Recovery has taken longer than before, not helped by severe problems in the Eurozone, one of the UK's largest export markets⁶. The most troubling aspect of the period since the onset of the recession is the fall in labour productivity.

Skills Development Scotland⁷ (SDS) is the national (Scotland only) skills body supporting the people and businesses of Scotland to develop and apply their skills. SDS was formed in 2008 as a non-departmental public body, bringing together careers, skills, training and funding services. A pragmatic and evolutionary approach to the development of Labour Market intelligence (LMI) has been adopted, driven by the needs of staff.

An LMI group comprising of staff, including team leaders and advisers, covering all 32 Scottish Local Authority areas has fulfilled a key role. This group has acted as a sounding board and conduit between the wider staff and the central LMI team and contributing directly to the development of resources and staff training. The drivers for the SPS and RSA works are:

- Explicit emphasis on skills policy as a driver of economic growth, and tool to address youth unemployment
- Alignment of skills provision with economic and employer demand
- Reflected in development of College Outcome Agreements
- Need for good quality LMI

They have been carried out against backdrop of huge economic and sectoral changes in Scotland with Sector Skills Councils (existing sectoral bodies in the UK – who have lost most of their central funding of late) and have had a patchy involvement in Scotland at times. At the same time, the 2008 crisis led to a slimming down of analytical support and capacity leading to the absorption of Futureskills Scotland within the Analytical Services, Scottish Government; the closure of the Lothian LMI Unit, Tayside Economic Research and SLIMS and a general dilution of expertise within Local Authorities. At the same time Scotland saw a loss of Local Enterprise Companies.

Further context and setting

VET and skills are mainly the remit of the United Kingdom Department for Business Innovation and Skills (BIS) and the Department for education (DFE). In terms of VET DFE focus on teaching and learning for young people under the age of 19 years in secondary schools and in further education colleges. This

⁵ UK Visas and Immigration, Home Office (2014). Tier 2 Shortage Occupation List – Government-approved version

⁶ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/343448/The_Labour_Market_Story- An_Overview.pdf The Labour Market Story: An Overview UKCES Report. 2014.

⁷ <http://www.skillsdevelopmentscotland.co.uk/resources/labour-market-intelligence/>

includes VET provision. By contrast, BIS invests in skills and education to promote trade, boost innovation and help people to start and grow a business. BIS are responsible for working with further and higher education providers to give students the skills they need.

In the UK, the term 'vocational education' is used to refer to the acquisition of: technical skills training for specific jobs/occupations; aptitudes required by an industry; and the soft skills required for work in general. There are a few occupations where specific qualifications are required to practice. However, this requirement is rarer than it is in many other EU member states. Vocational qualifications in the UK do not directly 'qualify' people to work in a particular occupation. They are better considered as providing an indication of the sorts of skills that an individual may bring to an employer in a largely unregulated labour market¹².⁸

The UK has a largely voluntarist approach to employer training. There are very few legal requirements (Page, R. and Hillage, J., 2006⁹) on employers that relate to staff development. VET provision in the UK is profuse and delivered through further education, higher education, private sector training companies, trades unions and voluntary organisations.

There is a long-standing culture of centralism in the UK (Heseltine, 2012 in Hildreth 2014¹⁰) and Scotland's approach attempts to diverge from this model.

In Scotland Skills Delivery is largely devolved to the Scottish Government whose skills strategy, *Skills for Scotland: Accelerating the Recovery and Increasing Sustainable Economic Growth* sets out what seeks to be a, flexible, responsive partnership approach to meeting Scotland's skills needs at a crucial point in economic recovery. The strategy is closely aligned with the Scottish Government's Economic Strategy that sets out the central purpose of creating a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth.

The Scottish Government's vision for skills policy has four priority themes:

1. Empowering people to ensure they have the opportunity to access the right advice, support and opportunities to acquire the skills and attributes to both contribute to and benefit from future economic success;
2. Supporting employers by better understanding and assessing the skills they need for future success, and ensuring that the supply of skills, training and qualifications can be responsive to this;
3. Simplifying the skills system to ensure that it is more coherent and easy to understand for individuals and employers; and
4. Strengthening partnerships and collective responsibility between public, private and third sectors to help improve skills and the contribution they make towards achieving Scotland's social and economic aspirations.

⁸ Skills for the Future: UK (with a primary focus on England). Dean, A and Neild, B. 2013. <http://www.swslim.org.uk/Downloads/SL2683.pdf>

⁹ Page, R. and Hillage, J., 2006. Vocational Education and Training in the UK, Strategies to overcome skill gaps in the workforce.

¹⁰ Hildreth, P. 2014. Place-based economic development strategy in England: Filling the missing space. Local Economy June-August 2014 vol. 29 no. 4-5 363-377

In theory, responsibility for delivering lies with employers, individuals, all learning and training providers, the Scottish Government, local government, Skills development Scotland, the Scottish Funding Council, enterprise agencies, the Scottish Qualifications Authority and Scottish Credit and Qualifications framework, the third sector, trade unions, SSCs and Industry Advisory Groups.

A partnership approach is sought using the ‘National Performance Framework and Single Outcome Agreements’ as follows:

Alignment across the public sector - The National Performance Framework sets out the ambitions for a greater alignment of work in the public sector, greater partnership working and a more outcome based approach. The Framework also sets out the expectations for the entire public sector in Scotland to contribute to one overarching purpose of sustainable economic growth, with all performance management systems well aligned to a single, clear and consistent set of priorities.

Single Outcome Agreements - The Scottish Government and Scotland's local authorities share an ambition to see Scotland's public services working together with private and third sector partners to improve the quality of life and opportunities for people across Scotland. Single Outcome Agreements (SOAs) are an important part of this drive towards better outcomes. They are agreements between the Scottish Government and Community Planning Partnerships which set out how each will work in the future towards improving outcomes for the local people in a way that reflects local circumstances and priorities, within the context of the Scottish Government's National Outcomes and Purpose. All outcome agreements are uniquely shaped to reflect the needs and circumstances of the areas they cover and this same localised approach is required for skills development.

Strategic Forum - The role of the Strategic Forum is to promote more effective collaboration and alignment between members - Scottish Government, SDS, Scottish Enterprise, Highlands and Islands Enterprise, the SFC and Visit Scotland - and to enable Ministers to give strategic direction in accordance with the Economic Strategy. It also has a monitoring role.

Key Partners are:

- *Skills Development Scotland*
- *Scotland's schools, colleges and universities*
- *Employability support*
- *Third Sector*
- *Modern Apprenticeship Group*
- *Private training provision*

Description

Skills Development Scotland (SDS) is the national skills body supporting the people and businesses of Scotland to develop and apply their skills. SDS was formed in 2008 as a non-departmental public body, bringing together careers, skills, training and funding services. SDS plays a key role in driving the success of Scotland's economic future, working with partners to:

- Support individuals to reach their potential
- Help make skills work for employers
- Improve the skills and learning system.
- SDS is preparing Scotland's workforce to maximise opportunities in today's dynamic world.
- How SDS deliver their services

SDS plays a key role in driving the success of Scotland's economic future, working with partners to support individuals to reach their potential; help make skills work for employers; and improve the skills and learning system.

SDS is preparing Scotland's workforce to maximise opportunities in today's dynamic world. SDS prepared a Planning Model to help explain their approach to impact (See Figure 1). The role of SIPs is to help understand the demand for skills within the existing and emerging labour market. They are focused primarily within sectors, apart from one which looks at a particular region, with unusual characteristics (peripheral).

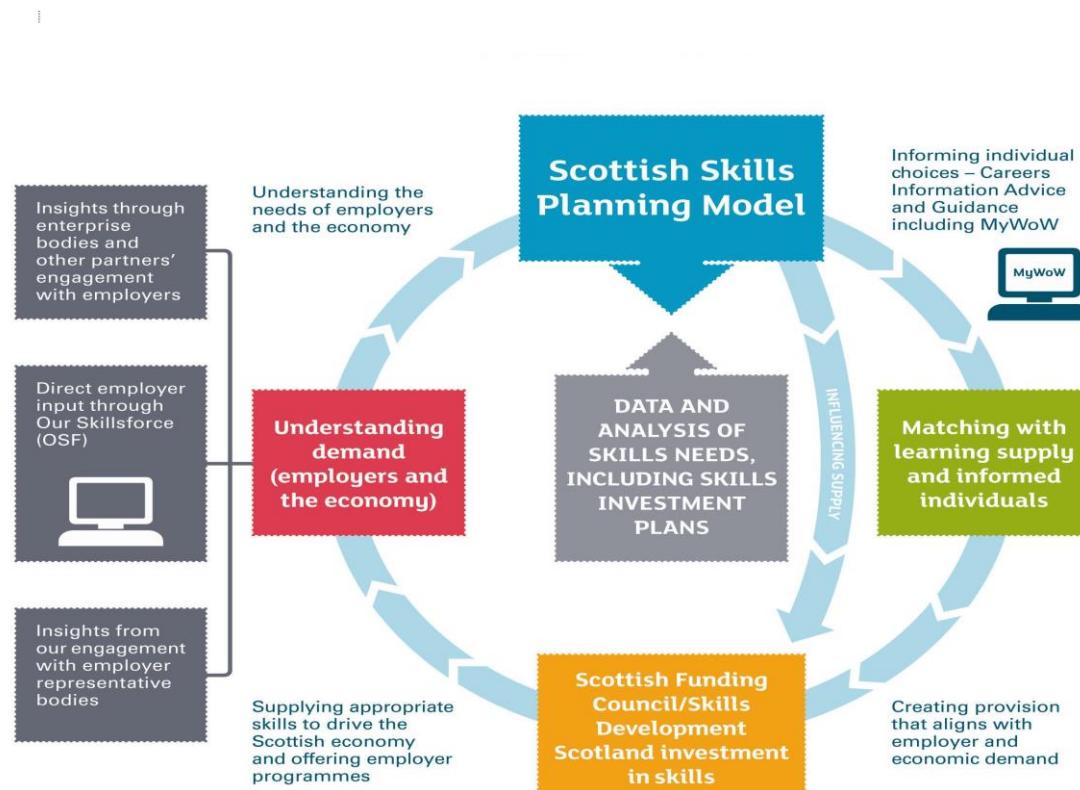


Figure 1. Scottish Skills Planning Model

Regional Skills Assessments (RSA)

These are produced in partnership between:

1. Skills Development Scotland (described above) who are leading the RSA analysis and production.
2. Scottish Funding Council - The Scottish Further and Higher Education Funding Council (SFC) is the national, strategic body that is responsible for funding teaching and learning provision, research and other activities in Scotland's 25 colleges (see Colleges that we fund) and 19 universities and higher education institutions (see Universities and Higher Education institutions that we fund). We are more commonly known as 'the Scottish Funding Council' or 'SFC'.
3. Scottish Enterprise identify and exploit international opportunities for Scotland's economic growth. They do this by supporting Scottish companies to compete, helping to build globally competitive sectors, attracting new investment and creating an open and responsive business environment.
4. The Scottish Local Authorities Economic Development Group (SLAED) is a network of senior officials from economic development teams across all 32 Scottish local authorities. SLAED exists to provide a national voice for Local Economic Development in Scotland by linking the work of Scotland's 32 local authorities and bringing a collective influence to bear at national and European levels.

The RSAs are the culmination of some twelve months of work. Extensive consultation took place during their development with partners (Colleges, local authorities, Regional Advisory Boards), to agree the geographic coverage, scope and content.

This engagement continued at the drafting stage with helpful feedback from a small number of 'critical friends' in July 2014. In August 2014, pre-publication drafts of each RSA were shared, in confidence, with the relevant regional college (and regional chair) and local authority delegated representatives (via SLAED) with a request for feedback by early September 2014 on three areas:

- Factual inaccuracies;
- Any additional insight/local evidence that could inform and complement RSAs; and
- Comments on the key questions contained therein.

In addition, key SDS staff and SFC Outcome Agreement Managers provided vital feedback. Over 50 external responses were received (80% response rate) with the vast majority offering positive and constructive feedback. By far, the main area for feedback was based around the evidence presented for the HE and FE provision. Every effort has been made to accommodate relevant amendments and suggestions provided by partners.

Every partner that provided comment on their RSA received an individual written response thanking them for their input and detailing how their comments had been dealt with. For some partners this also included a telephone call or a follow up meeting.

In addition, prior to publication (and after launch) SDS engaged with other stakeholders that were likely to have an interest in RSAs, including:

1. Department for Work and Pensions;

2. Employer representatives – e.g. FSB, CBI, Chambers of Commerce, SCDI;
3. STUC;
4. Scottish Training Federation; and
5. The Third Sector - Scottish Council for Voluntary Organisations and also representatives from the Third Sector Employability Forum.

The RSAs provide a single, agreed evidence base on which to base future investment in skills, built up from existing evidence. Ultimately RSAs should help to:

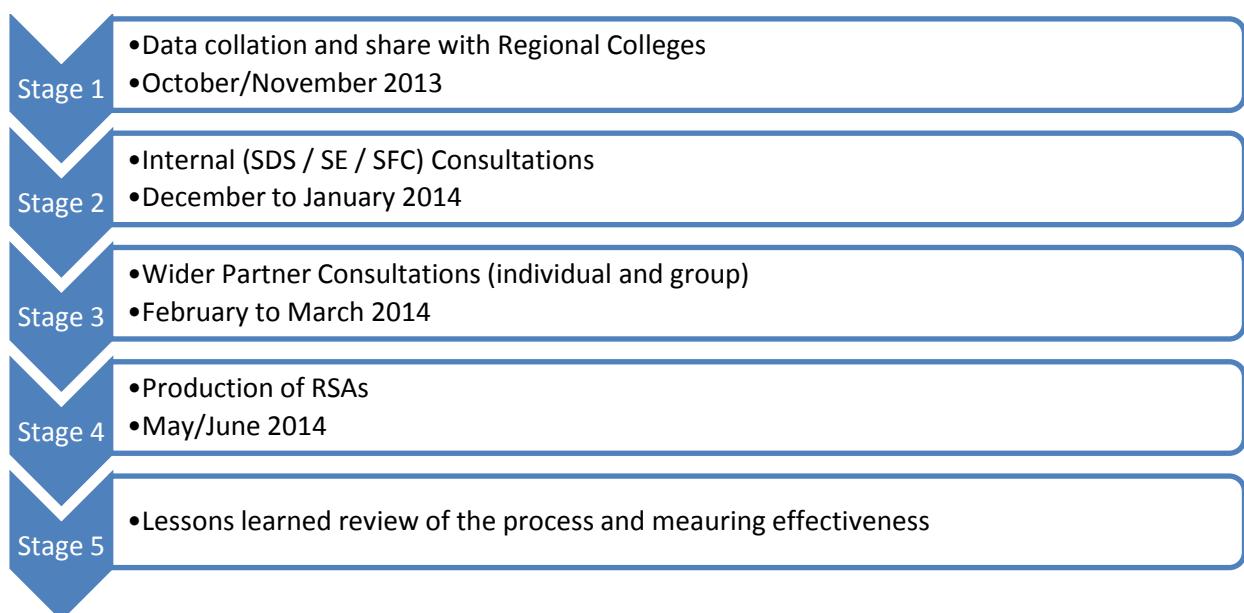
- Support SFC and Regional Colleges in negotiating Regional Outcome Agreements
- Provide a framework for aligning SDS investment in individuals and businesses
- Assist partners in planning their strategic investment in skills
- Highlight gaps in national and regional skills evidence

In setting about developing RSAs the Scottish Government used four guiding principles:

- ‘Useful’ content – and taking a holistic view beyond simply ‘skills’
- Extensive partner and ‘customer’ engagement
- Reflect Scotland’s different economic geographies
- It’s an assessment – not a plan

They adopted a five stage model of engagement to support RSAs with a view to ensuring sustainability for the outputs. This is set out below:

Engagement Model



RSAs were created typically at sub-regional levels typically larger than Local Authorities in an attempt to reflect geographical labour markets. The ones produced are set-out below:

RSA	Local authorities covered
Aberdeen City and Shire	Aberdeen City Aberdeenshire
Ayrshire	East Ayrshire North Ayrshire South Ayrshire
Edinburgh and Lothians	East Lothian Edinburgh Midlothian West Lothian
Fife	Fife
Forth Valley	Clackmannanshire Falkirk Stirling
Glasgow and Clyde Valley	Combines West. Lanarkshire and Glasgow Region RSA
Glasgow region	Glasgow City East Dunbartonshire East Renfrewshire
Lanarkshire	East Dunbartonshire North Lanarkshire South Lanarkshire
South of Scotland	Borders Dumfries and Galloway
Tayside	Angus Dundee Perth
West of Scotland	East Renfrewshire Inverclyde Renfrewshire West Dunbartonshire

These contents cover the following headings and categories reflecting the scope and depth of the analysis undertaken.

Policy context

- National economic and skills strategies
- Skills Investment Plans (SIPs) for Key Sectors
- Youth Employment Strategy
- College Regionalisation

Economic context

- Global / national economic context and outlook
- Impact of the recession on the labour market and demand for skills.

Regional Economic Performance

- Gross Value Added
- Productivity
- Earnings
- Business Base

Profile of the Workforce

- Total Employment
- Industrial Structure
- Occupational Profile

People and Skills Supply

- Population
- Labour Market Participation
- Qualifications and Attainment

Education and Training Provision

- Modern Apprenticeships
- College Provision
- University Provision
- Graduate Destinations.

Skills Mismatches

- Recruitment Activity
- Vacancies
- Skills Gaps

Economic and Skills Outlook

- Economic Outlook
- Expansion Demand
- Replacement Demand
- Skills for the Future
- Company Support

The result is a regional Data Matrix, pictured below:



1	Regional Skills Assessments Data Matrix - Contents									
2	Economic Performance									
3	1. GVA 2. GVA per Worker									
4	Demographic Profile									
5	3. Total Population 4. Working Age Pop 5. Pop Change by Age 6. Population Projections									
6	Labour Market Participation									
7	7. Resident Employment 8. ILO Unemployment 9. Economic Inactivity 10. Youth Unemp (16-19) 11. Youth Unemp (16-24)									
8	College Students									
9	17. Age 18. Mode of Study 19. Level of Study 20. SIMD status 21. Home area 22. Subject									
10	Modern Apprenticeships									
11	23. Starts by Age 24. Starts by Gender 25. Starts by Framework 26. In-Training 27. Leavers 28. Achievements									
12	Industrial Structure									
13	29. Emp by Industry 30. Top 20 Sub-Sectors 31. Emp Specialisation 32. Growth Sector Emp 33. SE Account Managed Cos 34. Reg Selective Assistance									
14	Qualifications and Attainment									
15	14. Staying-On Rates 15. School Leaver Quals 16. Qualification Profile of WAP									
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F11AL PISA Data Matrix - Microsoft Excel												
	Contents											
1	Aberdeenshire City & Shire	Angus	Argyll and Bute	Clackmannanshire	Dumfries and Galloway	Dundee City	East Ayrshire	East Dunbartonshire	East Lothian	Edinburgh City	Fife	Highland
2	Total Unemployment (Age 16-24)											
3	Aberdeenshire City & Shire	Angus	Argyll and Bute	Clackmannanshire	Dumfries and Galloway	Dundee City	East Ayrshire	East Dunbartonshire	East Lothian	Edinburgh City	Fife	Highland
4	2005	5,300	10,800	2,400	19,400	1,500	1,500	900	1,100	2,700	1,900	800
5	2006	5,300	10,800	2,400	19,400	1,500	1,500	900	1,100	2,700	1,900	800
6	2007	3,100	4,180	3,000	23,800	1,800	1,300	1,500	1,600	2,200	1,100	800
7	2008	2,700	4,000	3,000	23,000	1,800	1,300	1,500	1,600	2,200	1,100	800
8	2009	2,000	4,900	4,000	4,400	1,000	1,000	1,000	1,600	2,500	1,200	500
9	2010	1,100	2,700	18,000	5,200	1,000	1,000	1,000	1,600	2,500	1,200	500
10	2011	6,900	7,700	19,300	4,200	3,500	2,400	1,600	700	2,500	1,400	1,300
11	2012	7,200	7,200	21,000	5,200	3,500	2,400	1,600	700	2,500	1,400	1,300
12	2013	3,700	7,600	21,600	4,000	32,500	3,000	6,400	2,600	1,700	2,400	2,300
13	% Unemployment (Age 16-24)											
14	2005	13.9	17.7	10.0	9.9	12.7	9.5	11.9	9.8	10.4	9.8	10.5
15	2006	13.6	14.3	13.3	13.4	15.7	14.6	13.1	16.0	16.3	10.9	9.6
16	2007	12.7	14.6	13.1	13.2	14.8	13.5	13.9	15.7	15.3	10.6	9.5
17	2008	11.1	15.1	12.5	12.6	14.7	11.9	13.0	14.8	14.6	11.9	10.3
18	2009	6.0	16.1	13.6	16.2	14.7	17.7	13.8	8.8	17.0	20.2	10.3
19	2010	6.2	14.5	13.0	13.2	17.7	12.7	12.5	14.5	22.2	16.5	11.6
20	2011	13.2	27.9	18.7	22.9	17.6	17.6	14.1	12.2	21.7	13.4	14.2
21	2012	13.1	27.9	18.7	22.9	17.6	17.6	14.1	12.2	21.7	13.4	14.2
22	2013	8.7	26.0	21.2	24.4	18.6	19.0	16.8	8.0	17.1	10.4	20.6
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The approach included meetings with partners and, for instance Local Authorities.

Linked to the four purposes of RSAs described above, there are four key areas of action post launch:

- a. Engagement with SFC and regional colleges to identify a plan for the way in which RSAs are utilised to inform Regional Outcome Agreements.
- b. Engaging with key staff teams within SDS on the use of RSAs within our business with a view to:
 - i. Raising awareness of their content;
 - ii. Exploring with relevant staff teams:
 - 1. The ways in which RSAs can best be used to meet the needs of our clients; and
 - 2. The requirements of our staff to enable them to use RSAs effectively e.g. summary documents/slide packs, extracts of key relevant data;
 - iii. Agreeing a plan with staff teams on the ways in which RSAs will be used to align investment and to influence delivery of services.
- c. Engaging with partners to ensure that RSAs are utilised in the regional planning process. Amongst other things this will include:
 - i. Discussion with partners at the SLAED Conference planned for February 2015;
 - ii. Piloting a piece of work in Aberdeen City and Shire to utilise the RSA and sector based Skills Investment Plans to develop a Skills Strategy for the region, jointly funded by SDS and the Aberdeen City and Shire Economic Future; and
 - iii. Engaging with regional fora and other partners in their skills planning and development; and

- d. An independent review of the RSAs' content (including highlighting gaps in evidence), process and utility. This is planned for the early part of 2015.

Skills Investment Plans (SIP)

Having worked through a programme of 10 SIPs, SDS recognise that there are several cross cutting themes that present consistently across the SIP action plans. Work is underway to develop a strategic approach to addressing these. The themes take the following broad form:

- To inspire and prepare the future workforce to engage in the career opportunities provided in the sector (i.e. sector attractiveness)
- Developing and investing in pathways to enable people to enter and build their skills in the workforce (i.e. entry routes, MAs, and transition training for existing workers)
- Providing specific support to address immediate workforce development needs (i.e. tactical one-off projects to fill a gap)
- Stimulating systemic change to ensure provision meets the needs of employers (i.e. right content, right place, right time)

Aside from the common themes in the action plans, there are other dimensions that are being considered in relation to implementing the SIPs so that opportunities to maximise impact are identified, for example:

- Related skill sets (e.g. customer service, STEM, management and leadership etc)
- Elements of an individual and business journey through skills system (i.e. school interventions, FE/ HE provision, workforce development)
- SDS service area
- Partner agencies' sphere of influence and responsibility

The table below summarises the state of play regarding SIP publication. By the end of 2014/15 financial year it is SDS aim that the full suite of SIPs will be in place.

Sector	SIP Publication
Energy	March 2011, 'refresh' underway and launched in March 2015
Food and Drink	June 2012
Tourism	March 2013
Finance	November 2013
ICT	March 2014
Life Sciences	April 2014
Engineering	August 2014
Chemical Sciences	October 2014
Creative Industries	In development – anticipated in first half of 2015
Construction	Launched in March 2015

Whilst there has been considerable effort required to develop SIPs, implementation of action plans of those SIPs already been published has been ongoing with the Sector Development Team working with ILGs and their skills groups to make progress on SIP action plans.

The processes involved in developing a SIP stress the importance of partnership working when understanding the demand for skills. Figure 2 illustrates the steps (below).

Developing a SIP

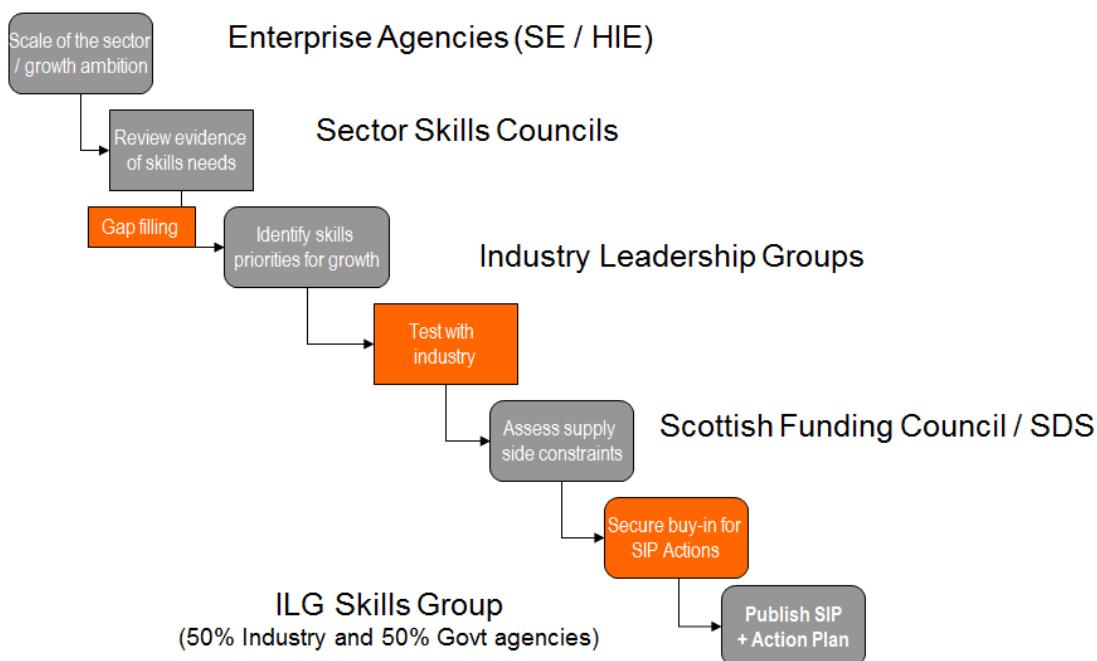


Figure 2. Steps involved in developing a new sectoral SIP

The production of all of the sector SIPs has involved a review of industry publications and official data sources, leading on to consultations with stakeholders such as employers, industry bodies, universities, colleges and local authorities to understand the key issues facing the sector and its future skills needs. The SIP sets out a clear statement of the sector's skills needs and highlights the skills priorities to be addressed to support the sector's future growth ambitions.

As well as descriptive sections exploring skills gaps, demand and the labour market, SIPs includes a critical section on Action Planning. The action plan details the key actions that will be undertaken to support the growth ambition of the sector. It sets out specific short-term and longer-term actions, partners and inception timescales. An example of elements of an Action Plan is given below with regard to (for the Chemical Sector) two of the identified 'Themes'.

Having worked through the programme of 10 SIPs, it becomes clear that there are several cross cutting themes that present consistently across the SIP action plans. Work is underway in SDS to develop a strategic approach to addressing these.

Theme 3: Upskilling of the existing workforce

Action	Description	Expected outcomes	Partners	Start date
Colleges to further develop provision to meet employer needs	Increase scale and relevance of activity. Involve industry in course design, share resources/staff	CSS to review the involvement of its members with education institutions and request greater involvement where required	Employers/ Colleges/ Universities	Q3 2015
Supporting use of Flexible Training Opportunities to support upskilling in the sector	Promotion of public sector support of FTOs	50 episodes of training supported through Flexible Training Opportunities Fund.	SDS	Q3 2015
Skills academy	Investigate options for an industry focussed skills facility to address company and geographic challenges	Feasibility study completed	CSS/SDS/SE	Q4 2014

Theme 4: Better meeting employer demand

Action	Description	Expected outcomes	Partners	Start date
Soft skills training	Support the introduction of soft skills training	Graduates/post graduates better able to communicate their skills and attributes to potential employers	SFC/SDS	Q2 2015
Communication	Develop a chemical sciences zone on Our Skillsforce and on My World of Work	Information of Our Skillsforce and My World of Work viewed as up to date and relevant for both industry and students	SDS	Q2 2015
Sponsorship	Promotion to employers of the benefits of sponsoring university projects	Increase the need for people who understand the job e.g. continuous chemistry versus batch processes	CSS	Q2 2015

Figure 3. Elements of the Action Plan for the Chemicals Sector.

The themes take the following broad form:

- To inspire and prepare the future workforce to engage in the career opportunities provided in the sector (i.e. sector attractiveness)
- Developing and investing in pathways to enable people to enter and build their skills in the workforce (i.e. entry routes, MAs, and transition training for existing workers)
- Providing specific support to address immediate workforce development needs (i.e. tactical one-off projects to fill a gap)
- Stimulating systemic change to ensure provision meets the needs of employers (i.e. right content, right place, right time)

Aside from the common themes in the action plans, there are other dimensions that are being considered in relation to implementing the SIPs so that opportunities to maximise impact are identified, for example:

- Related skill sets (e.g. customer service, STEM, management and leadership etc)

- Elements of an individual and business journey through skills system (i.e. school interventions, FE/ HE provision, workforce development)
- SDS service area
- Partner agencies' sphere of influence and responsibility

The SIP is used as part of a planning model to understand and rationalise the demand for skills. They particularly aim to understand the demand side of the skills 'market', consequently they seek to understand employers so that the system can be better at meeting employer need, including where there may be a need for a rapid response to new circumstances – new sub-sectors/skill sets or perhaps in response to the arrival or loss of a major employer.

It is also critical that the SIP is able to understand, through survey work, how attractive a sector is to new entrants, to enable it to change the way it is marketed/perceived and to indicate where certain sectors may struggle. As well as the future workforce, the SIP will also focus on the need to upskill the existing workforce.

In Scotland, as in the rest of the UK, there is a continuing policy move to try and ensure the skills system is responding swiftly and effectively to employer demand and to future skills needs. This is typically articulated in policies concerning the need for a more demand-led skills system. In parallel to this the SIP will also play a role in simplifying the skills system – and making it more transparent.

In Scotland, SIPs concentrate on tackling the following key questions:

- What is driving growth and change in the sector?
- How attractive is the sector (especially to young people)?
- Where are the skills gaps and skills shortages – and where do employers find it hard to recruit?
- What numbers and types of skills are coming out of the education system (Universities, Colleges, Modern Apprenticeships, Schools)?
- What are the prevalent employer views of skills system (Quantity, Quality, Appropriate skills?)
- What is the importance of international talent attraction for the sector?
- What are the major themes in current employer recruitment practices?

SIP Overview: <http://www.skillsdevelopmentscotland.co.uk/resources/skills-investment-plans/>

Example SIPs:

http://www.skillsdevelopmentscotland.co.uk/media/1266192/chemical_sciences_digital_skills_investment_plan.pdf

Impact and Replicability

The Scottish Skills Planning Model was fairly recently established, with sector reports first being created in 2011, and ongoing. The model identifies the need for a strong evidence base to inform planning and delivery of skills to meet economic demand.

The evidence base and planning generated through the Skills Investment Plans (SIPs) and the Regional Skills Assessments (RSAs) is central to the Model. The SIPs are developed (in partnership with business, unions and government) by Skills Development Scotland (SDS) who are the national skills body supporting the people and businesses of Scotland to develop and apply their skills.

The Skills Investment Plans (SIP) are an industry-led document developed by Skills Development Scotland (SDS) on behalf of the Scottish Government. They are the result of policies seeking:

- Explicit emphasis on skills policy as a driver of economic growth, and tool to address youth unemployment
- Alignment of skills provision with economic and employer demand
- Reflected in development of College Outcome Agreements
(As with RSAs) From the Need for good quality LMI

These drivers are similar to those found within most European regions and could easily transfer to the drivers for most European Observatories. Furthermore there is recognition in Scotland that following reductions and losses to the LMI infrastructure at both national and regional/local levels – and also within the private sector ‘Sector Skills Councils’ – which have lost significant support from Government, there is a need to ensure policy decisions are informed from quality LMI.

The SIPs form a nice model of how to pull together a sector strategy, through partnerships, which lead to agreed goals and targets and are accompanied by detailed plans and monitoring.

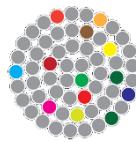
“The SIP sets out a clear statement of the sector’s skills needs and highlights the skills priorities to be addressed”

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Work Integration Social Enterprises (WISEs)

Eugenia Atin, Raquel Serrano

Introduction

Work Integration Social Enterprises (WISEs) represent a path to the labour market of people suffering social disadvantage. In the Basque Country, there are about 50 WISEs and their **growth** in the Basque Country has to do with the framework of existing **public and political support** for the inclusion as well as the initiatives of social intervention institutions that pursue integration through work and, in recent years, have shown its **effectiveness** in labour market participation of people with special difficulties.

The WISEs enable **standardized access** to **employment** after a period of coaching and through the performance of a job (training on the job) in a **non-profit commercial structure of production** of goods or services. For this reason, they are part of the framework of active employment policies to ensure the integration into the labour market of people at risk of social exclusion while achieving their personal and social activation.

They constitute a good practice in the analysis of the relationship between active employment policies and sustainable economic development and vocational training through training in the workplace of people at risk of social exclusion. So the WISEs while generating economic activity and wealth do from a commitment to people and the environment and society by encouraging hiring and purchase of services and goods with ethical, responsible and caring.

Summary

The Work Integration Social Enterprises (WISEs) are temporary learning structures aimed at the social inclusion of people with **low employability**. The company seeks to insert them through an itinerary of insertion which is a customized work plan that establishes a planned path of vocational training in the workplace and acquisition of technical, personal, social and labour skills aimed at achieving integration in the regular labour market.

In this line, the WISEs promote training resources tailored to the needs of the unemployed person and organize the collaboration with other external agents involved in the processes of socio-labour insertion. For this reason, they are part of the framework of active employment policies to ensure the integration into the labour market of people at risk of social exclusion while achieving their personal and social activation.

Around 40% of the WISEs' insertion workers are immigrants.

Context and setting

Economy, geography

The WISEs are part of the Social Economy. Social Economy in Spain is defined as the set of economic and business activities carried out in the private sector, and performed by entities pursuing the collective interest of its members, the general economic or social interest, or both of them. Thus, the social economy is composed by a plurality of agents (cooperatives, foundations, integration enterprises, special employment centers, ...) that operate in very different scenarios with a common core of being private nature organizations that develop an activity with the prime objective of meeting the needs of people, rather than remunerating or hedging capitalist investments.

Following the recession of recent years, the landscape of the way business is conducted in Spain has been constantly changing, in reaction to the affects the recession wrought on business and employment. In particular, there has been a flourish in new forms of social innovation and a range of social approaches to business as a result. In 2014, a report published by CEPES (Confederación Empresarial Española de Economía Social) stated that there were over 42,000 social enterprise entities based in Spain (consisting of insertion companies, mutualities, co-operatives, etc), with over two million people either directly or indirectly employed by them; in both cases, the highest number ever recorded.

The Social Economy of the Basque Country is made up of a total of 3,354 companies, which bring together a total of 69,280 jobs and a turnover of 9.653 million euros in the year 2014. In relative terms, the use of the social economy represents 8% of total employment in the Basque Country. Comparison with other autonomous communities (regions in Spain) shows that the Social Economy of the Basque Country has the higher specific weight within its productive fabric, representing more than 15% of the social economy in the state, well ahead of other communities.

Within the Social Economy, the WISEs in the Basque Country also occupy a privileged spot. Of the total of this type of companies operating throughout the Spanish State, the Basque Country is along with Catalonia, with almost fifty WISEs respectively, leading the list of Autonomous Communities with a higher volume of WISEs statewide (FAEDWISEs, 2011).

At present there are 47 registered WISEs in the area of the Basque Country. In 2014, data from Gizatea, WISEs Association in the Basque Country, indicated that it brings together 45 companies, with 975 working people of which about 60% are people at risk of social exclusion. Its turnover in 2014 was 18 million euros, resulting in a significant contribution to the Basque economy.

Nature of the VET concerned

The WISEs are production structures working in the market by producing goods and services, with the additional aim of social integration of their workers. They act as transition companies, where people with social and labour difficulties develop the needed skills for the performance of an occupation through the formula of learning by working. That is, they are based on a model of integration through work, or economically speaking, from the design implementation of individualized itineraries.

In the organizational model of WISEs, intervention models of integrated nature are designed in the field of social support in the labour market. Systems, protocols, guidelines and tools are implemented in order for the insertion employees to develop the necessary skills.

In this line, the WISEs promote training resources tailored to the needs of the unemployed person and organize the collaboration with other external agents involved in the processes of socio-labour insertion. For this reason, they are part of the framework of active employment policies to ensure the integration into the labour market of people at risk of social exclusion while achieving their personal and social activation.

The WISEs offer people at risk of social exclusion a labour contract of at least 6 months and a maximum of 36 months, under the sector's collective agreement. They offer a personalized coaching which includes support, monitoring and training actions (indispensable for their social inclusion) conducted by qualified personnel to facilitate the acquisition of social and work habits required for inclusion in the standard market, improving the employability of the people participating in them.

The companies prepare the personalized paths to insertion to support proper learning and which contemplates the attainment of social skills, labour, basic training, professional qualifications and market knowledge that allow them to improve their employability. The skills acquired through training in the workplace can be recognised and therefore many of the WISEs are using the skills recognition devices.

Nature of the Economic Development (national/ sector etc...)

The last decade has observed a significant increase in the amount and plurality of WISEs in the Basque Country, stimulated by two circumstances. The first is the increase in the demand of WISEs due to the high rates of unemployment and poverty and social exclusion with their impact on the most disadvantaged groups with difficult level of employability. The second circumstance is the strong commitment to active inclusion and employment and training as an engine of integration led by the Basque Government and some social and economic agents to show that everyone has some room to improve their employability and that career guidance can be decisive to overcome very difficult personal situations.

In the Basque Country, the WISEs were first recognised in 2001 when the Basque Government created the registry. It is in 2002 when a programme is launched for the support, creation and maintenance of such companies. The WISEs in the Basque Country are regulated both by state law, mainly by the State Law 44/2007 and Royal Decree 49/2010, and by the regional law: Decree 182/2008 approving the legal category of the integration and the regulated process of access and their registration; and Law 18/2008 for Income Security and Social Inclusion. In this legislation the exclusion of certain people, including a subset of international immigrants is acknowledged and the WISEs are proposed as one of the suitable mechanisms to facilitate a process that aims at employment on the regular market and, ultimately, at their social normalization.

This commitment is embodied in institutional aid for the creation and maintenance of insertion companies that constitute one of the instruments in the process of socio-labour insertion of people at risk of exclusion. The main tool for the promotion of these companies is the aid for the creation and

maintenance of WISEs of the Department of Employment and Social Affairs, which the Basque Government grants, both to promote creation and to support their sustainability (Decree 182/2008 of 11 November).

The foundations of this framework of support and collaboration for the promotion of the WISEs are found in their own nature. Indeed, the WISEs integrate two perspectives: to compete as an ordinary company and to encourage and favour coaching and learning processes. The WISEs are businesses and as such, they must compete in the market, so the criteria of productivity, competitiveness, are key elements like in any other business, as well as the working relations. On the other hand, their mission is to enable access to mainstream employment for people at risk of social exclusion, after a period of support and training through the performance of a job, so they must develop a productive working environment but always with intervention and coaching measures aimed at improving the employability of the socially disadvantaged.

In this line, the grants and aids to the WISEs coming from the active employment policies are aimed at promoting the creation of insertion companies and to support the maintenance of insertion companies. Among the measures under both provisions, we can highlight the grant of 12,300 euros for the creation of insertion job positions (with an additional 5% if the individual is a woman), the subsidies to investments that reach a maximum of 85% and 12,000 euros per job position, subsidies to insert production technicians (1,800 euros per position per year), study technicians (with a maximum of 50% and 6,000 euros), audit technicians (1,250 per position) and education technicians (EUR 1,100 per position), as well as the grant for labour insertion in training comprising 80% of tuition plus a certain percentage in diets.

Description

Why this has been included

This case study focuses on the role of integration enterprises (WISEs) of the Basque Country as agents of social and solidarity economy for the training and the socio-labour inclusion of people at risk of social exclusion with a special focus on the most vulnerable immigrant human capital.

The case study describes the solutions brought together by the sector of the social economy through the Basque WISEs, as vehicles that decisively back the active inclusion of groups in social difficulties, both the international immigrants and the native people in the Basque Country who suffer social disadvantage.

The case is interesting because the WISEs have been and still are the gateway of entry or reentry into the labour market for a number of workers in difficulties in finding work. Furthermore, clear results have demonstrated that the WISEs are a good practice of integration and that they improve the employability of the most vulnerable groups and immigrant population.

With regard to vocational training, WISEs develop socio-labour integration programmes that allow the acknowledgment of skills, abilities and responsibilities of people in insertion processes in a business

environment, as a springboard to leap into the regular labour market. The performance focuses on the people and the coaching along the paths of labour integration.

Describe national setting

At present there are 47 insertion enterprises registered in the area of the Basque Country. However, the analysis of the economic and social results shown below based on the social reports produced by Gizatea, Association of Integration Enterprises of the Basque Country that collects information from its partners through 42 WISEs through their Social Balances. The quantitative data therefore is not completely accurate but it faithfully reflects the characterization of the WISEs at present and their recent process.

Economic data:

In 2014, about 80% of the activities of the WISEs were carried out in the tertiary service sector, highlighting the activities of hotels and catering; collection and trade activities of second hand articles and other activities of collection, treatment, recovery and disposal of waste; home help services and cleaning activities among others. 81% are limited companies, showing an increase of these companies as well as cooperatives. If in 2011, 64% of the WISEs had a local or provincial scope, in 2014 that figure rose to nearly 80%.

The total turnover of the 42 WISEs studied was of 24.8 million euros, with an average per company of € 591,280, similar to the results of 2010 (572,090). The gross added value generated by the group of insertion enterprises is reduced to 14.3 million euros, being in similar values to 2010.

The analysis of the sources of income of the WISEs reveals that public aid accounts for 24% reaching 6,260,986 €. 72% of the revenue of the WISEs comes from the sale of products and services, thereby assuming a certain degree of autonomy and a market presence similar to SMEs. Thus, the main source of income comes from sales, 72%. The business focuses on 76% in the private sector and 24% in the public sector.

With regard to state aid, these reached 9 million euros in 2011, although the crisis has reduced this amount to 6 million in 2014, where the main change is observed in the reduction of investment aid, technical assistance and other concepts, keeping all the aid for the job positions. The distinguishing feature of the integration enterprises over other mechanisms for combating poverty, is that "WISEs do not consume non-recoverable social resources, the public investment produces a return to society." The association of integration enterprises has calculated a total of 2.676.32 euros of the return to the administration in respect of social security, common contingencies, VAT, income tax and other taxes estimated at, which per job position, amounts to 7.625 euros.

Social data:

In 2014 WISEs created 575 full-time equivalent jobs, which have employed 975 people. 61% of these positions are social insertion positions, employing 570 people, while 39% are not related to insertion jobs, employing 405 people. Considering the genre aspects, today there is a fairly equal distribution (51% insertion positions are held by women). In 2009, 62% of the insertion positions were occupied by women.

Of the 570 people that in 2014 were holding insertion positions, 132 (23%) completed the process of integration, 37 (6%) completed their contract, 21 (4%) dropped out and 380 (67%) continued working in the insertion position.

Of the 169 people who have completed the process or contract, 50 (38%) have found employment in the regular market and 6 (5%) have chosen entrepreneurship or self-employment. 12 (9%) have been inserted into the same company but occupying thereafter a position of "no insertion". Finally, 64 (48%) who have completed the process of integration have not found employment.

Therefore, the percentage of these workers entering the labour market after completion of their itinerary is 43%, whereas in 2009 it was 65%. The ratio of employment in 2014, taking into account employment in the regular labour market (employed and self-employed) and integration companies is 52%, remaining stable since 2010 (in 2009 it was 75%).

Type of VET and policy

The WISEs are an instrument of active employment policies and constitute an innovative business model to achieve active inclusion through the training and employment to ensure integration into the labour market of people at risk of social exclusion in conjunction with the achievement of their personal and social activation. That is their fundamental mission, in addition to meeting business objectives in the specific business sector in which they operate, providing trained personnel for the regular labour market. That is, they are based on a model of integration through work, or economically speaking, from the design implementation of individualized itineraries. They assume, therefore, a new role against a more "passive" role offered from the social protection system, as they tackle social exclusion from an active approach.

The Basque Government Decree 182/2008 of 11 November regulates the legal category of the insertion companies and establishes the access and registration procedure. In short, the characteristic that makes these companies different from others is that they enable standardized access to employment of groups with special difficulties, after a coaching period and through the performance of a job. This is the added value, while providing as well quality services with the necessary human and technical resources.

Other basic characteristics are:

- They are productive structures promoted by non-profit entities but working in the market by producing goods and services. This line must be promoted and participated in at least 51% of one or more promoters nonprofit entities. They must also apply the available surplus obtained each year to the improvement or expansion of their production structures or the promotion of social and professional integration related activities and should not occur in any case benefit sharing.
- They are instrumental, ie, they are not an end in themselves, but are created as an instrument of social and labour intervention in order to prepare people to enter the regular labour market. Learning focuses not only on technical skills but also in basic relational skills to acquire work habits. Therefore they should provide the personnel in the integration process with support measures (technical training, social and labour habits, social support, etc.) in collaboration with public services;

- They are temporary as they have the will to prepare people for the transition to the regular labour market. They must have at least 40% of workers in integration processes during the first three years and at least 50% from the fourth year and the stay will be of three years maximum in at most 75%;
- They work with people who have difficulties in accessing the regular labour market and who are at risk or in social exclusion. So the main purpose of their social object should be the social inclusion of people with special difficulties in accessing the labour market (integration agreement);

Target groups

Within the alternative framework provided by the WISEs we highlight as a good practice their contribution to promoting social inclusion through the facilitation of employment for the most disadvantaged, of different ages and gender, in many cases with substantial disabilities and low levels of employability. For a person to access a WISE's job position, he/she has to be unemployed and has to have a signed agreement with the corresponding Social Services. Recipients of social and professional integration are people in serious situation or risk of social exclusion who are unemployed and who are experiencing difficulties in accessing the regular labour market. Also people that are included in some of the following groups:

- People receiving the minimum income guarantee (RGI) and the members of their cohabitation unit.
- Young adults aged eighteen and under thirty, from Child Protection Institutions.
- People with substance abuse problems or other addictive disorders who are in rehabilitation or social reintegration.
- Prison inmates whose prison situation allows them to gain employment and whose employment is not included in the scope of the special employment relationship regulated by Article 1 of Royal Decree 782/2001, of July 6th and parole and former inmates.
- People from pre-employment, training or guidance programmes.

The Basque authorities have opted for promoting these business initiatives as an activation strategy and as a means to materialize the principle of double duty upon which the Basque system of income security and social inclusion is based.

And in this line it is worth noting the work with the immigrant community since nine out of ten of the workers in the WISEs in the Basque Country are persons of foreign origin. As for the volume that represents the foreign-born population in the Basque WISEs, the total is around 35%, having grown from the initial 5% when the WISEs were created to stand currently at just over a third of the total.

International immigration is a relatively recent phenomenon in the Basque region, although at present, the immigrant population has become a key segment in terms of demographic and socio-economic revitalization. Most of the immigrants in the Basque Country have an American origin (47%), followed by people from Europe (27%) and third place is for African countries (19%).

Regarding the educational level, the immigrant population over 16 years old is composed of 37% of people with and elementary education or no education at all, furthermore, regarding some nationalities, this low level of qualification may reach 45%.

The integration of this group is essential for social cohesion and assurance of the welfare system as it helps to alleviate the serious demographic and labour imbalances related to the ageing of the Basque population and potential future shortage of labour force. On the other hand the economic crisis has impacted very negatively by increasing the percentage of people, who are in a situation of risk of poverty or social exclusion, migrants being one of the highly vulnerable social groups most likely to accumulate social disadvantage and present a higher incidence in the different forms of poverty.

Thus, with regard to the labour market, you can see the negative impact that the crisis has had on the immigrant community, dramatically increasing the unemployment rate, from 18% in 2007 to 31% in 2010. Furthermore, the rate of inactivity has almost doubled, to the detriment of the working population. Moreover, the average monthly income of immigrants is of 696.37 euros. Specifically in the Basque Country, the poverty rate is almost seven times higher in the homes of immigrants (34%) than in national households (5%) and has increased by four points since 2008. This is why immigrants are living a situation of deep crisis and show a particular vulnerability by failing to join the mainstream labour market, requiring certain other support and preparation procedures as those provided by the WISEs.

In 2013 about 40% of the WISEs' insertion workers were immigrants. As for the proportion that immigrant workers represent inside the WISEs, their proportion varies from representing less than 10% to even 100%, being the willingness to hire foreign origin very high within the WISEs. The origin of foreign workers in WISEs is varied. The six countries from which the highest number of immigrant workers is received are three African: Morocco (22%), Senegal (7%) and Algeria (6.5%); and three in Latin America, Bolivia (12%), Colombia (11%) and Ecuador (7%).

Organisations involved and stakeholders (demand and supply side)

Promoting entities:

According to the decree, the WISEs must be promoted and participated in at least 51% of one or more nonprofit entity promoters. If we stop to analyze the promoters of WISEs in the Basque Country, the majority of them have extensive experience in working with people at risk or social exclusion. Many of them also count with occupational and pre-employment workshops, which provide essential know-how to deal with situations of need and to guide people towards improving their employability. In the case of WISEs, the entities face the challenge of working within business logic.

Coordination with public agents:

The promoters are mainly coordinated with two other key public entities in the process of referral of people to positions of insertion: Lanbide- Basque Employment Service and the Basic Social Services of the Basque Country. In order to improve coordination between these agents, there is a protocol that defines the roles and responsibilities of each in the process of incorporation of a person to a position of insertion.

In the coordination protocol there are other processes where Lanbide- Basque Employment Service collaborates with the WISEs which are further detailed: the managing of the offer of job positions, the contract, the development and monitoring of the itineraries of labour integration, the intervention services and support, the termination of the contract and the final certification of training acquired.

How is it organized

In the organizational model of WISEs, intervention models are integrated in the field of social support in the labour market, implementing systems, protocols, guidelines and tools for developing the necessary skills of employees in positions of insertion. The WISEs apply labour integration itineraries based on the criteria established by the competent Public Social Services and Public Employment Service, according to the integration enterprises. The integration paths (itineraries) have to be accepted by the hired person at social exclusion through an agreement of integration, with the aim of promoting their integration into the regular labour market, defining intervention measures and assistance as needed.

Intervention measures and coaching consist of a set of services, benefits, guidance, mentoring and customized processes for paid work, training in the workplace, labour and social habituation, designed to meet or solve specific problems arising from the exclusion which are hindering the normal development of a person. Usually an insertion itinerary includes several stages:

1. Welcoming service and advice: the situation of the person diagnosed.
2. Individualized work plan
3. Labour pre-workshops: recovery of the existing learning.
4. Labour Specialization Workshops: perfection of knowledge and skills.
5. Integration enterprise: puts into practice what learned in the previous phases.
6. Entry into the regular labour market.

FAEDEI, the Spanish Association of WISEs defines the coaching process as a pedagogical relationship that has as main objective the achievement of personal autonomy, independence and emancipation of the accompanied person in three dimensions: personal, social and professional. Learning skills in WISEs is the backbone for the professional development in a real job.

The accompanying phases are defined and adapted differently depending on the companies and the people but they generally identify three stages in the process of coaching:

1. Welcome and initial diagnosis.

The welcome is vital for the further development of the intervention to be performed. The welcome and diagnostic phase includes the following moments or subtasks:

- Selection and access: This is to define the job and plan the selection process to identify the person who best fits the needs and possibilities of the WISEs, considering both production criteria, and social criteria.
- Welcome and integration: Consists on giving the person all the information he/ she may need about the characteristics, conditions and requirements of the jobs, and at the same time the needs, goals and desires are identified.

- Initial diagnosis: Interview on the starting position with reference to the areas of work and identification of skills that allows focus and guide interventions to the most relevant aspects.
- Design of the personalized insertion itinerary: Basic Plan for participation and action planning to start working on the identified needs of the working people through an active participation, commitment and involvement. The design of the itinerary begins at this stage and ends after the start of the next phase, with the formalization of the Work Plan.

2. Work performance and employability improvement

The basic function of the WISEs, from the point of view of the worker in insertion is the opportunity to learn, qualify and reach a successful job performance to enable him or her to join the regular labour market developing different productive activities. Thus, the process of coaching in WISEs is based on personal and social development, training and professional qualifications, job performance and improving employability.

The objective of this phase is to "accompany the skills acquisition and development". This support implies the need to spend time, talk, discuss, question, meet people and also with the teams, for proper monitoring of the process.

In this regard, we emphasize the educational aspects of the WISEs, linked to job performance. In designing the training process in the WISE, we must consider objectives such as the acquisition of new skills and abilities. The coaching in WISEs is made based on a basic outline of skills which is divided into three major areas: personal (basic skills that everyone needs to achieve the exercise of active citizenship), social-labour (how to deal with the tasks and social relations that occur in a labour context) and technical-professional (aspects related to the specific contents of a profession).

3. Transition to the regular labour market

The transition to the regular labour market is the main objective of the WISEs. It is the time when the employment relationship with the WISEs is nearing the end and the learning process and improvement of employability in the integration enterprise is assessed. After completing these assessments, we begin the proceedings aimed at incorporating the regular labour market. This process begins when the person has reached an optimum performance of personal technical and socio-labour skills.

At this point it is also important to plan the exit phase of the person, trying to anticipate what might happen when he/she finishes the job in the WISEs. Many companies develop accompanying services related to support for active job search and support after the departure from the WISEs.

What worked and why

Integration enterprises are born as an innovative and effective tool to combat poverty and social exclusion using the integration through economy, ie social inclusion through social-labour integration in the labour market.

The differential element of integration companies over other mechanisms to combat exclusion, is that it is a sustainable tool which does not consume social resources since the public investment produces a return to society of much of the investment, both fiscally (economic activity tax, income tax, social security, payroll, etc.) as well as economically to reduce benefits on social assistance or unemployment and boosting the economy society to provide financial resources to people who did not have them.

In this line they generate wealth from their production and economic activity, pay taxes and employee contributions to Social Security, assuming considerable savings in public health care resources for people at risk of exclusion and boosting certain aspects related to Social Innovation incorporating, among others, immigrants. Unlike social assistance, WISESs produce significant returns for the economy, in terms of job creation, increased consumer capacity, dynamism in the economy, returns to public finances through taxes, etc.

In them it is crucial the role played by public or private nonprofit promoters in the WISE's management and promotion. They count with a public grant for their creation and maintenance, and cannot share profits.

Constraints

The latest data corresponding to 2014 shows a negative trend in the last five years in the number of integration enterprises. The impact of the economic crisis has adversely affected the number of working people in both insertion positions and regular positions, with a reduction between 2010 and 2014 of the number of jobs, in full time equivalents of about 27%. Despite the difficulties, the insertion indicator of people integrated in the labour market, 52%, is stable compared to 2010, while in 2009 the number of people who would access the labour market was 75%.

It should be noted that currently the Department of Employment and Social Affairs of the Basque Government, particularly Lanbide, is working on a project to identify and agree on key proposals to enhance the WISEs in the Basque Country, renewing the collaboration approach with the public administration. In this project, we have identified the areas to improve the adequacy of the grants to the needs of the WISEs, as well as some of the other major challenges that the WISEs face today and/or may face in the future:

- Being able to compete in the regular market with other companies. They must work well and hit the market so that consumers or other businesses buy their services / products because they are the best.
- To allow the growth of the WISEs, which are created on an entrepreneurial spirit, rather than as a political entity that survives on subsidies. Be employable and profitable.
- Expand the current number of job positions for insertion.
- Assume that the WISEs are an important part and instrument of active employment policies.
- Awareness in business and society to improve the ratios of insertion and access to markets.
- Greater economic security through projects that guarantee stability over time, to ensure a comfort zone that provides more confidence to these WISEs
- Access more public markets, as a public service that also favours the integration of persons at risk of exclusion.

- Create markets with confidence in the WISEs' products and services through the establishment of a label or brand
- Achieve a level of protection which is adjusted (adapted) and efficient (insured cash generating security company).
- As a sector, to be able to involve the public administration, private enterprises and society.
- To be a stable sector of the future, with new ventures in activities that meet social needs (sustainability, environment, caring for people) in an innovative and competitive way through technological innovation.

Impact and Replicability

How it has influenced VET and economic developments and in what circumstances could it be replicated to other national settings

Insertion Companies in the Basque Country are part of an alternative economy which prioritizes people ahead of economic profit. The case study shows how those companies are structured and its objectives of promotion of social inclusion fight against poverty and generation of opportunities for people with specific difficulties. The quantitative analysis shows the social and economic evolution in the recent years of those companies in the Basque Country between 2009 and 2013 dealing with the financial crisis.

Its link with vocational training and economic development strategies is clear. On the one hand, the WISEs are temporary learning structures aimed at the social inclusion of people with low employability. The company seeks to insert them through an itinerary of insertion which is a customized work plan that establishes a planned path of vocational training in the workplace and acquisition of technical, personal, social and labour skills aimed at achieving integration in the regular labour market. An indicator of the clear impact on how WISEs improve the employability of these people is the insertion ratio in times unaffected by the crisis when it reached 75%. The crisis and the decline of the contracts even in ordinary companies have decreased this ratio to around 50%, after the whole process of labour integration.

On the other hand, although WISEs have suffered from the negative impacts of socio-economic crisis in the current climate of job losses, they have, in general, shown a better performance in comparison to the traditional economy companies, for reasons that may be due both to the workers closest approach to decision-making and its potential greater sense of identification with it, and its flexibility to adjust employment and remuneration. Hence, these businesses are meant as a tractor element of development, sustainability and efficiency that combine profitability and solidarity, thanks to its ability to rectify the imbalances of the labour market, improve employability, promoting entrepreneurship, creating and maintaining high-quality jobs and providing care and proximity services.

For all these benefits the WISEs are being developed in most European regions, albeit with some differences based on the specificities and constraints or specific policies in each European country.

Existing cross-border or transnational implications & how observatories could replicate it

The main line of recent Reforms has-been the gradual orientation towards the activation of policies targeted towards Potentially Claimants active in the labour market. This has-been coupled with the

adoption of a somewhat restrictive criterion towards access to unemployment benefits and subsidies. Regional programmes of minimum income have been the most visible orientation of this activation approach. Also workfare, this development has extended to unemployment subsidies (eg active income for insertion, requirements for agrarian, both unemployment and overall unemployment subsidies, or schemes for "flexible" retirement). Furthermore, programmes targeted to favour access to the labour market are also taking into account incentives for workfare activation of those sectors of socially excluded population. That meant to optimise both labour activation policies by employment services and those carried out by social services for purposes of social insertion. That is the other side are the reforms reproducing the traditional division of deserved and non- deserved poor.

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The occupational compass – a way of showing results

Maria Salomonsson

Introduction

Arbetsförmedlingen (The Swedish Public Employment Service) have a service on internet called Yrkeskompassen (The Occupational compass). It is a tool on internet that shows the labour market situation and prospects for a selection of occupations in Sweden. It's a guidance support for both job seekers and counsellors.

Without the occupational tendency survey this knowledge would have been dispersed and underutilized.

The compass contributes to a more effective matching process on the labour market – shorter duration of vacancies – higher production – higher economic growth in the country – higher GDP.

Summary

This case study describes the occupational compass and how it is produced.

The purpose with the compass is mapping recruitment problems and surplus of jobseekers in each occupation.

The compass is a web-based service who maps about 200 professions. The compass shows LMI and both short and long term projections of the occupations.

It is a survey based model, involving the whole organisation. The knowledge from the local public employment offices is very important.

The model also includes dialogue with employers organisations and labour unions.

The study describes advantages and weakness of the model.

Context and setting

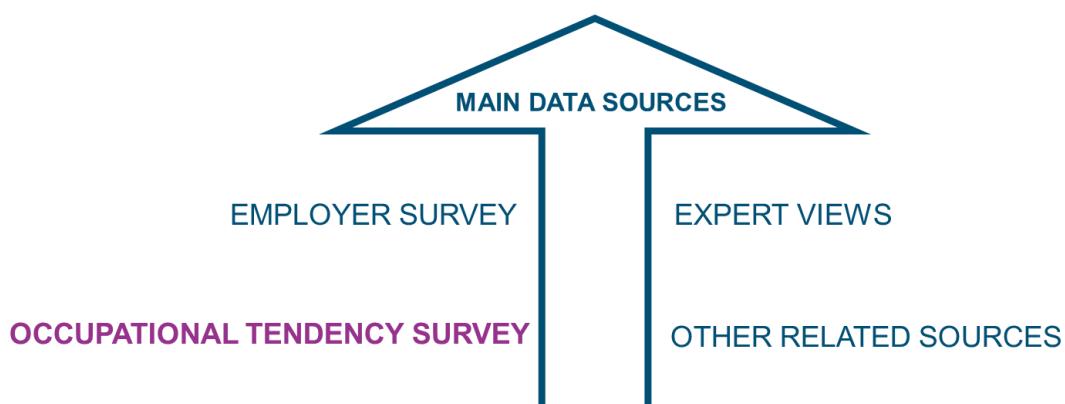
Sweden consists of 21 different counties, and the size of these counties varies widely, both in size and population. Sweden's population was roughly 9.7 million at the end of 2014. The three biggest counties in Sweden had about 52 percent of the nation's total population. Sweden's population is increasing, mostly from an increasing immigration. The economy in Sweden is growing and the employment has been increasing for a while. The unemployment is still at a high level due to an increasing labour force. Even though Sweden has a relatively high unemployment it is hard to find the required competence when employers are trying to recruit. The Beveridge curve shows that Sweden is facing big challenges when it comes to matching job vacancies. Therefore it is important to develop the work with VET-EDS over time.

The occupational compass is an LMI provided by the Public Employment Service (PES). It provides forecasts of shortage or surplus of 200 occupations at the county level in Sweden, covering approximately 80 percent of the Swedish labour market. The range of the short forecasts cover the next twelve months. There are also long term forecasts for the same set of occupations but they are delivered at the national level and over a time span of five to ten years.

The choice of forecasting model based on the following thoughts:

- Should basically be a public employment service model (PES)
- Good knowledge of the local labour market; familiar with corporate recruitment needs and abilities of job seekers
- Provides added value for both companies and job seekers
- The Employment Service may be strong network of working life
- Help job seekers with difficulties in entering the labour market
- Provide efficient matching, but also for a solid foundation for planning and developing labour market policy instruments

Forecasting and analysing labour market is a key for avoiding problems in the economy and getting a better economic development – higher GDP. More effective matching process – shorter duration of vacancies – higher production – higher economic growth in the country - higher GDP.



A structured way of collecting and disseminating the knowledge that otherwise would have been underutilised.

The results are compiled and presented in different ways and through different channels;

Occupations A-Z – WEB-Based information of occupations.

Labour Market Outlooks - A national report and 21 regional reports; one for each county, twice a year.

Where are the jobs? National report, twice a year.

Job opportunities 21 regional reports (pamphlet) published twice a year

The Occupational Compass

- Web-based service (launched 2008)
- LMI and outlooks for nearly 200 occupations
- Short and long term projections

The Occupational Tendency Survey

- Conducted since 1999

Description

The occupational compass forecast

The Occupational Compass forecasts on occupations at local, regional (county) and national level throughout the country, provided by the PES. The input is The Occupational Barometer, it is used to deliver forecasts at the regional level which are included in bi-annual reports on the regional and national labour market. It was established in 1989 and the report is in Swedish. The occupational compass is linked to a complementary LMI called Occupations A-Z which provides descriptions of each occupation. Besides a description of the occupational group, it includes relevant skills, interests and physical requirements, links to additional information, and required or suitable education. For a limited set of occupations, there are videos provided to complement the text.

Internal use of the results in the organisation:

- Improve our understanding of the labour market
- Better advice to job seekers on the recruitment needs and demand for different occupations, present and future
- Better contact with and information to employers about the lack or surplus of job seekers with different skills
- Needs analysis for the planning of the size and scope of the employment programs – needs of labour market training
- Dialog with industries or other associations

External use of the results:

- Inform and influence external actors
- Government, parliament, local governments
- Media
- Other agencies and organisations at regional and national level
- Schools and universities (including vocational guidance and people facing study-/career choices)
- Employer organisations and trade unions
- The public
- Scientists

WEB-BASED: Yrken A-Ö [Occupations A-Z] - An Encyclopaedia on occupations

Information about:

- Tasks
- Working conditions
- Education
- Skills
- Future
- Links to more information



Occupations A-Z is a site that provides detailed information and forecasts about 200 occupations.

The target groups for this information are unemployed persons jobseekers, students looking for information about future jobs, career counsellors searching for information in their line of work and also counsellors at the PES. The site is the only one of its kind in Sweden and a reference for all occupational information.

It is also commonly used by media and other channels spreading information about occupations.

Besides some general information the Occupations A-Z present a lists of prerequisites which educational background that is required and physical requirements as well as soft skills like ability to work in a team etc. for each occupation. Occupations A-Z also provides additional information links to relevant unions, and printed interviews with people working in the occupation. For a limited set of occupations, there are videos provided to complement the text with an “in real life” dimension. There are also links to forecasts about the occupation and links to current vacancies in the occupation. The following picture shows the design of the page, which has a very basic and straightforward design, but the *information* on the page is regularly updated.

The screenshot shows the homepage of Arbetsförmedlingen. The top navigation bar includes links for 'Jobseekers' (selected), 'Employer', 'About us', 'Free jobs', 'Tips and advice', 'Occupation and the future' (selected), 'Support and service', 'Sök på webbplatsen' (Search), and 'My page'. The main content area features a sidebar with links to 'Professions AZ', 'Yrkeskompassen', 'Tests and Guides', 'Labour market training', 'Training and studies', 'Starting your own business', 'Information sessions on careers, studies and start their own', 'Education Journal', and 'Young'. The main content area is titled 'Occupation and the future' and contains two sections: '200 professionals forecasts' (with a green icon) and '450 job descriptions' (with a blue icon). Below these are links to 'Find projections through occupations' and 'Find other professionals descriptions'. A section titled 'Here are the jobs of the future!' lists various professions with small icons next to them. To the right of this list is a circular graphic containing icons related to healthcare and construction.

The evaluation of Occupations A-Z (internal study) reveals that it is very widely spread and very frequently used by career counsellors, counsellors working at the PES and job seekers looking for occupational information.



Startsida > Yrke och framtid > Yrken A-O

Yrken A-O

- Inspireras av ...
- Måndagens intervju
- Yrkesfilmer
- För dig som är ny i Sverige
- Annonsera jobb
- Yrkesskärmen
- Tester och guider
- Arbetsmarknadsutbildningar
- Utbildningar och studier
- Starta eget företag
- Informationsträffar om yrken, studier och starta eget
- Utbildningsjournalen
- Ung

Sjuksköterska inom äldrevård

Nurse in elderly care

En sjuksköterska som är specialiserad inom äldrevård ansvarar för omvårdnaden av äldre män och kan arbeta inom flera olika verksamheter. Kommunal äldrevård, hemsjukvård, geriatriskt kliniker, rehabiliteringskliniker samt minnesmottagningar är några exempel.

Sjuksköterska inom äldrevård Yrkesfilm Arbetsförmledingen

Movie about the occupation

En legitimerad sjuksköterska kan specialisera sig inom äldrevård och får efter examen en yrkesskyddad titel som specialstsjuksköterska inom Vård av Äldre.

I arbetet främjar man hälsa och förebygger ohälsa och skador. Bedömer och behandlar samt lindrar symtom. De vanligaste arbetsuppgifterna är:

- Omvårdnad
- Hälsorämjande arbete
- Medicinska behandlingar
- Handledning och utbildning
- Anhörigstöd
- Administrativa uppgifter

Skriv din söktext

Sök på yrkestitlar
 Sök i hela texten

Sök yrke

Tillhör yrkesområde
Hälso- och sjukvård

Läs mer
Känsla för män är viktigt i jobbet med äldre, tycker specialistsjukskötterskan Ellenor Sörqvist

Platser i Platsbanken
Geriatrisksjukskötterskor(273)

Occupational compass, short term and long term forecast

Short term forecasts (next 12 months) of about 200 occupations covering about 80 percent of the employed at sub-regional level also called “labour market regions”, normally defined on the basis of commuting figures and regional level (county). The main input is the assessment of surplus/shortage (5-grade scale, from “considerable surplus” to “considerable shortage”) of local PES’s, which is based on contact with the labour market through ongoing matching activities and through interviews with employers within the scope of PES’s bi-annual forecast. This input (Yrkesbarometern) is provided at the local (municipality) or sub-regional (several municipalities) level, twice a year and during a limited period of about six weeks. The set of inputs are weighted to provide assessments at the sub-regional, regional (county) and national level. The quality of the assessments is controlled by analysts at three levels the least, namely the sub-regional, county and national level. Data and external qualitative assessments complement the main input. The taxonomy is based on ISCO (SSYK). Expensive to sustain as extensive manpower required, which is spread locally around the whole country. On the other hand, the model exploits the national structure of PES offices which are already settled to provide matching services at the local level. At the national level, forecasts are delivered on the medium to long term (one single time period, 5-10 years). These, however, do not cover as many occupations and the assessments rely more heavily on data. As such, it is not expensive to sustain, yet these assessments do rely significantly on the short term assessments.

The occupational Compass on the web



För arbetsökande För arbetsgivare Om oss

Min sida Hitta lediga jobb CV och anställan Yrke och framtid Stöd och service

Logga in | Ny användare?

Startsida > För arbetssökande > Yrke och framtid > Yrkesinformation > Yrkeskompassen

Yrkeskompassen

Söksidan Yrkesöversikt Yrkesprognos Yrkesbeskrivning Om Yrkeskompassen

Yrkeskompassen kan hjälpa dig att hitta ditt framtida yrke. Här finner du information om arbetsmarknadsläget och framtidsutsikter för yrken som Arbetsförmedlingen gör prognos på.

Vilket yrke är du intresserad av?

Sökord
Sök prognos
Sök yrkesvis

Om yrkeskompassen

Yrkeskompassen informerar dig om möjligheten att hitta jobb inom olika yrken på upp till 10 års sikt. Vi beskriver i vilken riktning utvecklingen är på väg när det gäller chanserna att hitta ett jobb. Men du måste tänka på att **prognos inte är 100 procent tillförlitliga**.

Ett yrkes framtid kan styras av många olika saker som exempelvis konjunktur och politiska beslut. Ingen kan exakt veta hur konjunkturlaget ser ut enskilda år i framtiden och det kan därför under vissa dåliga år vara svårt att snabbt hitta ett jobb inom i stort sett alla yrken.

Vi rekommenderar att du **i första hand** väljer utbildning och yrke efter dina intressen, men sedan kan yrkeskompassen vara en god vägledning på din väg mot just ditt yrke.

Example Nurses

Yrken A–Ö Yrkeskompassen

Söksidan Yrkesprognos Yrkesbeskrivning Om Yrkeskompassen

Yrkesprognos: Sjuksköterskor (grundutbildade) i Sverige

Yrkesbeskrivning: Sjuksköterska, Sjuksköterskeyran Läs om utveckling till Sjuksköterska, Sjuksköterskeyran

Summary

Arbetsmarknaden idag och ett år framåt

Kommuner och landsting planerar att utöka sina verksamheter. Behovet av allt rekryterat personal kommer att öka. Det förtäcker att finnas många lediga jobb att söka för grundutbildade sjuksköterskor under det närmaste året.

Jobbmöjligheterna för grundutbildade sjuksköterskor blir mycket goda i stora delar av landet.

Möjligheten till jobb på fem och tio års sikt

Arbetsförmedlingen bedömer att grundutbildade sjuksköterskor möter en god arbetsmarknad både på fem och tio års sikt.

Behovet av grundutbildade sjuksköterskor ökar de närmaste tio åren. Befolkningen äldre och endelvis äldre i befolkningen blir allt större, vilket ökar behovet av vård och omsorg. Många sjuksköterskor kommer att gå i pension under de närmaste åren. Detta medför att rekryteringsbehovet av sjuksköterskor ökar ytterligare.

Tillgången på grundutbildade sjuksköterskor förväntas inte motsvara efterfrågan under prognosperioden.

Prognos uppdaterad: 2015-06-24

Short term forecast

Ett års bedömning

Mycket liten konkurrens om jobben

Om jobben:

- mycket liten konkurrens
- liten konkurrens
- mycket hård konkurrens
- saknar prognos

Long term forecast

Fem års bedömning Tio års bedömning

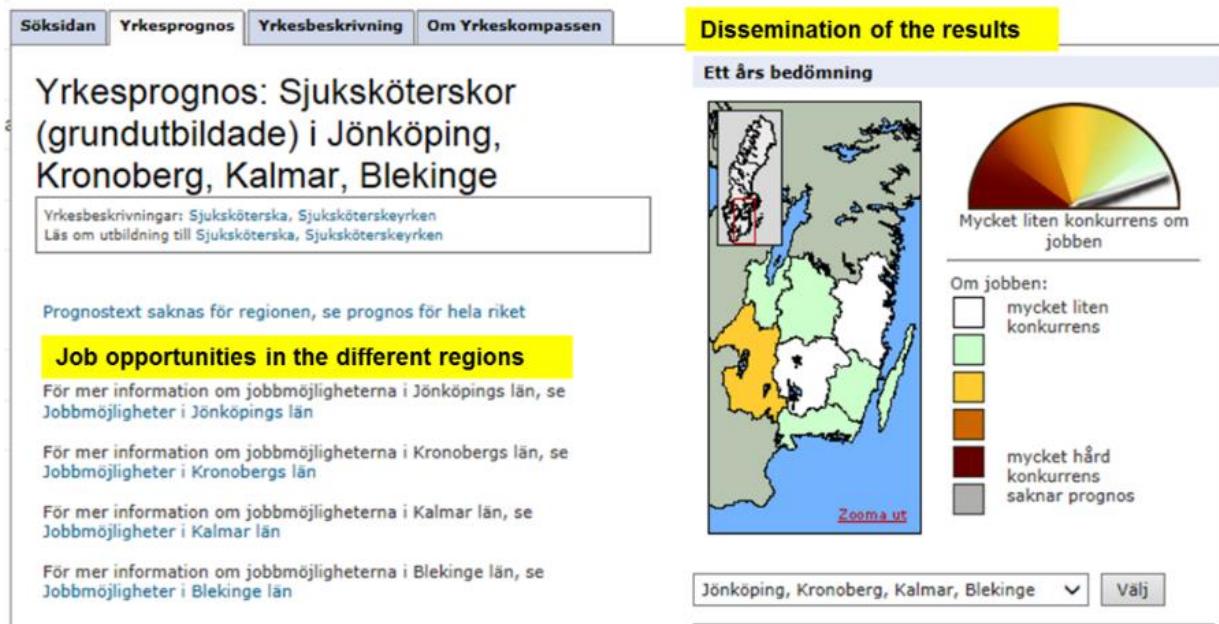
Länkar

SCB:s Arbetskraftbarometer Sjuksköterskor_grundutbildning_akb.pdf

SCBs trender och prognosar Sjuksköterskor_grundutbildning_TP.pdf

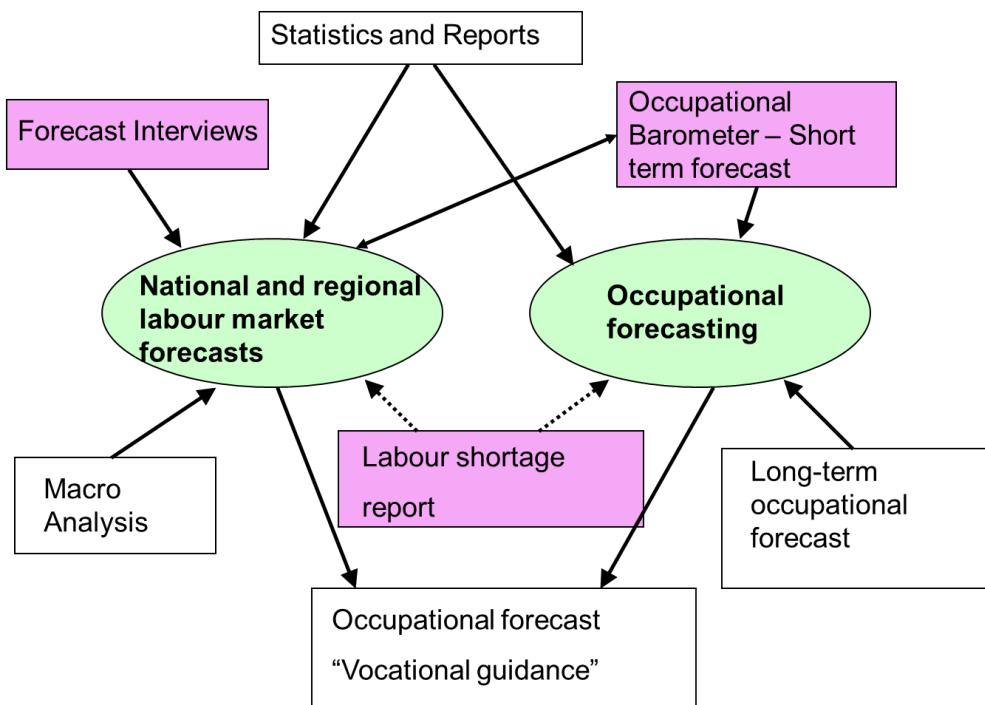
Dissemination of the results – nurses

Yrkeskompassen



A model for analysing labour market and forecasting

Forecast models core are the employment offices and contacts with employers



Survey based model, involving the whole organisation. Each employment office makes an assessment for the local labour market. They get the knowledge from visiting employers and from the daily work. Company contacts are improved and networks enhanced. The Employment office only make assessments for occupations which exist on their local labour market.

- The headquarter is responsible for a comprehensive planning process.
- For example when the process begins, when it ends and how often the employment offices shall make the barometer.
- Develop tools, application in intranet.
- Develop tools for information. In Sweden we have developed the Occupational Compass (Yrkeskompassen).
- Educational program for the employment officers.

Forecast Interviews

Employer survey

- Periodicity: twice a year
- Sample survey, 14 000 workplaces
- (about 11 000 answers - 80 percent)
- Population: workplaces with at least 5 employees
- Method of sampling: random sample stratified by county, industry sector and size of workplace
- Total coverage at municipal and county council level
- Interviews conducted by PES front staff

Random sample stratified by: county (21), industry (6), workplace size (4)

Industries in private sector

- Manufacturing (includes agriculture and forestry)
- Construction
- Trade, restaurant and hotel
- Transport and communication
- Financial business, enterprise- and personal services
- Child care, elder care and education

Important information in the interview

- Expected Employment Development
- Future staffing needs
- Any recruitment problems, lack occupations
- To understand the company's skills, not just education and experience, but also any claims for other skills, ex social skills

- The aim is to get a good picture of demand for labour on the local labour market
- Leading economic indicators such as new orders and stocks – you can get an early knowledge about what is going to happen on your local labour market one year ahead

Information from employers:

- Ask employers in a questionnaire – interviews in connection to our two forecasts
- Information directly from employers is the most common way to get information about matching problems on the labour market
- Most of the institutions which collect information about shortages only get it by branches, not by occupations, but PES in Sweden collect this information by branches and by occupations

The questionnaire

- Two questions
 1. Current situation
 2. One year ahead
- We create a shortage index for each occupation.
- This index is useful at the national level, the regional level and the local level.

The questions cover:

- Demand/Business cycle – outcome and future expectations on the demand for the company's products and services – capacity utilisation
- Employment – outcome and future expectations of the number of employees
- Recruitment – labour turnover, needs for recruitment, hiring qualifications, recruitment difficulties

5. Within which occupations will you need to hire staff in the coming year?				
ISCO-code <small>(to be filled in by EO/CLB)</small>	Occupation	Number of persons	Qualification requirements	
			Trained/ skilled	Work experience
.....	<input type="checkbox"/>	<input type="checkbox"/>
.....	<input type="checkbox"/>	<input type="checkbox"/>

The only question so far where we capture skill needs by qualification requirements. Free text however, thus difficult to systemize and structure the answers.

Analyzing statistics

- We use a lot of statistics in the analysing process.
- Statistics by professions will not always cover the real problem.
- At the same time it can be a lot of unemployed welders and a shortage of welders.
- It can be true that a lot of welders are unemployed but a lot of them lack valuable competence.

Quality check of the tendency survey

- Guided discussions at a local level with the front staff
- Quality check by regional analysts, and occupational analysts at country level
- The “cleaned” results are tested with a group of specialists from social partners – “Occupational Expert Council” The group is composed by people from labour unions, employer’s organisations and specialists from other authorities.
- Industry counsel adviser is also divided by industry. For example construction, manufacturing, transportation, IT, health care, education, child care etc. The counsel adviser operating both at national

To create the shortage index

- Huge surplus = value 1
- Surplus = value 2
- Balance = value 3
- Shortage = value 4
- Huge shortage = value 5
- If all offices answer huge surplus, the result in shortage index will be 1

Occupations	1a. Estimated needs of recruitment one year ahead					1b. Estimation of the situation on the labour market for different occupations one year ahead					county/office
	Strongly decreasing	Decreasing	Much the same	Increasing	Strongly increasing	Large surplus	Surplus	Balance	Shortage	Large shortage	
Professionals - longer educations											
Professionals											
Computering professionals											
Manager systems/computers											
Computer systems engineer											
Database administrator											
Programmer, computing											
Analyst, systems/computers											
Civil engineers											
Architect											
Civil engineer construction											
Civil engineer bridges/highways											
Civil engineer electrical											
Civil engineer electronics, telecommunications											
Civil engineer mecanical											
Civil engineer chemical											
Health professionals											
Doctor specialist											
Doctors, genaral education											
Dentist											
Veterinarians											
Pharmacists											
Logoped											
Nursing and midwifery professionals											
Midwife professionals											
Nurse manager											
Nurse emergencies											
Nurse children											
Nurse country sise											
Clinic manager											
Medical nurse											

Example

- Assume only ten answering employment offices.

- Mapping the access of welders.
- The first office estimate surplus of welders and get the value 2.
- The second office estimate balance and get the value 3, and so on...
- We add all answers from the ten offices and we get the sum 35. After that we divide the sum 35 with 10 and the shortage index will be 3.5.

Calculation

We calculate weighted results (population) and net balance. Net balance = the share of employment answering shortage of labour minus the share answering surplus of labour.

The scale classification in the shortage index

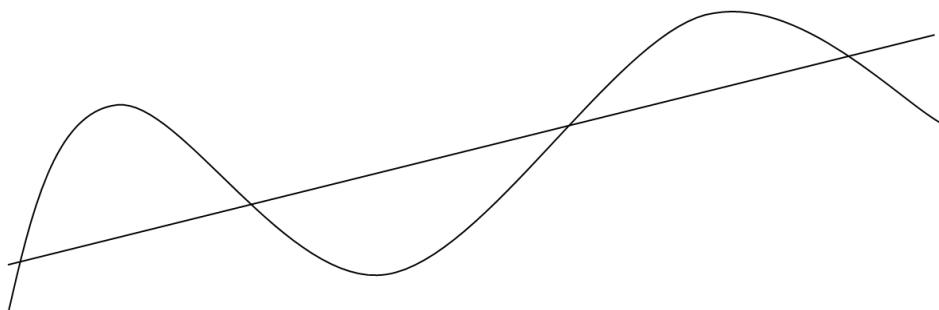
- Index > 3,7 large shortage
- Index 3,3-3,69 shortage
- Index 2,9-3,29 balance
- Index 2,5-2,89 surplus
- Index < 2,5 large surplus

Local adjustments

- It is also necessary to have the possibility to make regional and local adjustments
- For example in areas with a large agricultural sector, it can be valuable to add more agricultural occupations
- Other areas can have large shipping sector or a large manufacturing sector
- Other adjustments
 - Biologist
 - Chemist

Supply and demand of labour analyses long trends

Long term forecasting – information sources



Statistical information – basic information Demand of labour by occupation

- Changes in employment
- Occupational changes
- Retirements

Supply of labour by occupations

- Inflow of person into occupations
- Migration

Information from employer organisations and labour unions and other experts

- Expert group at national level with experts from branches and institutions which works with long term forecasting
- Information from employer organisations and labour unions and other experts – structural changes
- Difficult to ask about occupations in long terms by a questionnaire to employers – if so ask about structural changes for groups educated or of homogeny groups of occupations

Opportunities to find a job 5-10 years ahead

- The need to recruit concrete workers will increase over the next ten years. This is partly due to increased construction investments and large numbers of retirements.
- The supply of skilled concrete workers is not sufficient because too few students study to the occupation.
- The Public Employment Service's assessment is that skilled concrete workers have good opportunities to find a job. The labour market will vary in individual years depending on the business cycle.

Impact and Replicability

Without the occupational tendency survey this knowledge would have been dispersed and underutilized. The knowledge is used to facilitate the matching process. For example the counselling service with forecasts targeted to support the occupational choices of individuals as well as the work of professionals working with counselling. Extensively used and appreciated by counsellors and by jobseekers, according to internal study. School counsellors also seem to use this LMI widely but only at PES it constitutes a formal part of the organisation's activities. Most extensively, The Occupational compass is used at PES in relation to counselling activities towards job seekers, but the occupational forecasts are also disseminated through PES's bi-annual forecasts at the regional and national level.

Learning process

- It takes time to implement an occupational barometer
- Learning by doing
- Training
- The result must be useful for the employment offices
- Strong link to the action plan (jobseekers), and specially for planning labour market training

Advantages of the model

- Company contacts are improved and networks enhanced
- Not restricted by statistical classifications (i.e. gives a certain flexibility)
- Simplicity of the model

Weakness of the model

- Resource demanding
- Restricted to short-term anticipation
- Does not (yet) provide information on skills and competencies in a systematic and structured manner

The occupational compass demands a lot of resources but in the end it is worth it. Over the years it has been a learning process and the tools and the methods are developed among the working process. All the information that are sampled under the interviews are transformed into different channels and products and target groups. The question is if the occupational compass can be transferred to other EU-countries? It is difficult to answer because it depends on how other countries are organized around labour market and education systems today. Do the other countries have the same needs? How much effort and adaption would be required of the current systems and working methods at the organisation? Is it even possible to adapt? Or do other countries already have better tools and more effective methods to support the matching process on the labour market that Sweden can learn of?

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MySkillsMyFuture

Silvia Dusi

Introduction

The U.S. Department of Labor's Employment and Training Administration has launched a Web portal to help job seekers match their current skills to new careers and find out what training is needed to transition from one job to another. This online tool is called "mySkillsmyFuture" and can be accessed at <http://www.myskillsmymfuture.org>.

It's an interesting tool because it works as career guidance providing information about the occupations (posting all the job vacancies), the related skills and other variables, but moreover because it provides analysis on skills gap between occupations and it lists the courses to acquire the mentioned skills redirecting the user to the providers of this courses.

Summary

Users can view local job postings and locate training and education providers. They also can find descriptions, salary information and common job tasks associated with a new occupation. The site's features include: Detailed information about occupational skills that can be transferred from one job to another; A side-by-side comparison chart of likely skill gaps from one occupation to another; Links to local training programs that are available to help fill skill and knowledge gaps.

Additionally, users can find opportunities for short-term training programs provided by local community colleges and other postsecondary schools. They can find career-specific details about obtaining credentials such as certifications, licenses and apprenticeships. Job listings are from a national database and will be updated daily.

The online program is based on data from the U.S. Department of Labor's Occupational Information Network, known as O*NET, and the National Labor Exchange. Data from O*NET includes the required knowledge, skills and abilities for more than 900 occupations, which helps identify transferable skills and skill gaps among different occupations.

Context and setting

The web portal named “MySkillsMyFuture” is a product of Career One Stop, the flagship career, training, and job search website for the U.S. Department of Labor. The website serves job seekers, businesses, students, and career advisors with a variety of free online tools, information and resources. The audience of this good practice is the USA citizens; for this reason in the following pages the USA context will be briefly described.

- *Economic and political context of the USA:*



- Population: 316.5 million (2013)
- Unemployment rate: 9.3% (November 2015 - 16 years and over)
- GDP: US\$ 16,99 million (2013)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2005	5.3	5.4	5.2	5.2	5.1	5.0	5.0	4.9	5.0	5.0	5.0	4.9
2006	4.7	4.8	4.7	4.7	4.6	4.6	4.7	4.7	4.5	4.4	4.5	4.4
2007	4.6	4.5	4.4	4.5	4.4	4.6	4.7	4.6	4.7	4.7	4.7	5.0
2008	5.0	4.9	5.1	5.0	5.4	5.6	5.8	6.1	6.1	6.5	6.8	7.3
2009	7.8	8.3	8.7	9.0	9.4	9.5	9.5	9.6	9.8	10.0	9.9	9.9
2010	9.8	9.8	9.9	9.9	9.6	9.4	9.4	9.5	9.5	9.4	9.8	9.3
2011	9.2	9.0	9.0	9.1	9.0	9.1	9.0	9.0	9.0	8.8	8.6	8.5
2012	8.3	8.3	8.2	8.2	8.2	8.2	8.2	8.0	7.8	7.8	7.7	7.9
2013	8.0	7.7	7.5	7.6	7.5	7.5	7.3	7.2	7.2	7.2	7.0	6.7
2014	6.6	6.7	6.6	6.2	6.3	6.1	6.2	6.1	5.9	5.7	5.8	5.6
2015	5.7	5.5	5.5	5.4	5.5	5.3	5.3	5.1	5.1	5.0	5.0	

Data Source: Bureau of Labor Statistics - <http://www.bls.gov/>

To better understand the economic development – in terms of GDP – of the USA we cite the last report on GDP of National Bureau of Labor Statistics:

"In November, last month analysed, the unemployment rate held at 5.0 percent, and the number of unemployed persons, at 7.9 million, was essentially unchanged. Over the past 12 months, the unemployment rate and the number of unemployed persons are down by 0.8 percentage point and 1.1 million, respectively. Among the major worker groups, the unemployment rates for adult men (4.7 percent), adult women (4.6 percent), teenagers (15.7 percent), whites (4.3 percent), blacks (9.4 percent), Asians (3.9 percent), and Hispanics (6.4 percent) showed little or no change in November.

The number of long-term unemployed (those jobless for 27 weeks or more) was little changed at 2.1 million in November and has shown little movement since June. In November, these individuals accounted for 25.7 percent of the unemployed. The civilian labor force participation rate, at 62.5 percent, changed little in November. The employment-population ratio was unchanged at 59.3 percent and has shown little movement since October 2014.

The number of persons employed part time for economic reasons (sometimes referred to as involuntary part-time workers) increased by 319,000 to 6.1 million in November, following declines in September and October. These individuals, who would have preferred full-time employment, were working part time because their hours had been cut back or because they were unable to find a full-time job. Over the past 12 months, the number of persons employed part time for economic reasons is down by 765,000.

In November, 1.7 million persons were marginally attached to the labor force, down by 392,000 from a year earlier. (The data are not seasonally adjusted.) These individuals were not in the labor force, wanted and were available for work, and had looked for a job sometime in the prior 12 months. They were not counted as unemployed because they had not searched for work in the 4 weeks preceding the survey. Among the marginally attached, there were 594,000 discouraged workers in November, little changed from a year earlier. (The data are not seasonally adjusted.) Discouraged workers are persons not currently looking for work because they believe no jobs are available for them. The remaining 1.1 million persons marginally attached to the labor force in November had not searched for work for reasons such as school attendance or family responsibilities."¹¹

The workforce considered and analysed in all its stratifications is the whole target of the MySkillsMyFuture, even though in the next section the strategy and the working of it will be better explained.

¹¹ New Release, THE EMPLOYMENT SITUATION - DECEMBER 2015
<http://www.bls.gov/news.release/pdf/empsit.pdf>

Description

On Labor Day of 2010, the USA Department of Labor (DOL) launched the "My Skills, My Future" website (www.myskillsmyfuture.org) through one of their current websites, Career One Stop (www.careeronestop.org). The website is designed to help users assess current skills for future employment.

The website enables job seekers to match their occupational skills and experience with the skills needed in other occupations. This is a self-help website to help those individuals who are in transition and want to seek out new opportunities or looking for their next career opportunity. Along with possible education and training in those fields, it also can be used by organizations in an effort to help retain current employees.

Those who work in the public workforce system can already see the direct application of this site with customers who come into their One Stop Career Centres. Helping customers understand and assess transferrable skills and quickly helping them to get either back to work or into training that will lead them back to work will be a huge help.

The site also has links to job banks and job openings, specific training/education information and links to the skills required for specific jobs. The site highlights on green and high-growth industries. Connection to the Career One Stop site will be seamless. In future updates, the site will give you the opportunity to customize an own part of the site specifically for the user's career/job needs.

The approach used for designing and launching the website as a means of connection between the VET and the EDS is definitely integrated in the multitude of tools offered by the Department of Labor: the overall strategy is in fact oriented both to specific target and consequently specific needs (like the Veterans, that have a dedicated tool) both to general target, as MySkillsMyFuture shows, aiming at the whole USA workforce.

Contextualizing the website in fact we can see that is just one of the choices that Career One Stop proposes to job seekers. The different services and products offered are:

- *Credentials Center*, who Helps individuals plan, locate, and pay for education, training, and other credentials to help them start, change, or advance their career.
- *MySkillsMyFuture*, who helps laid-off workers and other career changers explore new careers that may use the skills and experience gained in previous jobs.
- *Worker ReEmployment*, who works as a shopping window showing Employment, training, and financial assistance for laid-off workers.
- *Veterans ReEmployment*, A one-stop website specifically for employment, training, and financial help for veterans after military service.
- *Business Center*, a one-stop source for help hiring, training, and retaining a strong workforce.
- *Job Search Help for Ex-Offenders*: tools and resources to help job seekers with a criminal record explore careers, get training, and find a job.

- *Disaster Recovery Services*, which is a quick access to a range of employment and related resources for people and businesses impacted by floods and other recent disasters.
- *Competency Model Clearinghouse*, Validated industry competency models and tools to build a custom model and career ladder/lattice for your industry.
- *CareerOneStop Mobile*: to offer its product CareerOneStop has developed six mobile apps for job seekers including Find an American Job Center, Find a Job, Veterans Job Search, Salary Finder, Training Finder, and Unemployment Insurance.

How MySkillsMyFuture works

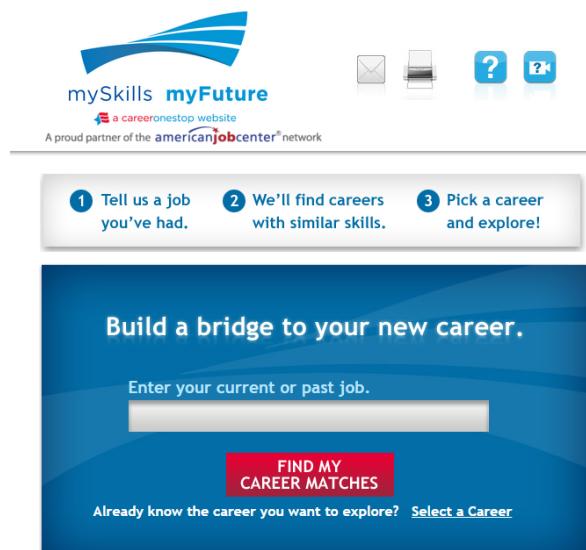
MySkillsMyFuture can be accessed at the link <http://www.myskillsmymfuture.org>.

Users will be able to view local job postings and locate training and education providers. They also will be able to find descriptions, salary information and common job tasks associated with a new occupation. Moreover the detailed information about occupational skills that can be transferred from one job to another, a side-by-side comparison chart of likely skill gaps from one occupation to another and there are the links to local training programs that are available to help fill skill and knowledge gaps.

On the home page, it's enough to type in the current job or a previous job into the input box and click 'find my career matches'. The website will list out career matches or careers that best match the skills you utilized in the job you typed into the site. The results provide a description of the new career and average salary statistics.

An interesting feature on the website is the skill comparison section where the website lists the similar skills between the submitted career and one of the career matches. It even lists out some skill gaps that you may have in trying to transition to this new career.

If you add in your zip code it will find job openings for the career match and some local training options that may help counter the skill gaps you may have.



This is the first page, with a user friendly approach.

Typing for instance “programmer” here is how the research takes place:

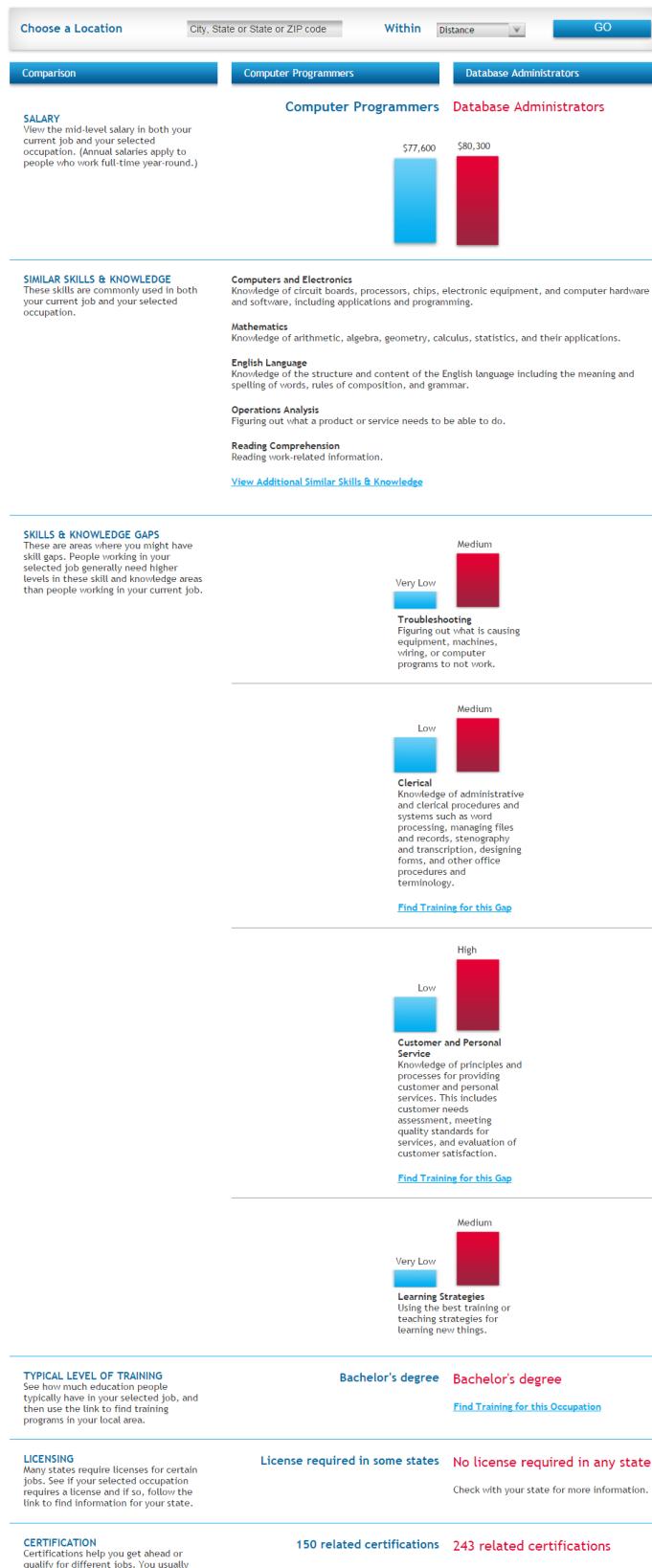
Start **Career Matches** ▶ Narrow Your Results

The careers below may be a good match for
Computer Programmers ▾
 United States

Choose a Location	City, State or ZIP code	Within	Distance	GO																												
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Start > Career Matches > Selected Career > Compare Skills

Compare Computer Programmers &
Database Administrators
United States



It is possible to understand that the user is guided into the description of the occupation and the choice of its own career by the useful analysis and their comments. The skills gap between similar occupation gives precious indications to workers who wants to re-enter the labour market and have difficulties.

Who Can Benefit from MySkillsMyFuture?

This site provides good information for a variety of individuals.

- Those who are laid off or are currently in the search for a new profession will definitely find this tool useful in terms of the data it can provide.
- Anyone who is thinking about the next step in their career and how to address any gaps in skills they may currently have would find benefit from this site.
- Those passively looking for a new career can find career ideas to begin investigating.
- Those who are interested in obtaining career information could also utilize this site.

Naturally, the website is not 100% accurate. It does not capture every career and may not have direct application to every person who uses it.

The problem addressed by the campaign: Worker dislocation affects millions of workers in the United States. Given the slow pace of economic recovery and foreign trade and technological developments, laid-off workers must search for work in other occupations. Job seekers can search more efficiently if they understand how their current skills match the skill needs in demand within different occupations and industries.

Information about the tasks individuals carry out at work and the knowledge, skills and abilities needed to perform on the job is already available through the Occupational Information Network (O*NET) system supported by the DOL's Employment and Training Administration. The MySkillsMyFuture site is the first free public-sector tool that leverages O*NET information with other employment, education, training and apprenticeship databases to create an online skill transferability tool. This tool helps job seekers, the workforce investment system, career counsellors and the general public to match workers' skills with occupations and industries where job openings exist.

MySkills myFuture lets users:

- Use previous employment experience to identify similar occupations they may be qualified for
- Identify the skills they need but lack to qualify for a specific job
- Identify education, training and apprenticeship institutions where they can get these skills
- Find links to relevant job opportunities in state and national job banks

MySkillsMyFuture Methodology

To find career paths that might be a good match MySkillsMyFuture uses a mathematical formula that compares the knowledge, skills, and abilities (KSAs) that are commonly used in the previous job to those that are commonly used in 800+ other careers. Each career in the database is scored on 120 different

KSA elements. The formula considers: similarities in entire KSA profiles; and differences in specific KSA scores.

To appear on the list of matches, a career must have both a similar overall KSA profile as the old job and must require similar levels of most knowledge, skills, and abilities. In this way, it's likely for the user to be matched up to careers that are generally similar to your last job and for which you are neither greatly over- or under-qualified. The matching formula uses data collected by the Occupational Information Network (O*NET), housed in the U.S. Department of Labor's Employment and Training Administration.

The Federal government collects and creates, either directly, or through the individual states, an immense amount of information about occupations. Skills are not extracted from job postings/vacancies, they have been developed by O*Net (www.onetonline.org) in cooperation with professional occupational organizations. There are 1000+ occupations for which skill, knowledge, and ability information has been developed. MySkillsMyFuture, asks for input about a past job. Then using an algorithm the tool returns 20 related occupations.

The O*NET program is the nation's primary source of occupational information. Central to the project is the O*NET database, containing information on hundreds of standardized and occupation-specific descriptors. The database, which is available to the public at no cost, is continually updated by surveying a broad range of workers from each occupation. Information from this database forms the heart of O*NET OnLine, an interactive application for exploring and searching occupations. The database also provides the basis for our Career Exploration Tools, a set of valuable assessment instruments for workers and students looking to find or change careers. The Occupational Information Network (O*NET) is being developed under the sponsorship of the US Department of Labor/Employment and Training Administration (USDOL/ETA) through a grant to the North Carolina Department of Commerce.

Impact and Replicability

About the **Replicability** of this tool it is quite evident that the "*conditio sine qua non*" is the public support of the Ministry of Labour or the Agency responsible to deal with employment policies: this is not a practice that can be runned by a private player, both for the cost (high for the initial implementation and then for the management and the updating – while the website is free) and for the access to all information and data (salary, courses, ecc.).

Of course, the support of the Government and the configuration of the instrument as a free service in support of citizens is a key element for the analysis of this good practice. In this case both the visibility and the believability, and the related spread of use, are highly influenced by the sponsor of the Department of Labor and the launch campaign done to make people aware of this tool: "Americans deserve good jobs, and *My Skills my Future* is one of the ways we're ensuring they can find and access them," said Secretary of Labor Hilda L. Solis. "The *My Skills my Future* portal personalizes job searches. It allows people to explore work possibilities based on their experience, strengths and interests. It also connects them with high quality training programs and provides localized job postings."

Users will be able to find information for short-term training programs offered by local community colleges and other postsecondary schools. They can find career-specific details about getting certifications, licenses and apprenticeships. Users also will be able to view and apply for open job postings available by ZIP code or state. Job listings are from a national database and will be updated daily.

Additionally, users can find opportunities for short-term training programs provided by local community colleges and other postsecondary schools. They can find career-specific details about obtaining credentials such as certifications, licenses and apprenticeships. Users also can view and apply for open job postings available by ZIP code or state. Job listings are from a national database and are updated daily.

MySkills myFuture includes an integrated help system with page-by-page instructions and videos to enhance the user experience. The online program is based on data from the U.S. Department of Labor's Occupational Information Network, known as O*NET, and the National Labor Exchange.

Data from O*NET includes the required knowledge, skills and abilities for more than 900 occupations, which helps identify transferable skills and skill gaps among different occupations. The National Labor Exchange is a service of DirectEmployers Association, a nonprofit consortium of more than 550 leading U.S. corporations.

Talking of the impact:

- The website launched with great success and was publicly praised and promoted by the Minnesota Department of Employment and Economic Development, several members of Congress, and the U.S. Department of Labor's Employment and Training Administration, including Secretary of Labor, Hilda L. Solis.
- Job seekers have access to a far more advanced view of their occupation and related occupations. They can research their field's expected growth and new qualifications required, thus facilitating informed career changes

Why does it work?

- Workers in the United States have easy access to up-to-date career information enabling well-informed job moves. mySkills myFuture includes the following helpful features:
 - A step-by-step guide
 - Examples of how the tool can be used to address various questions and situations
 - An online instructional video
- The mySkills myFuture site is continually evolving in response to user feedback and suggestions. Scheduled new features include:
 - Locate employers. This new feature will let users locate local businesses, non-profit organizations, government agencies and other potential employers for the occupation they have selected.
 - Select work preferences. This feature will let users filter their career matches based on several work preferences. Users will be able to exclude careers that often require

irregular work hours, frequent sitting, standing, good vision, good hearing and several other work characteristics.

Conclusions and Recommendations:

- Access to information helps the fluidity and quality of labour market decisions. Providing economic context and resources can help yield positive results for any country's workforce.
- Employment opportunity can be strengthen by moving beyond the confines of "jobs" to a broader mix of human capital assets that employees "own" and may have value to potential employers.
- Other countries should be able to exploit the enhanced knowledge and information of the human capital prerequisites of many different kinds of employment to increase opportunities for matching employers and employees in labour markets.

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Case Studies at Regional level



The “Bildungswerk” as intermediary VET actor in the logistics sector in Hesse

Daniel Kahnert

Introduction

The logistics sector is one of the biggest and most important economic sectors in Germany and in Hesse. It also is an important driver for regional economic success. One of the specifics of the sector is a large share of unskilled workers, especially in the subgroup of warehouse and storage workers. On the other hand, the industry faces large gap between skill demand and supply. This is partly due to the low attractiveness of the sector for talented young graduates and limited career options in many occupations. Therefore, a chance to close the gap of skilled personnel lies in the training of unskilled workers.

The “Bildungswerk” is the professional training provider of “Speditions- und Logistikverband Hessen/Rheinland-Pfalz e.V.”, one of the logistics associations in the state of Hesse in Germany. The “Bildungswerk” not only acts as training provider but also as strategic actor in developing human resources in the sector and taking part in strategic planning and program development. It represents an intermediary actor that bridges different stakeholders in the sector and brings together labor market intelligence via dense information networks, professional trainings for employees in the sector and an influential position in strategic decision-making processes. Establishing such a training organization is the purposeful approach of the sector association to meet one of the sectors biggest challenges.

Summary

The “BSH – Bildungswerk Spedition und Logistik e.V.” is the primary training institution of the logistic sector, one of the most important industries in Germany and in the state of Hesse.

As many of the companies in the industry are SMEs, they often do not offer in-house trainings and therefore the trainings of the “Bildungswerk” are very important for the companies and the industry as a whole.

This becomes especially evident when taking into consideration that large parts of the employees in the sector are unskilled or lowskilled.

For those employees, the German VET-system provides very limited options to improve their skills and enhance their career options.

The “Bildungswerk” acts as intermediary, bringing professional training and unskilled workers together, while also being strategic stakeholder and taking part in industry policy processes and decision-making.

Context and setting

The State of Hesse

Hesse is a federal state in the Federal Republic of Germany. It is situated in the Southern part of Germany, has an area 21,115 km² and a population of 6.07 million. The number of employees subject to social security amounted to 2.27 million in 2011 and the unemployment rate in the same year was as low as 5.6%.¹²

Hesse is divided into three administrative regions (Regierungspräsidien – Kassel, Gießen and Darmstadt), which in their turn comprise of 21 administrative districts (Landkreise) and five independent urban districts (Kreisfreie Städte). Most of the economic activity takes place in the Southern part of the federal state – an urban conglomeration called the Rhine-Main Area – whilst the Northern part faces challenges arising from shrinking and ageing population and loss of jobs. Nonetheless, the logistics- and especially the automotive industry sectors are particularly strong drivers for the economy in northern Hesse.

Logistics Sector in the State of Hesse¹³

Germany has by far the biggest logistics sector among European countries with a total annual turnover of about 230 billion €, being almost twice as large as the French, which is the second largest in Europe and contributing about 20% to the total European logistics turnover. The sector is a very important economic factor in Germany, being one of the three biggest in terms of annual turnover. Also with DHL, the biggest logistics company in the world (annual turnover¹⁴) is from Germany.

The logistics sector is also one of the most important sectors in the State of Hesse. According to HessenAgentur, about 170.000 employees subject to social insurance requirements are currently working in this sector. A large number of self-employed workers as well as workers in minor employment add up to a total number of a little under 200.000 employees. This makes the logistics sector one of the three most important sectors in the state. The State of Hesse is also a very important location for the nationwide logistics sector. Twenty of the Top100 most important enterprises within the sector are rooted in Hesse. These enterprises alone generate an annual total turnover of about 10 billion €. Companies in northern Hesse generate about 25% of this turnover, whereas the majority of 75% comes from companies in the southern part. Even looking at the forwarding industry alone, about 1.300 companies are registered in Hesse. About 1.000 of these are organized in the “Fachverband Güterkraftverkehr und Logistik e.V.”, whereas another 300 are organized in “Speditions- und Logistikverband Hessen/Rheinland-Pfalz

¹² HA Hessen Agentur GmbH: Hessen 2012: Facts and Figures, http://www.invest-in-hessen.de/mm/DaZa_2012_englisch_webansicht_300dpi.pdf, last downloaded on 26 July 2013.

¹³ More detailed figures in: https://wirtschaft.hessen.de/sites/default/files/HMWVL/grundsatzpapier_logistik.pdf

¹⁴ Source: Statista 2014: Transport- und Logistikbranche Deutschland - Statista-Dossier.

e.V.”, which also inherits the “BSH – Bildungswerk Spedition und Logistik e.V.”, the VET institution of the organization.

VET-System in Hesse

In Germany it is the responsibility of the federal states to organise and regulate the VET system for most professions on the basis of strategic information on the future needs for skilled labour. In the federal states, the different stakeholders in the regions communicate their expected needs for skilled labour to the planning organs who take the decisions on increasing or decreasing the VET capacities. Most German employees have medium-level professional education¹⁵; this is also true for the logistics sector. In the VET system, there are two ways to obtain professional qualifications – there are school-based and dual courses of studies, the latter combining school-based education and apprenticeships, which is the standard for most VETs in the logistics sector.

In the Federal State of Hesse, two ministries are involved in developing strategies for medium skilled labour: the Hessian Ministry for Economy, Energy, Transport and Structural Development (generally responsible for the employed persons; in the case of VET its competences lie in the area of the dual VET system, whilst they cooperate tightly with the Chambers of Commerce and Trade as well as the Chambers of Skilled Crafts and Trades) and the Hessian Ministry for Social Affairs and Integration (responsible for the unemployed; however, it also coordinates the part of the VET system which has to do with health professions including the labour market forecasting and the planning). A third ministry – the Hessian Ministry for Culture, is also responsible for some school-based strands of qualifications (outside the dual system) and further education, whilst the higher education organisations are under the control of the Hessian Ministry for Science and Art. Depending on their competences, certain aspects of policy fields are addressed by different ministries through different programmes: lifelong learning, for example, is a competence field of the Hessian Ministry for Economy, Energy, Transport and Structural Development if it concerns further learning in the context of employment and is supported through the European Structural Funds programmes. However, should it involve unemployed persons, it is coordinated by the Hessian Ministry for Social Affairs.

Further actors in the field of VET on the federal level are the industry and trade or skilled crafts associations influencing the politics, such as the aforementioned logistics organizations. Also on the level of the administrative districts (NUTS 3 level) the Head of the District Administration (Landrat) can initiate regional development strategies in cooperation with the representatives of professional associations in the concerned region, the representatives of Chambers and VET

¹⁵ Employees with a dual professional education in Germany belong to a group of medium skilled workers, while still being very well trained, as the dual professional education system has very high standards for professional training. Nevertheless, these workers often do not reach the highest career ranks as these are typically reserved for higher education (university degree) graduates.

providers. There are also associations for economic development responsible for setting up strategies supporting the companies in their region.

Description

Scale and target groups

This section explains what the “Bildungswerk” is, what its goals and actions are where it is located and which regional reach it has.

The “BSH – Bildungswerk Spedition und Logistik e.V.” is the primary training institution of one of the most important industries in Germany covering one the central locations of this industry in the country. Taking this into consideration, the importance of the training activities of the “Bildungswerk” is very significant as a factor of regional economic development.

It was founded in 1977 by the “Speditions- und Logistikverband Hessen/Rheinland-Pfalz e.V.”. The goal was to support strategic human recourse development in the sector by means of professional training. Furthermore, in the year 1992 the Verkehrsfachschule e.V., a school for professional trainings in the logistics sector was founded. The “Bildungswerk” is also part of “Weiterbildung Hessen e.V.”, an association of VET organizations in the State of Hesse.

As many of the companies in the sector are SMEs, they aren’t able to or at least do not offer in-house trainings and therefore the services of the “Bildungswerk” are very important for the companies and the industry as a whole.

The “Bildungswerk” has a strong focus on the Rhine-Main Area. This is mainly due to its location in the area and the fact that most participants of its courses are rather not willing to travel from farer away. Therefore, the reach of the institution is mainly the Rhine-Main Area and some cities in the surrounding areas such as Fulda, Wiesbaden, and Aschaffenburg. There also exists a smaller office in northern Hesse, which is partly organized by companies of the Kassel region and does the trainings for trainees in the logistics occupations in Kassel.

All occupations in the logistics sector are covered by the “Bildungswerk” and the trainings they offer, but a strong focus is set on the trades occupations. A growing field in recent years has been the trainings for the subgroup of warehouse and storage workers. Also important are training for unskilled workers and the “Meister” trainings for the highly skilled employees.

Trainings for drivers are not very important part of the portfolio, as many drivers are not even employed by the forwarding companies, but by sub-contractors, which often have very little to no interest at all in training their personnel. Also other institutions such as TÜV and DEKRA also offer trainings especially for drivers; therefore, there is quite some competition in this market.

Type of VET and policy

The “Bildungswerk” offers a large variety of trainings and means of qualification of many different types. In this section an overview of the different means is given.

1. Initial vocational training

The occupations of the logistics industry are usually learned in a dual training. This means that the trainees have to go to school part time and part time work and learn on the job in a company. The “Bildungswerk” supports this dual principle in two ways: first, it offers additional courses for the trainees that can be booked to deepen and increase knowledge of specific aspects of their future jobs. Second, it offers courses for the trainers in the companies. Only if the personnel responsible to train the apprentices is skilled and has up-to-date knowledge, the trainees can get the excellent education they need.

2. Preparation courses for exams

The vocational trainings are usually finalized with a major exam at the end of the training. This exam is extremely important as it hugely influences the final grade and therefore the attractiveness of a future worker for searching companies. In addition, there are interim exams that have to be passed during most vocational trainings. For both types of exams, the “Bildungswerk” offers courses that aim to support the trainees’ preparation specifically for these.

3. Further education for skilled personnel

The “Bildungswerk” not only offers trainings as part of the initial vocational trainings, but also for personnel at later stages of their careers. Such courses of further education cover the entirety of the important occupations within the logistics sector and the most important corresponding fields of their expertise. These courses are viewed upon as very important for the workers to stay up-to-date in terms of required knowledge and skills in an ever changing industry as well as for the companies to meet the modern requirements of the industry with their already present personnel. In addition, these courses can be used to strategically plan and shape careers on an individual level and to strategically develop human resources on the company level. These trainings also involve courses for the “Meister” exams, the highest possible educational status the industry has to offer outside of higher education from universities.

4. Training courses for lateral entrants and unskilled personnel

To train personnel without an educational background in the logistics sector, the “Bildungswerk” offers two types of courses. The first type of courses aims to have participants gain basic qualifications and skills for their job. This covers entry-level knowledge and basic certificates mostly aimed towards unskilled workers. The second type of courses aims to have participants finish a course program with a full vocational education in one of the relevant occupations of the industry including a Chamber of Industry & Commerce certificate. While open for different types of participants, these courses often

attract workers originally from other sectors who want to increase their career opportunities in the logistics sector.

5. General courses in adult education

Following the concept of lifelong learning, the “Bildungswerk” also offers courses that do not focus on specifics of the logistics sector but aim to refresh or improve knowledge, skills and competences in general work related fields. Such courses cover a large bandwidth of topics and are open for all employees in the sector.

With such a broad spectrum of offers in the field of vocational and general education, the “Bildungswerk” is an important strategic partner for many companies in the logistics sector. Especially SMEs who do not have in-house means of training and education heavily rely on these services. Therefore, the “Bildungswerk” as part of one of the major logistics associations is also an important political actor in terms of regional development of the sector.

How is it organized

The “Bildungswerk” is part of the logistics association “Speditions- und Logistikverband Hessen/Rheinland-Pfalz e.V.”. Thus, it is an actor with a very large and dense network of stakeholders within the sector and outside. This section explains how it is embedded and which relevant actors and institutions it is in close contact with.

The “Speditions- und Logistikverband Hessen/Rheinland-Pfalz e.V.” as umbrella organization of the “Bildungswerk” is a regional organization and part of the German logistics association “DSLV Deutscher Speditions- und Logistikverband e.V.”. Thus, it is embedded into a network of organizations that are directly involved in policymaking, agenda setting, lobbyism, interest groups and general communication processes in the sector.

This is especially relevant for at least three different reasons: first reason is that the “Bildungswerk” is largely recognized as a competent and professional institution in the field and the one go-to organization when it comes to vocational and professional trainings in the logistics sector in Hesse. They are recognized as having the right pedigree and are therefore trusted to do a good job. This gives the “Bildungswerk” a competitive edge over other actors offering comparable education and training courses. The second is that the “Bildungswerk” has access to lecturers, trainers and teachers with a strong background in the field, with a good reputation and great experience and skill. Thus, the advantage over other, not as specialized organizations is not only perceived by the target audience but it is actually real in term of quality and experience. The trainers and teachers giving courses for the “Bildungswerk” really know the latest developments in the sector, they also know the requirements for a useful training and know how to approach the typical workers of the different occupations within the sector. Third, by being part of the network of actors in the Hessian and German logistics sector, the “Bildungswerk” has easy access to the latest information, current trends and needs in terms of skills and occupations. Via such valuable information, it can steer its courses to match the

current demand for specific education in a best possible way and can act as a strategic partner to shape future developments in the sector. Thus the course program of the “Bildungswerk” usually represents what is needed in the sector instead just of what some trainers are able offer.

Many of the communication and information processes the “Bildungswerk” is involved in are institutionalized. The “Speditions- und Logistikverband Hessen/Rheinland-Pfalz e.V.” has several different committees, in which issues relevant for the “Bildungswerk” are discussed. For example, there is the “Fachausschuss Berufsbildung”, a committee, which has the single purpose of discussing VET-related issues of the logistics sector on different regional levels. The “Bildungswerk” is of course part of that committee and therefore in a position to get the latest information on the one hand and be involved in strategic processes in the VET-related discussions on the other hand. Being involved in institutionalized communication and information processes and channels is the major way of strategic action and linking VET-related strategies with economic development of the sector as a whole. In such institutionalized settings close and continuous contact with important actors from inside and outside the sectors, like company representatives, politicians, association members of different regional levels, VET-stakeholders and other regional actors with relevance for the economic development of a region are established. This is the most important source of information for strategic activities of the “Bildungswerk” and how it is involved in policymaking processes. Here it works together with actors such as the “Fachverband Güterkraftverkehr in Hessen”, an organization for cargo and freight transport in Hesse, the “Straßenverkehrsgenossenschaft”, the cooperative for traffic-issues, the different associated industry chambers and other VET-related organizations like the “Bundesinstitut für Berufsbildung in Bonn”, a federal institute for professional trainings. Being involved in as many processes and actions as possible is important to be recognized as an important stakeholder in the field and as an actor with a large expertise.

What worked and why

When planning and developing new courses the „Bildungswerk“ relies on information directly from the companies in the region. By having contact persons in most of the larger and many of the smaller companies in the Rhine-Main area, it is usually no problem to find out which new demands are developing, which supplies of skills and qualification are short and which trainings and courses might raise an interest among the companies. Thus, finding topics and content for courses is usually not a big issue.

I can be much more problematic to convince the companies that they benefit from training their employees and explain them in which way they benefit. Same goes for the individual level of the workers themselves, many of which are in no way interested in professional training and in enhancing their skills and qualifications.

Different strategies have proven successful to overcome these problems.

1. Communication as access factor into companies within the logistics sector

The first and most important is to develop a communication strategy to get in contact with the companies. Many of the companies are under large pressure, dealing with their day-to-day work and are therefore not interested in dealing with additional issues, which might even hinder their work. Especially not issues they are not familiar with and have no experience with yet. This is the case for many companies, as continuous and regular professional trainings are not common in the sector yet. Understanding this and offering solutions for this problem has proven crucial to reach the companies. Most companies are not interested in standard offers in a “one-size-fits-all” style. It has proven successful to offer specific solutions that match the conditions under which the company works and functions.

This is one of the major results of the project “Nachqualifizierung in Hessen”¹⁶, which investigated the most important factors for a successful access to different sectors for professional training activities. One of the important results was that companies significantly more often react positive to approaches that take into consideration the specific factors of the sector in general and the company specifically. This can for example be achieved by knowing specifics of the qualification structure within the sector and the company, by knowing who is employed at the company and how the company works. Visiting the company personally, holding courses at the company’s facilities and designing course material specifically for the individuals in the company can be solutions, according to “Nachqualifizierung in Hessen”.

2. Communication among the workers the as access factor

Very often initial contact approaches fail because information is not spread within the company and does not reach the workers. This can be due to an interest of the companies to actually not train their employees. Reasons for this can be fears that trained workers might claim a pay rise, might leave the company after they were trained, might claim another/better position within the company or might in general become unhappy with their job. Sometimes the companies also just do not see any benefit from having better qualified employees. Due to these difficulties, it is important to establish information paths to the workers themselves. The most important way to achieve this is by doing successful trainings and having attendees spread the word. This has been crucial to raise interest among the workers is a major success factor of the “Bildungswerk”. Only if it is known that the courses are actually good and the workers benefit from participating, more will do so.

3. Flexibility

Flexibility in organizing the courses and reacting to ad-hoc obstacles has been the third major factor to successfully reach the companies and workers and secure their participation in the trainings. Flexibility is important in two different ways. The first is flexibility in terms of content of the trainings. Being able to include company- or even attendee-specific issues

¹⁶ <http://www.nachqualifizierung-hessen.de/>

into the courses without diminishing the general utility for all participants, is important to attract companies and workers in the first place and meet their needs within the courses. The second is flexibility in terms of organizing the courses. This covers issues of time and place where and when the courses are held.

Projects within the logistics sector

1. Bachelor in logistics

In cooperation with the University Of Applied Sciences Hamburg a bachelor study in logistics was developed. This is one of the first higher education paths directly leading to a position within the logistics sector. A major benefit for the sector is that by offering a sector-specific study, highly skilled young people can be attracted for a career in logistics. Until now, this was a major drawback the sector suffered from: many highly skilled and ambitious young people found the sector unattractive for a career and decided a career path somewhere else.

2. Blended learning concepts

To meet the current media and learning requirements especially of younger people, the “Bildungswerk” will establish learning scenarios that make use of eLearning in addition to the usual courses. One reason is to attract other target groups to the courses, which would otherwise be less interested or not interested at all. Another reason is that with such an approach, it is easier to increase the number and variety of the courses without having to expand into more trainers, teacher and space. Blended learning concepts that mix both, online self-learning and classic course interaction are going to be designed more for the more skilled audience than the workers with less education affinity. It is expected that less skilled workers would not benefit from these courses in way that more skilled workers would. In addition, using a computer and the internet can still be an obstacle for some.

3. Training unskilled workers

Unskilled workers are a large part of all the employees in the logistics sector. Especially among the store and warehouse workers, many are without professional education – at least in this field. Here lies a great potential for trainings and qualification gain for the whole sector. Thus, a big focus of the “Bildungswerk” lies on this target group and how they can be trained. Courses that are specifically designed for this audience and programs that lead to a certified professional qualification are one of the core offers of the “Bildungswerk”, as it is their belief that this is the easiest way to increase the number of skilled workers in the sector.

Impact and Replicability

The impact the “Bildungswerk” and its activities have on the economic development of the Rhine-Main area is hard to grasp in hard figures. But the approach, to have specialized training organization within one of the main associations of the sector that profits from the network and the strategic position it is in, this approach has to be viewed upon as a great way to develop the logistics sector and therefore have an important part in the development of the region. By giving professional training an institutionalized position within the sector, logistics associations makes it one the major themes of sector development.

Especially interesting is the way the “Bildungswerk” gathers information about (mis)matches of the demand and the supply side of qualifications and the developments in the logistics sector in general. Instead of monitoring the sector with surveys and evaluating numbers, Information given by the companies in more or less institutionalized exchange channels is most important. To gain the most out of the knowledge the companies have about what they need and what they have, some part of the information exchange process has been canalized in the VET committee of the logistics association. In this committee, strategic decisions are made and all matters VET-related are discussed. In addition, by being involved in many other policy making processes the “Bildungswerk” directly or indirectly via the “Speditions - und Logistikverband Hessen/Rheinland-Pfalz e.V” gathers valuable information to strategically plan its activities and make a major contribution for the development of the whole sector.

Such an approach is not easy to replicate by a labor market observatory with its standard routines. There are at least two major reasons for that.

First is that the major precondition for successfully pursuing such an approach is to be very well embedded into the network within the sector. This means not only being involved in informal information flows via contact persons in the sector but also by holding official positions in relevant committees and holding relevant positions in strategic decision making processes.

Second is that this approach does not make use of the classic means labor market observatories use to monitor regional labor market developments and gain intelligence from. The “Bildungswerk” does only to a very minor extend rely on numbers from studies. Thus, within a labor market observatory would have to develop new means of gathering information, evaluate it and gain intelligence from it. Such new means have to be developed, tested and experience has to be gained to make adjustments and improve their reliability and effectivity.

While two major obstacles to the replicability of the described approach have been presented it might nevertheless be worthwhile to look into the development of a monitoring strategy that takes in aspects of what the logistics sector has developed with the strategic position of the “Bildungswerk”. To be able to gather information in institutionalized exchange settings as well as unofficial channels via a dense network in the sector should prove an extremely viable strategy to gather labor market intelligence. This way labor market observatories could support

strategic decision making and policy processes with unique knowledge to align VET activities in a way that they systematically help the economic development of a region.

For such an approach, new methods of monitoring would have to be looked into. One direction could be a qualitative approach to mimic the way information is gathered in communication settings such as official committees or informal talks between different stakeholders from the sector. Such a qualitative, innovative approach has for example been used with the RMQ approach in the EQUIB¹⁷ project in the Bremen region in Germany to gain detailed insight into regional skills developments by constantly and repeatedly interviewing a large number of different regional experts in the field.

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¹⁷ <http://www.iaw.uni-bremen.de/equib/>



The Forecast on Education and Training in the County of Skåne (UAPS)

Victor Tanaka

Introduction

How does UAPS fit with the aim of VET-EDS?

3. UAPS is a regional forecast on education and training for the county of Skåne. It is **comprehensive** both in the sense that it covers all the major occupational areas of the labour market and in that the short, medium and long term sight is accounted for. As a regional LMI of such scope and quality, UAPS is unprecedented and has filled an important gap in the LMI infrastructure of the region.
4. In the long and complex collective process of planning, producing and disseminating UAPS, a "**competence platform**" has been established and developed for crafting a consensus on the current states of view in the region.
5. This process has also **generated knowledge** for key actors within Region Skåne, the leading partner of UAPS, which is expected to in general support more informed decisions by decision makers throughout the region.

Why is UAPS successful and a good practice?

- The comprehensive approach has implied that the **interest** has been vast and virtually ubiquitous across regional actors in Skåne.
- The elaborate approach has been possible through an **inter-county project**.
- **Targeted national policy** triggered the project.

Summary

When UAPS was first released, as one of three regional forecasts, it became apparent that it catered to a great and broad underlying interest for this kind of comprehensive and elaborate LMI. There was also an interest for the methodology, and in the forthcoming release of this inter-county project seven regional forecasts will be delivered. Besides the published results, the complex process of producing UAPS have established a "platform" for crafting a consensus on the current states of view in the region, through dialogue, discussion, and input. There are large thresholds present to initiating and realizing an LMI of the scope of UAPS. At the same time, the interest for UAPS has been vast indeed. The historical absence of a regional counterpart to UAPS in Sweden, before 2012, is explained by the absence of a collective solution to provide such elaborate LMI. As the benefits of this kind of LMI are both scattered across numerous actors and often not realized before the long run, targeted policy is necessary. In the case of Sweden, UAPS was not realized until a formal directive was given to all the public administrations at the regional level to establish "Regional Competence Platforms", from the highest political level.

Context and setting

Economy and geography in Skåne County

Skåne is the southernmost county of Sweden. It is a part of the Öresund region which also includes Sjælland (Zeland), Lolland, Falster, Mön and Bornholm on the Danish side of the Öresund strait. The Danish and Swedish parts of the Öresund Region are linked together by the 16 km long Öresund Bridge, between Copenhagen and the Greater Malmö area, as well as through ferry lines that run in northern Öresund between Helsingør and Helsingborg. Operating in an economy oriented toward foreign trade, Skåne is strategically located at the gateway to the rest of northern Europe.

Figure 1.1. Map of Sweden



The largest city in Skåne is Malmö, which also is the third largest city in Sweden and the administrative centre of Skåne County. There are roughly 1.3 million inhabitants in the county, which is more than 13 percent of the total Swedish population. The average population density amounts to 176 inhabitants per km². As such, Skåne is one of Sweden's most densely populated regions, yet with a population density that is significantly lower than the OECD average (36 inhabitants per km², in 2011).

The age structure in Skåne is quite similar to the structure of Sweden as a whole, yet young people (aged 22-34 years) are more strongly represented in Skåne whereas the proportion of persons between 50 and 60 in age is smaller than in Sweden as a whole. The disparities in population density across the Skåne Region are not only large but growing. The population is increasing, mainly in the vibrant hubs of Malmö and Lund, due to high fertility, net inflow of population from the rest of the country, and increasing immigration.

Immigration is the prime factor for the population increase in Skåne in recent years. The unstable situation in the world, especially in Syria and Iraq, has resulted in a large net immigration to Sweden and Skåne during 2014. According to recent figures, the population is increasing and expected to grow with 8.4 percent or 106 000 inhabitants to 2022.

Nature of the VET concerned

The institutional context, as of VET in Sweden, has been subject to significant change during the past one or two decades, and not least the last few years. An important development has been the establishment of The Authority for post-Secondary Vocational Education and Training (*Myndigheten för yrkeshögskolan*, from now on **MYH**), a state authority. This overarching authority established in 2009. It was set up to solve the previously addressed problem of how to bring together existing VET-programs at the post-secondary level. Under the new administration, a number of different programs were given a new and common institutional status, for example allowing its students access to the national study loan system (*CSN*). Most importantly, however, the reform was targeted to strengthen the ties between studies at this level of education and forthcoming (or at least existing) demands on the labour market. By being assigned the tasks of control and evaluation of all VET-education at the postsecondary level in Sweden, MYH is expected to stand as guarantor for the quality of this particular type of education and training. Providers of education at this level may be firms, municipalities and even universities. Irrespective of the provider, each program that MYH accepts to give state grants has to establish a directory involving “representatives of the working life”, including a student representative. The authority is responsible for evaluating both the quality of the granted programs as well as its results. Thus, for instance, assessments of the job-rate are made systematically; there is a constantly ongoing process of physical supervision; students (“quality agents”) are explicitly encouraged to report flaws; and, in extreme cases, the authority has the right to stop a program.

Still at the national level, another relatively new and indeed important policy change concerns the development of Regional Competence Platforms (*Regionala kompetensplattformar*, from now on **RCP:s**). Shortly after the establishment of MYH, or in 2010, the national government gave regional governments throughout Sweden the mission to develop RCP:s, with the general purpose of improving skills provision at the regional level, throughout the country and thus ultimately on the aggregate. During 2010-2012 RCP:s established in all the regional jurisdictions in Sweden, at different levels of development and with different shapes and orientation, to adapt to the regional context. Region Skåne's¹⁸ seminal release of “Education and labour market forecast for Skåne – targeting 2020” (*Utbildnings- och arbetsmarknadspredikt för Skåne – med sikte på 2020*, from now on **UAPS**), in 2012, has filled an important gap in the infrastructure of Labour Market Information and analysis (**LMI**) in Skåne. The work with UAPS was initiated together with Länsstyrelsen Stockholm and Västra Götalandsregionen, the corresponding administrations in the Stockholm and Gothenburg urban regions. It followed as the result of the government commission given to all the regional administrations in Sweden to establish “regional competence platforms for cooperation on the provision of skills and educational planning on the short and long term” (UAPS, foreword, 2012). UAPS offers a comprehensive account of the labour market and the educational system with exclusive reference to Skåne, including analysis and forecasts on a broad range of specific occupations and educational options. The range covers the whole period ahead until 2020, yet it is apparent that the long term has offered the most

¹⁸ The Region Skåne administration was established in 1999, initially on trial and as a permanent administration since 2011. The aim was to narrow the gap between citizens and decision makers. As a jurisdiction, it stands out in Sweden as one of five regional governments where the elected politicians also are responsible for “regional development”, besides the major pillars health and care and public transport (train and bus).

valuable perspective. The release of UAPS can be described as successful in several aspects, and arguably this encompassing regional forecast delivered something that was missing and much demanded by an uncountable number of stakeholders in the region.

It is apparent, as well, that large part of the value added by UAPS is in the general approach it offers, covering both the short and long term in conjunction with its coverage of all the main areas of education (and thus occupation). As an LMI, then, there is no exclusive link between UAPS and VET, yet the general approach is of direct relevance to VET at the secondary school level. Regarding VET at the post-secondary level, there is an indirect yet probably as important link between UAPS and VET education at this level. The indirect effect is that in the long and complex process of production of UAPS, a considerable amount of knowledge is accumulated by the project leaders from Region Skåne, who also are the most important external analysts in the process of evaluating the program applications to MYH. In this respect, the value of UAPS is related to the lack of access to high quality LMI in the process of providing educational programs on VET at the post-secondary level.

Nature of the Economic Development in Skåne County

The county of Skåne produces a considerable proportion of Sweden's graduates throughout the three Universities in Lund, Malmö and Kristianstad, who accounts for 15 percent of Sweden's total graduates. Skåne has maintained this proportion of graduates also as the number of university graduates in Sweden has increased following a national reform in the late 1990's. In 2008, over 32 percent of the labour force in Skåne had tertiary education. This is a significantly higher proportion than the average in Sweden and compared with other regions in OECD countries. Skåne also figures, however, a large number of individuals with only elementary education, at least in a Swedish context yet not in comparison to the OECD average. Only 18 percent of the population aged 25-64 has compulsory school as the highest educational level attained whereas the OECD average is about 30percent. Even though the educational level is high from this international perspective, it is low compared to the rest of Sweden. The city of Malmö has one of Sweden's highest unemployment figures, which is mainly explained by the high level of unemployed people with only elementary education.

Like other parts of the western world Skåne is in a structural transition. That is to say that the share of employees in the service sector is increasing whereas the corresponding share as for manufacturing is decreasing. Yet still the manufacturing industry accounts for roughly 12 percent of employment, and still particular segments of industry play a pivotal role in many of Skåne's municipalities. The economic structure of Skåne is largely the same as the Sweden average. The main difference is that a larger share of the employed are within wholesale and retail trade and a smaller number is employed in manufacturing. According to a recent OECD report (OECD Territorial Reviews, Skåne Sweden, 2012), Skåne has distinguished itself as one of the most innovative regions in OECD. It has increasingly moved into high-skilled sectors and is classed by the OECD as a "knowledge and technology hub". Skåne spends a large share of its resources on R&D (nearly 5 percent of GDP), and "In terms of innovation inputs, the region is second to none". After the financial crisis, Skåne lost its position as the fastest growing region in Sweden, a position which to a large extent seems to have followed as a result of the building of the Öresund Bridge in 2000.¹⁹

¹⁹ Martin Andersson, 2011, "Vad hände sen? Utvecklingen på den svenska sidan av öresundsregionen efter bron", Handelskammaren.

Description of UAPS

Scale

The range of UAPS, as a regional labour market forecast, is comprehensive regarding both the time perspective and the coverage of educational groups. Published in 2012, the time span of the forecasts in UAPS ranged from 2012 to 2020. Considering the numerous options available in the Swedish educational system – covering a large span of educational lengths and prerequisites – it is reasonable to assume that this time span covers demand and supply side decisions (private individuals and formal decision makers, respectively) on the short, medium and also the long term. In the basic approach educational groups are studied, and thus occupational groups are only addressed indirectly. Following the overarching taxonomy of study options in Sweden, all educational groups are covered at the secondary and tertiary level (about 90 educational groups). Overall demand and supply at the primary school level is also covered, as well as the sum of programs at secondary school level which are targeted to forthcoming tertiary studies and thus not primarily to specific labour market demands.

Besides the labour market forecasts, UAPS includes an extensive introductory part, consisting of four chapters on “The role of the urban regions”, “The structural change in 2000-2008”, “Development on the labour market”, and “The educational system”. As a regional labour market forecast, then, UAPS also offers rather extensive related background and general information. In addition, it includes a comprehensive appendix covering methodological issues, at a rather detailed level, as well as the historical and expected figures used in the forecasts. Most importantly, the forecasts in UAPS are at the regional level, thus providing LMI on Skåne with a coverage that is unprecedented in the history of Skåne and of any other county in Sweden. The appendix also includes historical and expected figures which are used as input for, or at least are related to, the forecasted output.

Type of VET and policy

As a labour market forecasting tool, it is within the reach of UAPS’s comprehensive approach that the VET system is aligned with economic development strategies. There is no exclusive focus on the VET system and neither are there regional economic development strategies with very specific links to the VET system. In Region Skåne’s Regional Development Strategy,²⁰ important lines of development are addressed but at a rather abstract or at least high level of operation. Thus, for example, “smart materials, smart sustainable cities and personal health” are “three prioritized areas of strength” for Skåne for the next decades to come. Similarly, skills supplies and matching on the labour market are emphasized as important factors of success, yet not at a much higher level of detail than captured by the statement that “Skåne needs to ensure skills supply in the long term and become a strong educational region” (p. 17). The importance of achieving a “broader labour market” is indeed stressed, both by providing low- and high-income jobs and by improving cooperation between business in general and educational institutions, but VET per se is not mentioned.

²⁰ “Det öppna Skåne 2030”, *Region Skåne*, 2014.

Arguably, national policy has been more important than regional policy regarding the link between the VET system and regional economic development. In particular, UAPS should be seen in the context of two important reforms, both based on national policy. These are the establishment of The Authority for post-Secondary Vocational Education and Training (MYH), in 2009, and the government mission to develop Regional Competence Platforms (RCP:s), in 2010. As described in the previous section, UAPS has been the most concrete result following on the government commission to develop RCP:s. Regarding VET at the secondary level, UAPS has certainly closed a gap between this part of the VET system and economic development. It offers a planning tool given predicted shortages, balances or surpluses which simply did not exist, at least not in such a comprehensive scale, not with such rigour and level of complexity in the methodology, and not with such general approach.

As a planning tool for VET at the post-secondary level (yet not at the tertiary level), UAPS:s focus on education at the secondary and tertiary level implies that it is flawed: there is no direct correspondence between the forecasts in UAPS and the educational options offered within the realm of MYH. In general, the educational programs offered under the administration of MYH are difficult to grasp with forecast on the basis of register data, which is dependent upon the existence of continuous time series of reasonable length. The reason is twofold, but essentially based on the fact that the educational taxonomy is relatively less strict and more dynamic within this part of the educational system. The first is that the level of detail in the occupations addressed by a program is in general very high and specific, which makes it difficult to find relevant data to build forecasts on. The second is that, partly because of the narrow or specific occupational target of the programs, there is a discontinuity in many of the programs offered. To a larger extent, VET programs at this level are started and closed, which again makes it difficult to rely on relevant time series. Nevertheless, in the present work with the second UAPS (forthcoming, in 2016), there is an explicit attempt to also provide forecasts on the set of educational groups addressed by MYH. Given the mentioned problems, however, it is also explicitly stated (in the present work with the second UAPS) that this part of the project may not work out and eventually be excluded from the publication. In the worst case, then, also in the future will there be a lack of reasonably adequate LMI for planning the educational groups addressed by MYH.

This is particularly troublesome given that there is a systematic demand-side bias in the provision of VET programs by MYH. The bias is implied by a formal procedure where the application for and, if approved, the administration and provision of programs are made by external actors, often a firm or for example a municipality. Very often, then, if not always, applications are made by relatively small organisations, in terms of their capacity to produce adequate LMI of high quality. If there is no forecast on the VET programs that may be applied for to MYH, then, in general there is no LMI available on which to plan and apply for programs in the future. Reasonably, the demand-side bias in the formal process, in combination with the lack of adequate LMI, should imply that there are programs that could cope with future shortages and still are not even applied for. As such, adequate LMI would probably help align this part of the VET system with regional economic development.

Irrespective of this flaw, there are two indirect effects which imply that UAPS can be expected to contribute with effective labour market forecasting also at this VET level of education. First, and most obviously, educational programs are more or less related to educational programs at the secondary and/or tertiary level. When the relation is strong, educational forecasts in UAPS may well account for a valuable planning tool, in particular when the predictions show substantial surpluses or shortages. In addition, and second, the comprehensive and ambitious approach in UAPS implies that the production

of this LMI has generated significant side effects, as argued by one of the project leaders. During the whole process of production,²¹ the two project leaders at Region Skåne have gained considerable knowledge on the regional labour market, both in terms of breadth and depth. Considering that UAPS is the result of the commission to establish a RCP, this commission has not only generated formal, published results. It has also implied that the two project leaders have accumulated extensive knowledge on the regional labour market, which is one main area of responsibility in the ordinary work of these two analysts.

In sum, it is apparent that the decision to produce UAPS has established a “regional competence platform” in two ways: through published and publicly available LMI in the form of UAPS, and through learning-by-doing in the process of providing UAPS. This second, less visible contribution to the building of a “RCP” thus accounts for the accumulation of relevant human capital; yet, less apparently, also for the establishment and strengthening of informal expert networks which may be counted as another result of the “learning-by-doing process”. These positive yet “non-formal” side effects, on human capital and networks, are relevant for the planning of VET at the post-secondary level as MYH normally depends on Region Skåne’s analytical capacity in this respect. The analytical capacity of Region Skåne on this matter is important as even though MYH has its own expertise, it does not produce any own LMI that is as comprehensive and rigorous as UAPS. In fact, UAPS is the only existing LMI of its kind and covering Skåne, as argued previously. Normally, there is a standard procedure where MYH asks Region Skåne to evaluate program applications, where Region Skåne’s analytical capacity obviously is at centre.

Target groups

UAPS main target group are stakeholders in a broad sense, including decision makers in for example private or public providers of educational programs at different levels, or in political organizations or different organizations within public administration. Another important category of stakeholders are, of course, the different kinds of analysts in Skåne that somehow are related to educational issues or labour market issues. Finally, study counsellors at different levels of the educational system account for an important target group. They outnumber by far all the other groups of professionals working with LMI. Moreover, study counsellors have a particular key role in aligning the educational system with future labour market demands. The reason is that the educational system at the secondary level in general, and regarding VET at the post-secondary level, implies strong incentives for educational providers to cater to the demands of present and future students. No matter how accurate claims on future developments that UAPS may establish, these predictions will not have an effective impact unless translated into specific demands by prospective students, at least not in the current policy context.

As of VET, UAPS includes forecasts on specific VET programs at the secondary level, and thus stakeholders within this part of the educational system are clearly part of the main target group. In particular, *Teknikcollege* and *Vård- och omsorgscollege* are educational VET institutions at the secondary

²¹ From decision to publication, UAPS took approximately eight months to produce. The production of the second edition will take longer time, with the decision taken in December 2014 and expected to publication in April-May 2016.

level which may be seen as especially important target groups when considering VET and UAPS.²² These institutions offer a certification system with the purpose of improving the standards of technical education and health and care education, respectively, at the secondary level. In addition, stakeholders related to MYH are a potentially important target group, yet this is crucially dependent upon whether the second, forthcoming version of UAPS will succeed with making forecasts on MYH:s specific programs.

As a result of the great interest that revealed after the seminal publication of UAPS, and awaiting the second version of UAPS, there is a discussion on how to target broader groups in the forthcoming version. Once UAPS was released it became apparent that this LMI was interesting for a broad range of groups, some of which cannot be classified as stakeholders. The interest was largely beyond what had been expected prior to the first publication, and for the next UAPS release there will be measures taken to better correspond to an interest at the level that turned out the first time. This time, for instance, there is a communication strategy and a specific person that is responsible for effectively disseminating the results of UAPS. There is also a discussion on whether, and in that case how, to broaden the present target group of UAPS.

Organisations involved and stakeholders

UAPS is published by Region Skåne, the public administrative entity at the county level in Skåne. The production of this LMI takes the form of a project, headed by two project leaders from Region Skåne. Statistics Sweden (the Swedish statistics agency, *Statistiska centralbyrån*) is part of the lead group of the project, and it is also Statistics Sweden which prepares large part of the report and finishes it. The formal methodology and the demand-side input are delegated to an external partner, a consulting firm that gets involved after a formal procurement process.²³ Besides Region Skåne and Statistics Sweden, the project group also consists of seven other public administrative entities, each representing another particular county in Sweden.²⁴

At the regional level Region Skåne is formally the only stakeholder, yet stakeholders in a broader sense are described above. These stakeholders are involved both as important target groups and/or as important providers of information and knowledge during “production”, in particular regarding the demand side of the forecasts.

The organization of UAPS

At an executive level, the production of UAPS, as an LMI, can be described as the result of the following four stages.

²² *Teknikcollege* is analyzed and described in more detail in the other “VET-EDS Case Study” on Sweden. Together with the present report, there are two VET-EDS Case Studies on Sweden, in addition to two (less extensive) “VET-EDS Good Practice” reports on Sweden.

²³ In the first release of UAPS the external consultant also finished the report, a task that Statistics Sweden is responsible for in the second release.

²⁴ In the first release of UAPS, only Region Skåne and the public administrative entities of Stockholm and Västra Götaland were represented in the project group, in addition to Statistics Sweden. In other words, only counties representing the three main urban areas in Sweden were represented in the seminal release.

1. Interregional dialogue. As mentioned at the outset, UAPS must be seen as the result of the government commission to establish RCP:s, given in 2010. As also mentioned there, the first release was initiated together with Länsstyrelsen Stockholm and Västra Götalandsregionen, Region Skåne's corresponding administrations in the Stockholm (the capital city) and Gothenburg (the second largest city) urban regions. While the RCP mission certainly gave obvious incentives to provide more elaborate LMI at the regional level, the large scale effects related to the production of an LMI of the scope and quality of UAPS implemented strong motives for cooperation. These motives are particularly strong, of course, for similar regions. For this reason, the three larger urban regions in Sweden are particularly well suited for cooperation on this matter, yet also because these are all larger public administrations at the regional level, implying that they have a relatively large amount of resources available in general. Analytical resources, for instance, may be a particularly scarce resource for a public administration in a minor county of Sweden.

Following the approach from the first UAPS, also in the second version there has been an “interregional dialogue” which has initiated the project. This time, however, four other public administrations have been added to the initial three, as a result of the successful launch of the first UAPS and the corresponding forecasts of the Stockholm and Västra Götaland counties, respectively. For Region Skåne, then, as for the other six regional public administrations, the first stage of the project consists of general planning together with the other public administrations involved.

2. Internal dialogue. The second stage consists of anchoring the project plan, outlined in the first stage, within the internal organization. This includes major decisions, economy, and the like. UAPS is decided upon on a project basis, yet there is long-term political support for it in Region Skåne.

3. Project group. Together with Statistics Sweden a project group is established. As mentioned, this second time the project group includes seven instead of three regional public administrations. This second version will thus generate seven simultaneously produced and released regional forecasts. In this third stage, most of the interregional, collective work is accomplished. This is realized with the crucial support of two external actors. In an early phase of this third stage, an **external consult** is procured, which is responsible for quantitative calibration and estimation. This means, in particular, to estimate the demand side of the forecasts and in general apply the regional statistical tool that is employed. At the second phase of this third stage, **Statistics Sweden** uses the demand side figures to generate the numerous forecasts, after adding the supply side to the calculations and using a gap analysis on the basis of register data. Faced with the statistical outputs, finally, there is a dialogue with the **regional public administrations**, or more precisely their analysts (which are also project leaders). At this final phase, the work of analysis consists of evaluating the reasonability of the results, which means that a qualitative analysis takes on after the preliminary quantitative results. As register data cannot capture all the variables attributable to the skills which are indeed significant on the labour market, quantitative estimations on the basis of this input is only a rough predictor of shortages, balances and surpluses. The qualitative analysis, then, is important to secure the quality of the results. This is a major task, as UAPS is comprehensive also in the sense that it covers all the major educational groups, and correspondingly all the major areas of the private and public sector on the labour market. This means that knowledge on important demand- and supply-side developments must be accounted for, at least at the national and regional level and covering all the major areas of the labour market. Not least important, a qualitative assessment of the current state is necessary to translate quantitative estimates into “de facto” shortages, balances or surpluses on the labour market.

4. Communication and dissemination. This final stage deals with the communication and dissemination of the results to the public. For Region Skåne, it includes three channels, where one is obviously the publication of UAPS on the web. A second channel is that, in conjunction with the publication, a press conference is arranged where stakeholders, media, and others are invited. At this event, the results are presented and discussed and printed versions of UAPS are offered. Thirdly, an additional venue for disseminating the results is through additional and numerous on-demand presentations of UAPS.

What worked and why?

Once UAPS was first released, it became apparent that it catered to a great and broad underlying interest for this kind of comprehensive and ambitious LMI. At least in this respect, UAPS has been an indeed successful product. After the publicity generated by the initial press conference, the first printing of 1 000 versions was finished and approximately 1 500 printed versions have been distributed. In addition, an unknown number of copies have been printed or read through the web. The great interest for UAPS was also revealed through numerous on-demand presentations that took place after the press conference, primarily during the first year thereafter. In total, about 60 presentations have been delivered by the two project leaders from Region Skåne, addressing an audience of approximately 2 000 persons. Given that the main target groups are stakeholders in relation to LMI, this is a large number indeed. The audience has been broader than the target group, including study counsellors and teachers, decision makers at educational institutions and from municipalities around Skåne, representatives from business and industry, and also decision makers and analysts at the national level.

Whereas the approach of UAPS is narrow in that it is targeted towards decision makers and analysts, at the same time it is broad as it covers all the major areas of the labour market as well as all the relevant time perspectives (the short, medium and long term sight). The broad approach, apparently, catered to a broad audience. Besides a miscellaneous group of stakeholders, it also includes an audience which is more closely related to decisions at the individual level, most apparently represented by study counsellors. Interestingly, there has also been an interest from analysts which is related to the methodological approach. This interest has resulted in the proliferation of the approach, implying that the forthcoming second set of forecasts will represent seven and not three counties.

The broad interest for UAPS, and for the corresponding and closely related forecasts of the other six counties, can be boiled down to the fact that it can, as can LMI:s in general, be categorized as a *public good*. Typically, a public good is *nonrivalrous* (can be consumed by many) and has a *low degree of excludability* (it is difficult to charge the consumption of the good), implying that it will be underprovided under market competition unless there is a collective solution to coordinate a more satisfactory level of provision. In other words, it is not surprising that the large costs accrued to launch UAPS have not been rationalized previously, although numerous actors have showed interest in the eventually generated results. Many, and probably most of these actors, are part of the public sector, so UAPS must be seen as an innovative collective solution also within the domains of public administration. Neither this is surprising, though, given the almost ubiquitous value of providing efficient forecasting as an LMI, often realized in the long term. The value of providing LMI which improves the capacity to take more informed decisions, at the individual level and by decision makers, can be related to virtually all the major entities within the public sector. The long term rewards of allowing for such informed decisions, moreover, makes it particularly difficult to coordinate efforts on the provision of this kind of LMI. In the particular

case of UAPS, it is clear that the government commission to establish RCP:s, given in 2010, was necessary to coordinate incentives on this important problem. When this formal mission was stated at the highest political level, and simultaneously for all the regional levels, it did not take long before the work with the seminal release of UAPS was initiated. In 2012, then, UAPS was released on behalf of Region Skåne, by Swedish Statistics, and after close cooperation with the public administrations in the other two larger urban areas in Sweden.

Arguably, UAPS is valued by a large and disperse group of actors, and the initiative to produce this comprehensive and ambitious LMI was realized first after the government commission to establish RCP:s. Besides the value for external actors, however, UAPS has also improved the collective knowledge on labour market issues that has become available within Region Skåne, as an organization. As argued by the interviewed project leader, the two project leaders of UAPS have accumulated considerable knowledge in the process. It is knowledge that is closely related to their regular duties and valuable also to external actors, for example regarding the standard procedure where Region Skåne contributes with analytical input to MYH:s process of evaluation of program applications.

The production of UAPS has thus contributed to the establishment of a “Regional Competence Platform” also by accumulating human capital within Region Skåne, besides the more obvious external value of delivering the product. To considerable extent, but not least as a potential development, UAPS also serves as a platform for discussing, aggregating and improving the quality of the large amount of labour market information and analysis that is dispersed across numerous actors in the region. This function as a “platform” can be attributable to primarily two phases in the previously described process. The first is that categorized within the third stage related to “The organization of UAPS”, described above. On an ad hoc basis, this task consists of securing “the quality of the [quantitative] results”, which is “a major task... as UAPS... covers all the major educational groups, and correspondingly all the major areas of the private and public sector on the labour market”. Once UAPS has been launched, the second phase attributable to the function as a “platform” is that when the published results are confronted with stakeholders. In particular, on-demand presentations often address audiences with important knowledge on a particular segment of the labour market. Moreover, the function as a “platform” establishes important links between key stakeholders on labour market issues, as a valuable side-effect in addition to the value of immediately generating new LMI. As a “platform”, then, the value of UAPS may also be seen as that of establishing a network “for discussing, aggregating and improving the quality” of LMI also in the future.

Constraints and challenges

Two major constraints can be identified in relation to the work with UAPS, as experienced by Region Skåne. The first is that the “qualitative assessment of the current state” (“stage 3”, p. 9) has not surprisingly proved to require access to a broad network of stakeholders, including labour market analysts and stakeholders in general. Also prior to the initiation of UAPS, Region Skåne had an extensive network related to LMI. This is probably a prerequisite for being able to effectively deliver an analysis which evaluates “the reasonability of the results, which means that a qualitative analysis takes on after the quantitative results” (p. 9). Such qualitative feedback and evaluation of the results must be consistent with the time framework of the overall project that UAPS is part of, which at date involves seven partners at the regional level and two external actors. The project schedule can thus be pressing,

and the quantitative results which need to be evaluated cover the whole labour market in Skåne, including segment specific trends and developments at the national and even international level. Needless to say, to establish a well-functioning procedure, or system, for generating LMI on an ad hoc basis of evaluation, within the project framework that UAPS is part of, is a major challenge. To generate this kind of LMI, effectively and with high quality, requires an extensive network and a well-established procedure. To considerable extent, it seems that the development of a relevant and effective network and procedure is part of a learning-by-doing process. This “qualitative”, in contrast to “quantitative”, part of the production process is crucial for the quality of the eventual results of UAPS. Nevertheless, it is probably not possible to completely establish an effective network and procedure *ex ante*. Rather, this important “qualitative” analysis will probably need to develop sequentially, if not continuously, as part of the preparation for improving the next release to come.

The second major constraint identified is to adequately account for the user’s perspective: to anchor the results, interpret them, and to make them useful for the particular organization addressed. As the approach of UAPS is comprehensive, the potential users are numerous, which became clear by the large interest that revealed after the seminal release of UAPS. As a result, the user’s perspectives are many and various, and it is not possible to cater to them all through one single LMI. In the present approach, UAPS is mainly targeted towards secondary and tertiary school, and probably the use of this range is an important explanation of the large interest that UAPS has generated. These two educational institutions are, by large, the most numerous amongst the educational institutions which are in direct or at least close relation to the labour market. Relevant data on this is also readily available so there seems to be no reason, and there is no plan, to change the basic approach. Also with this rather straightforward and conventional target, however, there is important scope for improving the possibility to anchor the results of UAPS. This was emphasized by the interviewed project leader and especially regarding educational institutions.

At the end of the day, this is closely related to the overall aim of UAPS as an LMI, which is to have an effective impact on the (uninformed) choices that decision makers and individuals do. Often, decision makers in the private and public sector have proved to react particularly reluctant when faced with results showing surpluses for educational options, or related professions, within their specific area of work. In marked contrast, the reaction is often the opposite when the corresponding results show present or forthcoming shortages. The basic point, made by the interviewed project leader, is that it is obvious that stakeholders often have an agenda, with significant influence on the actual response to the results delivered by UAPS. Put differently, special interests may well conflict with the results in UAPS, such that it cannot be assumed that these results will in general be effectively translated into correspondingly adequate measures, taken by decision makers or individuals. A large employer or an educational provider, for instance, may have strong incentives not to spread, or indeed contest, UAPS’s results on predicted surpluses on educational options related to their area of work. UAPS’s function as a “platform”, then, discussed in the previous section, may be an effective and potentially very important venue for crafting a consensus on the current states of view in Skåne, through broad dialogue, discussion, and input. This notwithstanding, effectively targeting the presentation of the results of UAPS to the right decision makers may be an effective complementary measure to actually have an impact. As of individual decisions, in contrast to the decisions implemented by decision makers, UAPS is not primarily targeted towards this group, as described previously. Indirectly, however, individuals may to a

large extent be reached by targeting study counsellors, which then is of fundamental importance as the educational system strongly caters to the often uninformed demands of potential students.

Regarding VET in particular, in the current approach of UAPS it is only VET at the secondary level that is targeted. In the ongoing work with the second UAPS there is an explicit attempt to produce forecasts on study options at the post-secondary level, as offered by MYH, yet the difficulties with register data implies that it may not be feasibly accomplished (see p. 6). Irrespective of the outcome, it is a specific example of the perceived need of, as well as the difficulties related to, developing the target in the approach of UAPS.

Impact and Replicability

As has been described in more detail previously (p. 10), the interest for UAPS after the seminal release in 2012 was almost overwhelming. The interest revealed was surprising regarding the number of stakeholders in concern yet also considering the variety of the organizations represented. As also described, the vast interest pointed at the fact that, as an LMI, UAPS was unprecedented in terms of its scope (broad and covering all the relevant time perspectives) and quality (elaborate method and ambitious overall approach). Whereas the effective impact on the labour market is hard to evaluate and of long term character, the interest that followed on the release of UAPS signaled that the demand for and thus potential impact of this LMI is large indeed.

At some level, the interest for UAPS, once released and broadly disseminated, has been ubiquitous. It represented all the significant organizations with respect to the labour market in Skåne, and interest at the national level was also revealed. Besides the eventual yet unclear impact that the specific publication and dissemination of the results may have on the functioning of the labour market, a probably more important impact is that related to the function of UAPS as a “platform”. This implies that it may continue to develop to “be an effective and potentially very important venue for crafting a consensus on the current states of view in Skåne, through broad dialogue, discussion, and input” (p. 12). This is particularly relevant for two of the four different stages of the process related to the production and release of UAPS. At the final phase of analysis, “the work of analysis consists of evaluating the reasonability of the results, which means that a qualitative analysis takes on after the preliminary quantitative results” (p. 9). At this point, the input from Region Skåne’s expert network is important for the quality of the final results. In the stage of communication and dissemination of the results, finally, the numerous on-demand presentations that followed during the first year after publication offered a similar venue for “dialogue, discussion, and input”. Given the time sequence of the release, at the former stage focus is clearly on the collection of complementary input to the preliminary results, essentially on an ad hoc basis. The function as “platform” then is attributable to the establishment and development of an expert network related to UAPS. This is important not only as an input but also to build consensus amongst key regional stakeholders on the final results. At the latter and final stage of communication and dissemination, the on-demand presentations obviously cannot provide input to the presented results yet surely for next release. This venue can thus be seen as pre-stage for dialogue and discussion, which precedes the formal initiation of the work with the next release and provides very early input for the work to come. Most importantly, however, it should be seen as a venue for anchoring and disseminating the available results.

A less visible and less obvious, yet perhaps as important impact of UAPS, is the “informal” generation of knowledge. In the long and complex process of production and release, that is, besides the published results, in particular the two project leaders accumulate considerable knowledge on a broad range of labour market issues. Given the key role of these two analysts on issues of regional development, this side-effect probably has substantial impact by supporting the implementation of more informed decisions in general throughout the region. The value of such accumulation of knowledge can probably be related to the work by most key actors on labour market issues in the region. Specifically, however, and related to VET, it improves Region Skåne’s capacity to deliver analytical input of high quality under the evaluation of MYH’s program applications, which is usually made within the scope of a formal procedure each year.

Regarding the replicability of this LMI, in other regions in Sweden yet in particular abroad (when there is no corresponding multi-partner project to join), it is essential to understand that UAPS is a large project. In particular the first release of this ambitious and comprehensive LMI can be expected to require extensive resources, yet each release that follows will certainly claim a considerable amount of resources to replicate the process and to continue to develop it. Probably of critical importance is that the regional organization that leads the production and release of such LMI must be qualified enough according to some criteria. Besides economic resources, it is important to have analytical capacity available in-house, such that internal project leaders can be assigned with the aim of accumulating important labour market knowledge in the process. As in the case of Region Skåne, however, not all analytical capacity may be in-house. In the case of UAPS, the overall estimates and finish of the whole report has been outsourced to Statistics Sweden, and an external consult has contributed crucially with technical competence to calibrate regional estimates. The critical issue is that the organization and its analysts do have an important role on labour market issues in the region to begin with. The credibility and status of the organization on labour market issues is probably of considerable importance to be able to establish and develop an extensive expert network, which can be used to provide feedback on the preliminary results of the forecast. The credibility and status of the organization is probably also important for the dissemination and impact of the final results.

In other words, there are many thresholds that may not be overcome, and it is not surprising if stakeholders in a particular region do not manage to succeed with initiating and delivering an LMI of the kind considered. This was the case, for instance, before the seminal release of UAPS, an LMI that was unprecedented in Sweden in terms of scope and quality. There are two institutional innovations which appear to have been crucial for the realization of UAPS, in 2012. The first is that Region Skåne was established in 1999. As a jurisdiction, it stands out in Sweden as one of five regional governments where the elected politicians also are responsible for “regional development”, besides the major pillars health and care and public transport (train and bus). In 2011 Region Skåne gained status as a permanent administration but, more importantly, already at the outset the responsibility for “regional development” implied that relevant analytical capacity was established and developed. Therefore, and because the county is one of the most populated, Region Skåne is one of the regional governments in Sweden with largest resources in general but also in terms of analytical capacity. Thus Region Skåne had the necessary resources in place to realize UAPS as a project, yet only in cooperation with two other regional administrations and with the crucial input by two external actors. Not surprisingly, the other two regional administrations involved in the seminal release were those that are responsible for the two other larger urban areas that exist in Sweden. The second and probably most important institutional

change is related to national policy, namely the government commission given to all the public administrations at the regional level to establish “Regional Competence Platforms”, in 2010. Apparently, this explicit and formal directive gave public administrations at the regional level strong incentives to put considerable effort into the issue of actual and forthcoming surpluses and shortages on the labour market. For the largest regional actors, moreover, this work was rapidly transformed into the initiation of UAPS and the two other regional forecasts, and in the second forthcoming release another four regional actors joined this inter-regional project.

An important point to be made here, regarding replicability, is that there are very large thresholds present to initiating and realizing an LMI of the scope of UAPS. Yet at the same time it is apparent that, once realized, the interest for UAPS has been vast. The historical absence of a regional counterpart to UAPS in Sweden, before 2012, in combination with the great success, once released, may appear as a contradiction. It is explained, however, by the fact that UAPS, as an LMI, is a public good. By definition (p. 10), then, it is valuable for many and at the same time likely to not be provided at all, unless an effective collective solution is arranged for. As the benefits of this kind of LMI are both scattered across numerous actors and often not realized before the long run, the arrangement of such collective solution appears to be necessary indeed. In the case of Sweden, UAPS was not realized until a formal directive was given to all the public administrations at the regional level to establish RCP:s, from the highest political level.

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MyTec Noorderpoort

KWIZ Research & Consultancy

Introduction

MyTec is a new and innovative educational project focused on technical education, launched by the educational institute Noorderpoort Energy & Maritime in collaboration with regional companies established in Stichting AOT Noord. The project consists of three educational programs. Although these are separate programs within Noorderpoort, they are all part of MyTec. Within MyTec there is a strong emphasis on combining education with practical work. As technology is developing quickly, companies demand new and different skills and knowledge from its employees and jobseekers. MyTec anticipates to these new demands by its practical oriented approach which gives students the opportunity to learn the technical skills that are needed at this point of time. MyTec differs from other educational programs by how they focus on external companies. Students perform a lot of assignments within one of these companies, giving these companies a leading role in the educational program. Subsequently, Noorderpoort in its turn will adapt its classes and guidance to these assignments. This way MyTec strives to be as current as possible. In its brochure about MyTec, Noorderpoort states: "During your education you will acquire a lot of work experience and you will be introduced to future opportunities. There is a good chance companies will be interested in your services after you finished your education, because of internships or assignments you have done for them." Similar practical oriented study programs offered by Noorderpoort thus far seem to be very successful.

Why was this chosen as a case study?

The main goal of the VET-EDS program is to create a better alignment between the VET system and economic development strategies, with the help of effective labour market forecasting. This means that the VET-policy is adapted to be in line with current regional economic developments. The

Summary

MyTec is a new and innovative VET program primarily focused on technical education, initiated by the educational institute of Noorderpoort in collaboration with regional companies established in Stichting Support AOT Noord. The Eemsdelta is a region in the Northeastern part of the Province of Groningen. Within this region, the technical field of work is developing quickly. New investments have been made and existing companies are expanding.. MyTec's aim is to bring more qualified technicians on the labour market, as a response to the high demands. MyTec anticipates to development in the technical sector in the Eemsdelta through a practical oriented educational method. Regional companies participating in Stichintg Support AOT Noord are being given a leading role in the educational program. They get to offer practical assignments and internships to the students. Students spend the majority of their time in professional practice, gaining valuable work experience. This way students learn the necessary skills and knowledge at this point of time, effectively aligning technical education to professional practice.

close cooperation between MyTec and its partner companies effectively creates a link between vocational education and regional economic activity. As a result of this cooperation the discrepancy between supply and demand within the technical labour market in the province of Groningen is bound to decline. The company and demand-driven approach that is used by MyTec could also be applicable to other regions within the VET-EDS program to create the same connection between vocational education and economic activities. MyTec is therefore a case study that could be included in the toolkit to support the alignment of VET policy and economic development strategy.

Context and setting

Economic developments Eemsdelta

The “Eemsdelta” is a region in the Northeastern part of the province of Groningen. In the last couple of years there has been an increase in economic activity within the Eemsdelta. Recently, multiple new investments have been made as a reaction to the quickly expanding technical sector in this region. Most investments have been made in the Eemshaven (port), the region’s economic center. A large investment has been made in the wind power industry. By developing and expanding both existing and new (off shore) wind farms, many households are now provided with so-called green energy. As these wind farms are under construction, the Eemshaven functions as a logistic center supplying man force and materials. Another ongoing technical development in the Eemshaven, is made by Google. Google is investing in the construction of a large datacenter to support its enormous servers, resulting in 150 new jobs. Altogether, these economic developments will create 3.000 – 5.000 new job vacancies in the Eemsdelta.

Shrinking population East Groningen

Currently in The Netherlands there is an increasing mismatch between supply and demand in the labour market. At certain parts of the labour market there is a great demand for skilled professionals, whereas in other parts and sectors there is a high rate of unemployment of skilled labour force. In the province of Groningen, especially industrial sectors are suffering from a mismatch in skills. The economic activities occurring in the Eemshaven don’t necessarily benefit the entire region of study. Recently, parts of East Groningen, including the Eemsdelta as well, are suffering from a phenomenon called ‘shrinkage’. Shrinkage often leads to a decrease in economic vitality as a result of young, highly educated people leaving the area looking for better opportunities. Elderly people stay behind, which causes an ageing population and ultimately a loss of total population. In the Eemsdelta, forecasters expect a 7% population decline in the year of 2020, rapidly increasing to more than 20% in 2040. Facilities will start to disappear and the occupancy of houses and business premises will drop. Moreover, the rate of unemployment will increase, because of the ageing population and a lack of highly educated people. Partly due to the lack of educated work force and declining population, there is an insufficient amount of qualified technicians to fill the amount of job vacancies in the 68 Eemshaven. Besides that, a lot of technical workers are approaching their retirement, while there is a small influx of new workers, causing an even bigger discrepancy between offer and supply.

MyTec as response to demands

As mentioned before in subchapter 3.1 there is a growing demand for technical workforce in the Eemsdelta. Because of the insufficient amount of qualified technicians in Groningen to fill these jobs, companies are being forced to expand their search for workers outside its province borders and possibly

even crossing national borders. On the other hand, job seeking technicians in Groningen that do possess a diploma or qualification often fail to meet the required skills, as their knowledge is outdated. As a response to the high demand for technical workers in the Eemsdelta, MyTec was launched to decrease the shortage of technical work force. Also, through its practical approach MyTec ensures its students that their acquired knowledge and skills suit the needs of professional practice.

Description

Organisation

As mentioned before, MyTec is a new and innovative educational project, launched by the educational institute Noorderpoort Energy & Maritime situated in Delfzijl, in cooperation with Stichting Support AOT Noord. Stichting Support AOT Noord is a collaboration between multiple (technical) companies from the region Delfzijl. Their goal is to offer practical assignments and internships to students in order to create a larger and well educated technical work force. The participating companies are all leaders in their respective field of work when it comes to technical development, innovation and sustainability. In addition to their big market share in The Netherlands, most of these companies operate internationally. They have great awareness of the practical skills and knowledge needed for professional practice. Therefore, they are given the leading role in arranging the educational program of MyTec.

The following companies participate in Stichting Support AOT Noord:

- AVEBE
- Delesto
- ESD-SIC
- GDF Suez
- Lubrizol
- Kisuma Chemicals
- NAM
- Nedmag
- Nuon
- RWE
- SCA
- Stork
- Teijin Aramid
- Waterbedrijf Groningen

Stichting Support AOT Noord applies 5 successive steps to the educational program of MyTec, which are:

1. *To perform a strict selection procedure;*

Every student will be tested at motivation and affinity, before they are being allowed to take part in one of the MyTec programs. This assessment will be carried out by an employment agency.

2. *To offer appealing study conditions;*

Students get a laptop and pay a small amount of money for their learning tools. After finishing the MyTec education students receive a partial compensation for the costs.

3. *To determine content educational program;*

Before the MyTec program begins participating companies will be involved in determining the contents of the educational program.

4. *To offer internships and practical assignments;*

From the second year onwards participating companies in Stichting AOT Noord will offer students practical assignments and internships.

5. *To assure job security;*

After finishing MyTec, students will be offered optional job opportunities.

Stakeholders and target groups

When analyzing MyTec it is important to know which parties are involved and which position they occupy within the process of developing and executing MyTec. This concerns both stakeholders and target groups. These are the most important involved parties:

Stakeholders:

- Noorderpoort Energy & Maritime
- Stichting Support AOT Noord

Target groups:

- Students
- Unemployed / jobseekers

Noorderpoort Energy & Maritime

With 17 locations ROC Noorderpoort is the biggest provider of vocational education in the northern part of The Netherlands. Energy & Maritime is one of Noorderpoort's locations and is primarily focused on technical education. It is situated in the city of Delfzijl. As the initiating educational institute behind MyTec, Noorderpoort is responsible for the implementation, and organization of MyTec. Also, Noorderpoort Energy & Maritime will adapt its classes and guidance to the assignments given by participating companies.

Stichting Support AOT Noord

14 companies from the technical and chemical industry in the Eemsdelta have collaborated in Stichting Support AOT Noord. Its goal is to create a connection between regional economic activity and education. They offer practical assignments and internships within their organization to the students participating in the MyTec program. Also, after finishing MyTec they offer students optional job opportunities. This way it aims to increase the influx of new technical workers, in order to reduce the considerable imbalance between supply and demand.

Students

The shortage of qualified technicians on the labour market causes problems for the technical sector in the Eemsdelta. The amount of available workers cannot meet the amount of job vacancies, holding back the growth in the technical sector in the Eemsdelta. Moreover, technical work and education often is looked down on and has a bad reputation, causing very few pupils to pursue a career in this field of work. MyTec looks to encourage young people in particular to choose for a technical education. For that reason, they are the primary target group of MyTec.

Unemployed / jobseekers

In the eastern part of the Province of Groningen the unemployment rate is way above national average. Currently there are 9.000 people looking for work in the region, with an increase of 1.800 people in the year of 2015. The technical sector offers many opportunities to reduce the amount of unemployed people, because of its high demand for work force. Although, many of the unemployment don't have an education or left school early. Without significant retraining, it will be very hard for these people to find work in the technical sector. MyTec provides new opportunities for these people in order to gain necessary skills and knowledge.

Type of VET and policy

The educational project of MyTec is a BBL-learning track in vocational education. BBL means students combine study and work. Pupils who choose BBL spend at least 60 per cent of their time as apprentices working for an employer. The students spent their remaining time at college. The BBL-learning track equals to level 4 of the European Qualifications Framework (EQF). Critical factors for success Within a project there always are certain factors contributing to its success and the project reaching its objectives or not. These so called critical factors for success are from significant importance to identify, as they can be used in other projects as well. These factors can be made transparent with the help of statistics and research. Within the context of the VET-EDS program it especially is important to identify the factors of success behind the case studies and good practices, because they will be included in the toolkit to support the alignment of VET policy and economic development strategy. Within MyTec we distinguished four critical factors of success. These are:

- Organizational commitment
- Support of regional economy and government
- Involvement of regional companies
- Sufficient amount of (external) financial resources

Organizational commitment

Characteristic for the organization of MyTec is the constructive cooperation of all parties involved. The collaboration between the educational institute of Noorderpoort and Stichting Support AOT Noord results a lot of administrative power. In fact, the organizational commitment and cooperation makes it possible to align the interests of both parties, in favour of the educational program of MyTec. It would be very difficult to align vocational education and the world of work if education and regional economy do commit itself to achieving a certain goal.

Support of regional economy and government

As described in subchapter 3.1 there is a high demand for qualified technicians in the Eemsdelta. Also there is a lot of unemployment in the Province of Groningen. Because its goal to achieve a better match between offer and supply and the positive contribution to the regional labour market, MyTec is widely supported by both governmental parties and regional economic activity. In order for an initiative reach its goals and be successful, a broad base of support within society and regional economy is indispensable.

Involvement of regional companies

Education in the Netherlands traditionally is aimed at training students to reach a certain educational (thinking) level. In general there is not a lot of attention for actual economic demands, neither for

practical work experience. MyTec differs from those traditional education, because of its educational focus on practical assignments and internship. This way the MyTec educational program comes very close professional practice. Involving regional companies in shaping the educational system is an important part of aligning VET-policy and economic development strategies.

Sufficient amount of (external) financial resources

Financial resources are crucial when designing and implementing an initiative like MyTec. A project or initiative will fail when there is a shortage of financial resources to work with. The educational institute of Noorderpoort and regional companies joined forces to make MyTec possible. Provincial sector funds were used for the development and implementation of MyTec. Also, the participating companies in Stichting Support AOT Noord make a financial contribution, in return for apprentices. Noorderpoort itself will bear some of the costs and sets the tuition fees for the students.

Constraints

There are very few constraints which affect the program of MyTec. There are enough financial resources to work with. Besides that, the participating economic parties can offer a sufficient amount of practical assignments and internships. Because of its innovative and new educational method, MyTec benefits from the market being relatively open. There are not a lot of similar educations like MyTec. Although, MyTec is limited to a certain amount of internships. MyTec will contribute to decreasing the shortage of technical workforce in the Eemsdelta, although because of its limited amount of internships it won't meet the total demand for technicians in the Eemshaven.

Impact and Replicability

Regional impact

The educational program of MyTec was launched as a response to regional economic developments and recent labour markets issues in eastern parts of the Province of Groningen. It is particularly directed at decreasing the shortage of technical workforce in the Eemsdelta. To what extent MyTec 72 can contribute to the regional demand for educated technicians cannot be quantified for a couple years yet. For that reason it is unclear what future impact MyTec will have on the (technical) labour market and economic developments in East Groningen. The leading role given to companies in the development of the educational program of MyTec is new and innovative. Traditionally, educational institutes pay very little attention to practical skills and real-life assignments. It is to be expected that more institutes will adapt to a more practical educational approach in the near future. Replicability This case study was written within the context of the VET-EDS program and could inspire other partner regions on how to align vocational education and the world of work. It won't be useful to directly duplicate MyTec's educational approach to other regions, as it is specifically developed for the region of East Groningen and its labour market. What does matter, however, are the critical factors which contribute to MyTec's success. These could be taken into account when applying a similar kind of educational method to support to alignment of education and the regional labour market. These critical factors of success were: Organizational commitment, support of regional economy and government, the involvement of regional companies and the presence of a sufficient amount of (external) financial resources.

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More information about the educational programme of MyTec can be found on Noorderpoort's website. Also, Stichting Support AOT Noord has its own website with a lot of information. Note that these websites are written in Dutch.

Noorderpoort Energy & Maritime: MyTec:

<http://www.noorderpoort.nl/Scholen/Energy%20en%20Maritime/Paginas/MyTec.aspx>

Stichting Support AOT Noord: <http://www.aotnoord.nl/>



Oliver Twist School

Mattia Martini

Introduction

This Case Study summarises Oliver Twist School's approach in facing school dropout in the area of Como, Italy, through the development of training paths on handicraft (silk and carpentry) and tourism.

It has been selected as a best practice since it is an example of multiple bottom-up approach in service design through the development of VET courses combining the attention for:

- the social sustainability, providing autonomy through work for young people risking the social exclusion,
- the economic development, by developing innovative courses aimed at supporting the renaissance of a traditional industrial district.

The organizational context of Oliver Twist School makes this case study particularly remarkable. In particular, the development of this project within the initiatives of a Not for Profit Organisation (*Gruppo Cometa*) with a strong mission on the support for children and their families, highlights the positive effect of the organizational culture in motivating personnel, engaging stakeholders, and developing social capital.

Summary

This Case Study summarises Oliver Twist School's approach in facing school dropout in the area of Como, Italy, through the development of training paths on handicraft and tourism.

it is an example of multiple bottom-up approach in service design through the development of VET courses combining the attention for social inclusion and economic development.

Context and setting

The training services offered in the Oliver Twist's School are aligned to the characteristics of the socio-economic context in which it appears. The area in question is that of the province of Como, which is located in a strategic geographical position, between Milan and the Lombard industrial area on the one hand and Switzerland on the other hand, this factor has contributed to its economic and social development. Como's economy has a high manufacturing vocation which it's developed over time through the district model and industry specializations. According to the latest available data, for the year 2012, the manufacturing industry accounted for 21.9% to the wealth produced. This figure is higher than those that refer to the Lombardy region (19.5%) and Italian nation (15%)²⁵. The silk district is the most important in the Como's province with its long history²⁶. First, silk was worked by artisans (XIV century) then the production was industrialized and it became one of the most important voice of Italian export. Since the fifties, there was a progressive product's diversification due to the development of new synthetic fibers. The silk industries began to use these new fibers to meet the market demand. In the following decades the district has alternated phases of crisis and recovery, connected to the performance of the global economy and international trade. Currently the silk district suffers two problems: the first is related to the increasing market penetration of Asian competitors and the second refers to the economic and financial crisis that especially has negatively affected the demand from middle classes. The district's structure has recently changed through the entry of big enterprises that have vertically integrated the production cycle (from weaving to marketing) in order to be more competitive. There is also an extensive chain of small and medium enterprise (SME) both monobusiness enterprises which they are specialized in certain phase of production or for certain types of fibers and other company subcontractors which are entrusted certain special processing (e.g. weaving, dyeing, finishing) thanks to their flexibility and economy. The success district strategy to face the aggressive international competition lies in these key words *quality, innovation and creativity*, according to an increasing number of manager, academic professors and local stakeholders.[Bramanti, Martignano, 2008]. Although there are two university and a textile technical school in Como, this area lives the paradox of the failure employability of young people with higher qualification and in the same time the enterprises suffer the structural lack of qualified technicians²⁷ [Luraschi, 2010]. The employers have difficult to find not only traditional figures, but also new professional profiles. For example it's emblematic the demand of employees for research and development product, namely people who are able to innovate tissues and products ensuring that competitive and inimitable advantage, which over the years has characterized Como silk district. [Bramanti, Martignano, 2008]. In addition to the Como silk district there are other districts that, although they have their main location elsewhere, they invest in the neighboring province of Como, we are referring to the furniture district of Brianza, engineering and textile districts of Lecco. The first includes both companies on average very small (craft) and larger companies, including some national and international market leaders. It is about companies specialized in the production of furniture and objects in wood, accessories for the furniture in wood or metal. A production that stands out for the quality of materials and finishes, for the design and style, addresses to the medium-high market segment. The engineering district of Lecco is characterized by an extensive

²⁵ Statistics from dati.istat.it

²⁶ Source of qualitative information about the districts: www.osservatoriodistretti.org

²⁷ According to Bramanti e Martignao (2008) the failure employability of young people with higher qualification is due to a very centralized management, typical of family firms , that it makes difficult the development of a real management class which is emancipated from work-family culture.

network of SMEs specialized in the production and processing of metals and their alloys, metal products and manufacture of machinery, equipment, functional components in the production process. Finally Como is involved in the textile district of Lecco, which is characterized by the production of textiles in particular for furniture (the production of this district is more than half of Italian product) and the production of fabrics and materials for the automotive industry. The products in jacquards and velvets are known worldwide for the high quality standards and innovative approach. About 60% of district production is exported to the USA, Germany and Britain. This district is composed by many SMEs, specially they are family businesses with a strong artisan presence, a chain interdependent and geographically rooted. The statistics confirm that - within the Como manufacturing sector - the engineering industry employs over 18,600 workers, followed by the textile and clothing industry with almost 15,500 employees and wood and furniture industry with over 10,600 employees. Altogether, these account for 75% of total employment in the manufacturing sector [Asia-Istat, 2012]. In addition to the district and craftsmanship context, also the services sector contributes significantly to the production of wealth in the province (10.3 billion about 70% of the wealth here produced), employment (106,000 employees, of which 42% is employed in commercial and tourist services) and the local business system (over 3,300 local units of companies)²⁸. Tourism generates a positive contribution to the local economy (it accounts for 3.5% to the wealth produced - it's the second highest value in the Region), thanks to more than a million visitors per year and more than 2,6 million presences²⁹. This is a significant resource for the province of Como. In fact, thanks to its location on the western shores of the homonymous lake, has many factors of attraction such as the city of art, lakeside resorts, mountains and hills. The high level of tourist hospitality is described by the accommodation system with 240 hotels (60% of upper middle class hotel) and 398 extra-hotel facilities (in particular bed & breakfast, rental accommodation and farms)³⁰. According to Lecco and Como Chambers of Commerce Observatory, the touristic demand for the city of Como is about due products, equally relevant, the *lake* (tourism for leisure) and *business* (tourism for work). Tourism is the sectors that has better stood up the economic crisis (positive statistics are recorded for restaurant and accommodation services) and nowadays it is expected a further positive phase thanks to the start of the international exhibition EXPO in Milan (May - October 2015). In addition to these sectors described, It's important to refer to certain new industry that represent a growth opportunity for companies such as the "*green chain*" and the culture and creative sectors. The first refers to horticultural and gardening sector - a part of the new Lombard horticultural district "Il distretto Florovivaistico Alto Lombardo" - and the second views a preponderant role of Como crafts and design activities.

In Como economy, the crisis has more affected the manufacturing industry and specially crafts, leading to a die-off of companies and reduction of jobs. If domestic demand still struggling to grow, the economy was able to benefit from foreign demand for both manufacture goods, and tourist services. In the province of Como, export propensity is higher than both the regional and the national data and this indicator has continued to grow over time³¹. Among the most important export products, there are tissues, followed by machinery; pharmaceuticals, chemicals and synthetic; furniture and clothing.

²⁸ Asia - Istat 2012 statistics

²⁹ Statistics by Como Chamber of commerce (2013). Visitator is a person who do the check in an accommodation. Presences are the number of nights passed by visitators.

³⁰ Last date (September 2014), Como Chamber of Commerce.

³¹ Export propensity of the province of Como, estimated as the ratio between export and local value added, is about 39%. This figure is higher than both regional (36%) and national (27,9%) figures. It has continued to grow from 28,3% in 2009 to 38.3% in 2012. [Como Chamber of Commerce, 2013].

Almost all of these products are typical of the district production. The vitality of tourism in Como is strongly related to foreign demand of tourists who mostly come from Germany, UK, Netherlands, Switzerland and France. This demand offset the stagnation of the local market or of Italian tourists coming from neighboring regions primarily Lombardy (about 60% of Italian tourists) followed by Piedmont and Veneto.

Oliver Twist's School fits therefore in a socio-economic context with a relevant district and craftsmanship model where «innovation, internationalization and tourism are considered the main drivers for local development»³². Regarding the local labor market, it suffers from the same problems present at the regional level: a significant suffering in terms of employment, strong difficult in employability of young people [Magatti, 2013]. However, according to the latest forecasts Excelsior, entrepreneurs are struggling to find qualified staff, especially in the textile and clothing industries (where about a fifth of the profiles are difficult to find into market labor). These same difficulties are expected also in the tourism and catering³³.

The competitiveness of the industries and crafts district goes through the availability of skilled professionals who are able to revisit the old traditional techniques with a view of innovation and development. The education system in Como has a problem of dropout, which is in line with regional trends, but it should not be underestimated. So the improvement of the quality of the education system should go through the development of innovative processes within the school educational paths. Within this context the Oliver Twist's School can be presented as a best practices [Magatti, 2013].

The history of Oliver Twist's School is linked to the growth of a small family community namely Cometa that it has started since 1987 with the custody of children in difficult situations and the support of their families. In addition to the initial custody of children were added a lot of other services such as sports, recreation, after-school activities, training and job orientation. These services have been developed to satisfy the needs that gradually emerged from the first experience of childcare. The philosophy of Cometa expressed by the formula "*welcome for educate*" is reflected in all of the socio-educational activities that occur in the community. The idea of a school - explains the founder of Cometa, Erasmo Figini - originated from the need for a personalized learning path for some of the children entrusted and for the many children attending the daily activities in Cometa; but also by the realization that this need expressed by these guys was just a part of a larger problem of young dropout in the Como area (Figini, 2013). The creation of the School took place thanks to the partnership between Cometa Formazione scs³⁴, the Foundation Oliver Twist and the Lombardy Region together with the contribution of many other local private and public institutions. Inaugurated in 2009, the school offers courses in vocational education and training (VET) and experimental courses for youth and adults in the areas of tourism and craftsmanship. The goal common to all courses offered is to thrill students to knowledge, especially of those who have left school for different reasons. The Oliver Twist's School offers a model of work-based learning namely courses in vocational educational and training based on the experience and individualized for each student. This is in line with the indications from the EU: «The aim of improving the results of young people at high risk of prematurely leave school or with scarce base skills can only be achieved by promoting the actions and the actors for a more inclusive education system in order to implement work-based learning and individualized learning and to foster care to children at dropout risk

³² As defined in the Plan for the competitiveness and development of the province of Como .

³³ Excelsior (2014)

³⁴ Social cooperative within Cometa's Group that have been dealing with vocational training activities and employment services since 2003.

and flexibility of courses to accommodate them»³⁵[Isfol, 2013]. So the School Oliver Twist is a project sensible to situations of hardship and dropout of teenagers unmotivated. To achieve its aim, the school works in partnership with companies and local craft, which are actively involved in the definition and implementation of the entire VET programs that help the young students of today to become workers of tomorrow.

Description

The school Oliver Twist was founded with the belief that everyone can be educated when the context is able to give to young student a sensation of warm acceptance. The building of Oliver Twist School are located within the Regional Park of Spina Verde, a wonderful natural environment near Como.

With the aim to host 250 students every year, the school occupies 3.100 m², divided into three floors: 10 classroom, 3 laboratories, offices, canteen, a multifunctional room and different sport facilities.

In designing places and rooms, the mission of Cometa of granting a worming acceptance to allow children and teenagers education has been considered. As a consequence Oliver Twist School has been designed with the care for each detail. The concept of "beauty" is fundamental in Oliver twist School pedagogical approach. On one hand, welcoming young people risking social exclusion in a beautiful and well-finished locations is a demonstration of acceptance and appreciation of the person, independently from his (her) past experiences and conditions. On the other hand, this teaches the students to take care of both him(her)-self and the common environment.

The building of Oliver Twister School is a modern well equipped structure. Every room has available new technologies allowing the combination of traditional learning approaches with those more innovative. A care attention is given to environmental sustainability, also as a tool to stimulate in young people love and respect for the environment, according to the school mission. Oliver Twist School is certified Iso 9001:2008 and Iso 14001.

Accoding to Italian law Oliver Twist School is an organization accredited by Lombardy Region for Vocational Training. Its target groups can be listed as follows: **vocational training courses for young people of compulsory school age and customized technical training to prepare them to enter the labour market**. This courses correspond to Initial Vocational Education and Training (IVET) as it was defined by Cedefop and European Commission. Toward 3 courses IVET and other experimental projects, Oliver Twit School offers a personalized and work-based learning approach with the aim to prevent and face scholar dropout for young people risking the social exclusion. These training paths allow students to learn a job and, at the same time, to obtain a scholar certification recognised at national and EU levels. In order to provide personalized paths mirroring individual learning needs, the approach of Oliver Twist School is student-centred. This approach implies the development of the learning project through an in-depth knowledge of each student's past, as well as a strong involvement of their families.

The focus on the personalization of the learning project is very relevant, since on the reason of scholar dropout is the high standardization of traditional scholar paths that, often, are not able to valorise individual attitudes, and cognitive approaches of different students.

³⁵These were the conclusions that emerged from a comparison of eight European countries on policies to reduce dropout and to improve the attractiveness of VET (vocational education and training), held in Brussels on 15 March 2013.

The deductive approach of traditional Italian schools is another criticism that Oliver Twist training courses has to face. The need to transform theoretical concepts into skills and competences, in fact, makes traditional lectures nonconcrete and useless for this students [Ragazzi, 2010]. That is the reason why Oliver Twister school teaching approach is based on experience. This implies starting from a sort of “hands’ understanding”, recovering the concept of work as an educational experience that is concrete and modern. Toward an inductive approach, from the experience the students are able to conceptualise the general principle, and they are motivated to learn. In this way, they move from doing to knowing, inverting the order of traditional schools’ deductive approach.

Students experience this inductive approach both in the context of the Botteghe which are workrooms internal to the school’ building, and in the context of the affiliated local enterprises. Along the path of local traditional handcraft, Oliver Twister students also go through the use of technological equipment. The inductive approach, however, does not concern exclusively the transfer of professional and vocational knowledge and expertise; it is also the approach adopted for general competences and knowledge. For example, they are stimulate to reflect that a chef has to know how to calculate proportions and equivalences to dose a recipe’s ingredients; at the same time a *maitre* has to able to speak other languages in order to serve the restaurant clients. Laboratories, meeting with professionals, school trips, and movies are technical tools widely adopted to grant a concrete approach to the knowledge process.

The Oliver Twister School approach in Vocational training courses for young people can summarized as follows:

- A training program in which the context of workroom is properly replicated. In this Workrooms the production and selling processes are managed by teachers and students;
- The external contact with local handcrafts (joined together in the Contrada degli Artigiani cooperative) that teach students the artistic handcraft skills;
- Direct contact with the local enterprises through apprenticeships or on the job training periods with a work-school turnover program.

In addition to the IVET courses, the Oliver Twist’s School offers **professional training courses for young people or adults** who have qualified and are in possession of a school leaver certificate, but have difficulty in finding a job or those who, although they have a job, want to continue personal or professional development. This second category of courses is included in the Continuous Vocational Education and Training area (CVET) according to the Cedefop and European Commission definition. Next to an individualized and work-based learning, as it is described before, the Oliver Twist’s School embraces the principle of lifelong learning that is important in a changing world where skills and competences became soon obsolete.

Details on training courses

If we analyze in detail IVET courses of the Oliver Twist’s School we can distinguish between two different service offers: “*Vocational School*” and “*Tailored School*”.

The first includes IVET courses for young people of compulsory school age³⁶ from 14th to 17th year old with a lower secondary school leaving diploma (EQF Level 1). The attention for the customization of these IVET courses is one of the main features thanks to a variety of training and development options with different employment opportunities in exit. Students can choose among three courses/paths/IVET

³⁶ DDIF – Children’s rights and duties to be educated and developed

that is *Bottega del Tessuto* (Textile shop), *Bottega del Gusto* (Taste Shop) , *Bottega del legno* (Carpentry Shop). These courses fulfill the Italian education requirements issuing a qualification (3 years) and professional degrees (4 years). These titles are valid as other educational qualifications, so they are recognized over all Italian territory, because they respect national standards established by State with Regions, and also in the European Union because they can be comparable with the European Qualifications Framework (EQL 3 level for the Qualification and EQL 4 level for the Diploma). There is the opportunity of completing the fifth year so also to have access to university and public competitions, for students who wish continue their studies. But for those who prefer the work, during the courses, they can learn well a useful trade in the area of textiles, of woodworking or restaurant industry. The definition of IVET courses together with their future employment opportunities have been done according to the productive systems in Como. So both the traditional textile and wood manufacturing and the growing development of hospitality industry and catering have been preferred. Especially the latest, linked to the tourism, offers different and interesting employment opportunities for young people. In fact, it's useful remember that among the most in demand jobs in the province of Como there are firstly food service managers together with food preparations and serving workers, but afterwards there are also artisans and skilled workers³⁷. The correspondence between IVET courses and local productive systems improves availability of skills needed on the labour market, perspectives of local development and young people's transition to work with advantages for both students and local economy. As for organizational details of these courses, the learning activity takes place from September to June according to the Italian school year (Monday - Friday from 8.30 a.m. to 1.30 p.m. with some afternoon reentries). Next to the teaching of the basic competences (Italian, Math, English, Science, Law and Economics, Informatics, History, Religion, Physical Education) there are technical and professional competences common for all courses when they are referred to the quality, safety, health and environmental or key competences for the profession that each course aims to prepare. History and Science are taught in English according to Content and Language Integrated Learning or CLILL method. The educational programs can be integrated with study abroad period. Learning English is a qualifying competence in reference with the present socio-economic evolution and Como's local context where export and foreign tourism are important for the local economy. The relationship "school-work" is another important key features of these courses. The courses of Oliver Twist's School are based on the project work method, that is all learning activities are thought as a path that accompany each student in the design, creation and marketing of a product or a service within school workshops as a real business context. In this School there is no teacher who move from a classroom to another one, but they are students who move among different area of workshops where meet teachers who are masters, artisans and entrepreneurs. The hours in workshops become activities of real production of goods and services [Figini, 2013]. For example the learners of *Bottega del Gusto* can test their abilities in patisserie, ice cream making, baking workshops. This products are sold in a teaching bar which represents a learning place where client service is only in English Language. There is also a Teaching Restaurant whose dining room service is available for guests in addition to catering and banqueting service. It adds the *Bottega della Natura* that supports especially the activities of the *Bottega del Gusto* through laboratories for the creation of flower arrangements in the dining room. Students of the *Bottega del Tessuto* design, create and package the product in the different laboratories that reconstruct the whole chain of the product. Not least are the students of the *Bottega del Legno* that design, project and make various objects from a pedalos to a wooden display for pastry, from a hatbox to a sailboat. In additions to this shop inside the

³⁷ Source Excelsior (2014)

School, it joins another important shop thanks to the creation of *Contrada degli Artigiani* (Craftsmen's District), a cooperative where the children come in contact with expert artisans who teach them their crafts, still considered a true form of art. The cooperative currently accommodate four school-workshops teaching carpentry, home furnishing, restoration and design, designed to train and prepare the young people to the job market. Thanks to the Craftsmen's District, on one hand, it is revitalized the wealth of skills and crafts from Como, and on the other hand creating new training and employment opportunities for young people. Key component of this type of IVET is on the job training period in company which involves personal, professional and relational aspects and it lasts from 8 to 12 weeks. The host company have to exercise an educational and training role that involves a shared definition and jointly responsible for the internship project. The internship is a qualifying training opportunity during which students are placed in a real working environment, alongside entrepreneurs and artisans who transmit passion and the value of work. During the internship the student is supported by a school tutor and a company tutor. According to *Excelsior*, more than 50% of recruitment in industry and trade sector takes place through direct knowledge. Therefore, in addition to being an educational experience, the internship is an opportunity for the trainee to be known and be selected for future job placement. All courses described are recognized and financed by the Lombardy Region through the system of Dote School³⁸. There is no registration fee for students, but only the cost of purchase of equipment and teaching tools. Under the new legislation, qualifications and professional degrees can be acquired even in Apprenticeship by young people up to 25 years old.

The path of the “**Tailored School**” involves experimental projects highly personalized and with a high vocational approach that are the “Job High School”, and the “Short-Master on Hospitality”.

The “**Job High School**” refers to young student 16-19 years old dropped out traditional high school. The target of these courses is often composed of unconcerned and unmotivated students, or students that, because of learning disorders, are not able to conclude traditional school paths. The aims of the “Job High School” can be summarized into:

- Reinforcing personal and relational capabilities;
- Recovering and supporting to the learning and training process;
- Facilitating the re-integration in traditional school's paths;
- Giving a vocational guidance.

In order to face these issues, the “Job High School” offers flexible and modulated courses, giving the opportunity to obtain handcraft skills and competences in the context of gardering restoration, carpentry, decoration, upholsterer, tailoring, and other sector of the traditional handcraft of Como, as well as hospitality. Aimed at exploiting individual aptitudes, the path of the “Job High School” involves three phases:

- Access: the access phase represents the first contact between the school and the potential student, where the organization obtains information on the student's past and family, and provides information on the service. This phase allows the evaluation of individual needs and the identification of the most appropriate training path;
- Planning: planning consists in formulating objectives, identifying the necessary resources, defining the timing and implementing the intervention. This involves the definition of

³⁸ This is the system of services and resources developed by the Lombardy Region to reward worthy students of private and public schools or of regional VET courses and to reduce the additional costs incurred by disabled students. It is one tool to achieve the twin objectives of promoting the educational, training and professional development of a person and improving the quality of education and training regional systems.

- The general culture training program (lectures of Italian, English, Mathematics, and Informatics);
 - Vocational apprenticeship in local enterprises;
 - The project work in the fields of handcraft, hospitality or gardening.
 - Implementation: the planned activities are implemented in a training project. The project takes two years, with the opportunity to add a third year training aimed at the introduction in the labour market. Anyway, the path is considered closed, when the initial objectives are reached.
- Evaluation: the project is continuously monitored also through self-evaluation, the evaluation of the enterprises on the apprenticeship and other tools.

Thanks to the regional ad-hoc financing (Regional call for the project “Eccellenza” in Lombardy), in these years Oliver Twist School supported about 160 students. 75% of these students obtained a long term job contract, while the rest of the students obtained contracts for apprenticeship. From 2014 (and until March 2015) this project is financed by the regional program “Lombardia Plus” aimed at supporting the regional policies for training, education, and work.

The “Short-Master on Hospitality” was the result of the offer of dropout students looking for jobs opportunity, and the demand from hospitality organization of competences of maîtres, porters, and manservants. The “Short-Master on Hospitality” takes one year of vocational training for young people (17-20 years old), aimed at the direct introduction to the labour market. This involves a 450 hours-training program based on the development of technical and professional skills imparted through training on the job, an apprenticeship contract of 6 months with local hospitality organization, and a general culture training program through lectures at Oliver Twister School. During the last month, the students obtain a short term contract with the enterprises that provided the apprenticeship in previous 6 months. During this training program the students obtain the skills and the competences required for a long term insertion in the hospitality industry, one of the most important sector for the local economy characterized by a relevant tourists flows from other Countries. The aim of this program is not, simply, the transfer of technical and professional skills, but also the development of “culture of welcoming” particularly essential in the context of hospitality services. Examples of projects in the context of the “Short-Master on Hospitality” are banqueting services for privates and enterprises. At the end of the program, the students organize an event aimed at welcoming the top management of the enterprises that drove them in this training path. In this occasion, the students demonstrate them the ability they have gained.

The students access at this course for free. At the moment, in fact, the “Short-Master on Hospitality” is financed by Formatemp, Gi Group S.p.A, and other private financers. The results show a high level of employability after the courses.

While the “Job High School” and the “Short-Master on Hospitality” aim at facing the school dropout, other paths of the Oliver Twister School aim at preventing this phenomenon, through appropriate courses that are complimented to those of the traditional school. In particular, different programs are developed with the objective to support, with flexibility, students that still attend other school courses, but require the improvement in specific areas (i.e. lectures of Italian for foreign students, laboratories aimed at re-motivating, recovering or reinforcing the learning process).

Furthermore, the “Tailored school” includes training courses whose target are young people (15-25 years old) with the objective to allow the certification of professional diploma, and the activities of the Cometa Academy.

The first category includes courses, financed by the regional “Dote Scuola”, articulated as follows:

- Identification of an apprenticeship opportunity with a partner enterprise;
- Definition of a training program approved by both the school and the enterprise with the roles for the training on the job, as well as with the presentation of the expected outcomes;
- Assignment of an individual tutor from the enterprise;
- Training on general culture at the school (400 hours).

Finally Cometa Academy differs from previous initiatives because this includes courses aimed at training unemployed young people and adults with a scholar background (diplomas and other professional courses), as well as initiative of Life Long Learning. In particular, the activities of Cometa Academy include:

- Conselling: post-diploma courses preparing people to labour market, using a method based on the concept of responsible access to the job;
- Courses supporting professional apprenticeship: according to the Italian Law, the apprenticeship contract with enterprise includes a formal program training. Cometa Academy supports enterprises granting 120 hours training courses for their apprentices (18-29 years old);
- Courses for workers: aimed at supporting individual activities of Life Long Learning in the industry of hospitality, tourism, and manufacturing.
- Courses for Postgraduates: aimed, in particular, at preparing professionals with multidisciplinary skills to manage services for school dropout conditions.

Stakeholder involvement

The creation of the School Oliver Twist and the performance of its daily activities is made possible by the support and interaction of a multitude of different subjects stakeholders. Among the most important, which have economically supported the project actively working with Cometa Foundation, it is possible to mention the Lombardy Region and the Oliver Twist Foundation.

The first one supported the initiative by investing in the school as a Centre of Regional excellence in education and training and still contributes to the financing of its activities. The Oliver Twist Foundation, private entity engaged in preventing and fighting against youth disadvantage, directly contributed to the coverage of about 40% of the budget and helped Cometa through organizational consulting and support to the involvement of other foundations and entrepreneurs for fundraising.

Today the Oliver Twist School can continue its activities with the support of individuals and entities as well as the local community and especially the business and artisan world. Several local companies (about 250) are committed to the school to take minimum one student for an internship: this means that there is a significant and solid partnership, resistant to the economic crisis that forces companies at reducing staff in the face of a decline in sales and margins.

Following there is the classification of the stakeholders of the Oliver Twist School distinguishing between those who benefit from the training service and those who contribute to the realization of the service itself.

Demand	Supply
<ul style="list-style-type: none"> ▪ Students in age of compulsory education and their families; ▪ Young people and adults of the Comet Academy ▪ Employers (who demand training courses for adults and courses for apprentices) ▪ Private or business customers who purchase goods and services in the School shops ▪ Partner volunteers and donors for financial support 	<p>1. Public:</p> <ul style="list-style-type: none"> ▪ Lombardy Region; ▪ Province of Como; ▪ Chamber of Commerce of Como. <p>2. private profit and non-profit organizations</p> <ul style="list-style-type: none"> ▪ friends Cometa Association non-profit organization; ▪ Oliver Twist Onlus Foundation; ▪ Cariplò Foundation; ▪ De Agostini Foundation; ▪ Credito Valtellinese Foundation; ▪ Group A2A SpA; ▪ Ecodeco - A2A Group; ▪ Gi Group SPA ▪ other Partners <p>For institutional support</p> <ul style="list-style-type: none"> ▪ City of Como <p>For the supply of products and equipment</p> <ul style="list-style-type: none"> ▪ Technical Institute "Paolo Carcano" of Como for the laboratory of Textile, Chemical and gym; ▪ Cooperative of the school ▪ other suppliers <p>Subjects who contribute to the organization and carrying out of the production of the service:</p> <ul style="list-style-type: none"> ▪ employees and co-workers (teachers, tutors, administrative staff) ▪ companies, entrepreneurs and artisans who participate in training initiatives (meetings, lectures, internships) ▪ University and other educational institutions

Internal organization: management and staff

Alessandro Mele is the director of the School Oliver Twist assisted by a Deputy educational coordinator. Followed by three managers, one for each of the business areas *Vocational College*, *Tailored School* and *Cometa Academy*. Then there are the managers for the other areas of *Special Needs*, *Vocational Guidance*, *Communication*, *Territorial Relations*, *Web* and *New Media*. For the management of all activities the school employs qualified personnel.

In 2009 Cometa Training had 129 employees: among these, 33 are employees, the others are divided between project workers, 27 casual workers, 34 professional employees, 32 interns and working partners for a total of 3 people. Employees, as shown in the following, vary their activity from the managing one to the one of project manager / coordinator, teacher, etc.

Activity	Economic profile	Total
Direction	Employee lev. 7 e 8	3
Project manager/coordinator	Employee lev. 3-5	4
Teacher	Employee lev. 5	4
Tutor/educator	Employee lev. 4, 5 - D1,D2	14

Administration	Employee lev. 2/3	4
Secretary	Employee lev. 2,3,6	3
Auxiliary	Worker A2	1
<i>Total</i>		33

Source: Poledrini, S. 2010

Final remarks

There are some key elements that differentiate positively School Oliver Twist in the landscape of education and vocational training:

- **an idea that comes from the analysis of concrete needs:** the present need of training and education of children and the future one of their employment and continuing professional development according to the principle of lifelong learning;
- **strong territorial vocation and close partnership with the corporate world:**
This allows "on the one hand, to take into consideration the characteristics of the Como area and its peculiarities and needs depending on the prospects of employment and, on the other hand, to develop concrete paths, that always benefit from the expertise and practical know-how of people with professional experience of value."³⁹ It is expected, therefore, the active involvement of the territory and of enterprises providing an innovative model of school-enterprise;
- **an educational model that aims for excellence** that is to develop the whole person and complexity and that is accomplished through:
 - an innovative method of learning because it is customized and based on the experience summarising as "to learn from doing";
 - *Maestro*. The experience alone hardly leads to knowledge, the young man must be guided by an adult, a trainer. Not teachers that transmit abstract skills, but tutors, entrepreneurs and craftsmen who know how to "do with" the boys, convey the passion for knowledge and craft through relationships of mutual growth;
 - a space made with care that contributes to the educational project (sending the value of hospitality, the taste for beauty and respect for nature).
- **a virtuous model of governance based on social partnership between private, for-profit and public.** An initiative that starts from a private part of society, but is developed with the collaboration and cooperation of the completely different sectors of society.

Besides the strengths of the model, the School Oliver Twist has some constraints:

- **The financial dependence**

The training courses and projects are funded through free donations, and funding from private and public contributions. The sale of products and services of the School Shop is a form of self-financing, but it is not sufficient to ensure financial autonomy. The financial dependence is a limitation that affects the choices of management activity. The availability of third-party loans depends on the conduct of normal activities and the development of new projects. For example the suspension of Excellence program of the Lombardy Region (that founded the first years of

³⁹ Savorana (2010), Il liceo del lavoro: Il caso della Scuola Oliver Twist, page 96

"Liceo of work") put at risk the completion of the route taken by young members and the possibility to offer this opportunity to other people. Uncertainty and inadequate funding bring the difficulty of building long-term projects. The School is required to do a continuous effort in research and adapt supply to the requirements in public tenders, in fundraising and in building a network of relationships of trust with private lenders: businesses, foundations and associations.

- **Shortage of Excellent Human Capital**

In the Oliver Twist School they are convinced that the success of education depends on the educational role of adults placed alongside the young people. The choice of the teaching staff is essential. Each teacher is asked to "get involved, to have a total availability to accompany the boy into his path, to have such knowledge of their subject to be able to disassemble and reassemble the discipline to follow the logic of the boy," [Venturino, 2010]. It is required the availability to "educate himself to educate", i.e. to make a personal work and to undergo to a continuous training. School clashes with the problem of selection of the personnel who have these characteristics and this availability. The university training of teachers is often insufficient for a difficult environment like the one in which this school, and from this comes the idea of the training course for teachers "Education, Training and Work" to acquire an educational method and specific instruments in the vocational training of young and combating early school leaving.

- **The economic crisis**

The economic difficulties - financial felt by all sectors of society can lead to a reduction of financial support (donations, public and private funding) and compromise the partnership with the business/artisan community because of the staff reducing, the closure or the transfer to foreign production activities. The lack of involvement of the business world and local artisan would prevent the realization of the model of school - enterprise, made of experiences of internships and of entrepreneurs as professors.

Impact and Replicability

Oliver Twist School is considered a centre of excellence for education and training at national, but also European level. A confirm of it is the selection of the school – among all the Italian ones – as partner in the Cooperation Project between Italy and Germany to promote youth employment⁴⁰. From a preliminary survey, conducted by Vittadini, President of the Foundation for Subsidiarity, on a significant sample of 250 companies in the Como area that welcomed in internships or hired boys of the School Oliver Twist, resulted that their work is not only effective, not just for quality but also for efficiency.

This is an Efficacy measured by the results of the boys, who have recovered an important gap starting being substantially at least of equal value compared to other peers included in the company. The quality of projects is appreciated by companies, which have expressed their satisfaction in welcoming the students: "Sometimes it seems there is something more -declares a craftsman - These guys are trained to work culture." Another important result is expressed in terms of efficiency: a boy of Oliver Twist School cost about 4,500 Euros per year, just over half of the cost of a student of the similar paths of the education system state (7,388 euro) [Mele, 2010]. A school that year after year has expanded the

⁴⁰ The Project started in 2012 provides for the implementation of actions and measures ranging from the exchange of experiences to the start-up of transnational mobility and employment projects. (Ministry of Labour and Social Policy).

provision of training and received an increasing number of students. "The 70% of the boys - says the president of the School - is working in the first six months after they left the school".

The reason for this success depends on two factors: on the one hand there is the quality of training, because students learn skills that make them employable; on the other hand there is a great cooperation with several companies working together with the school through the joint planning and internships. "The School, for the way it was thought, should have a positive impact broken down into different levels of analysis. At the micro level, the benefits are both social (reintegration into society and to boost individual motivation) and economic (opportunity of employment, earnings and career growth). At the macro level the school can contribute to the inclusion of disadvantaged groups, improvements in productivity and performance of businesses that can benefit from skilled workers. At the macro level, the contribution is the reduction of the phenomenon of dropout (that can turn into a chronic burden on the whole community with its cargo of human, social and economic costs) and the improvement of the problem of mismatching in the labour market, creating opportunities for development and growth of the local economy.

Among the future prospects of the School it can be seen the desire to build stable relationships with the academic world in order to consolidate the processes of learning and pedagogical models also to receive a contribution in terms of assessment of learning paths. In this point of view it is part of the school vision the performance of some PhDs in higher education in pedagogy at the University of Bergamo. These scholars do research in the field being teachers involved in the training proposal of the School.

The replicability of the Oliver Twist School model collides with the difficulty in reproducing some specifics of the case:

- first of all the long history of the social phenomenon of Cometa and the positive reputation gained over time that gave credibility to the project since its debut;
- secondly the broad economic support received by the Region and the Oliver Twist Foundation as well as by a network of supporters that allowed subjects to cover the extent of the planting costs and operating expenses;
- more generally, it arises an issue - cultural and educational - to qualify the training, traditionally far from practical activities and production environments, through innovative solutions that, nevertheless, enhance the specificity inherited from the past. It is possible to reach such a result through innovative institutional forms, generated locally, providing the introduction of new forms of governance with the involvement of economic actors, social, institutional so as to strengthen the interplay between businesses, school, families [Magatti, 2013].

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WollyBi

Silvia Dusi

Introduction

WollyBi is a digital monitor which uses web job vacancies to provide information to the policy makers and the other Labour Market players on the needs expressed directly by the firms about the most required occupation and skills. One of the goals of the project was just the providing of this kind of information in a short term, and the technology used allows to have almost real time analysis.

Summary

WollyBi is an Observatory focused on the Italian Labour Market, established with more than 750,000 job vacancies analysed by the web - constantly updated - and offers a complete view of the Italian Labour trends.

There is a chance that the analysis of labour demand through the web job vacancies will become part of the regular activities of the Regional Labour Market Observatories in the future, as it is considered a valuable informative source for unemployed people, companies and the training systems.

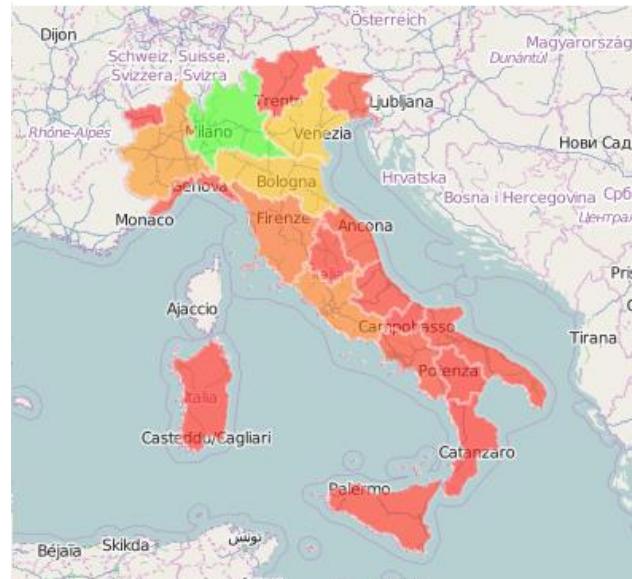
The investigation on the most required occupation and skills on the market (that could be seen associated to each occupation or in general) it's the real point of innovation for the contribution to the economic development.

Context and setting

WollyBi is a digital monitor which uses web job vacancies, properly treated and put in quality, covering all the Italian territory to identify the education, qualifications and specific skills that employers want to fill their job postings; it also identifies the most in demand qualifications and the associated work experience and skills required to fill certain positions, measure demand by specialised and functional skills and identify the market needs to address the skills gap.

The territorial level to which it addresses is manifold: it can be used at national level, but it gives the possibility to explore information to the municipality level.

Distribution of the Job Vacancies on the Italian territory



As the Figure aside suggests (red = low quantity of job vacancies posted on the web, yellow = medium quantity of job vacancies posted on the web, green = high quantity of job vacancies posted on the web), by now the WollyBi is a tool of particular interest for the North part of Italy: this is given to two reasons. The first fact to consider is that there is really a dramatic difference in terms of employment, job offers and economic situation between the North and the South part of Italy, and consequently the amount of job offers is lower, as the colours suggest. The second important factor is that the WollyBi analyse just the job vacancies posted on the Web, and the Italian situation is less internet-centre for what concerns the labour market compared to other countries. In addition to this fact there is a physiological lack of job offers posting for some specific sectors, like Agriculture and the Public sector.

The VET institutions, both public and private, are giving a positive response to the use of this tool to support decisions about politics programming and courses providing. The related Economic Development regards different aspects:

- The main contribution is the decision support to the programming and evaluation of the Labour Market and VET policies: the results of the ARLI project⁴¹ pointed out that the use of LMI (Labour Market Intelligence) for the Labour Market stakeholders was a critical issue for the Italian territory, and that the most used information were of qualitative type, coming from the consultation. This because it was identified a lack of integration of disaggregated data at regional and local levels (connection with LMI regional and local); a lack of provision of information on the interpretation of the dynamics of labour

⁴¹ ARLI (Achieving Regional and Local Impact) Project, Founded with the support from the European Union's PROGRESS Programme

demand; a lack of attention to the level of data update published and there was no focus on skills rather than professions. The WollyBi gives the opportunity to have a quantitative knowledge describing the Labour Market needs, expressed not through fragmented and localized sources but through just one channel.

- Another interesting issue is the possibility to monitor different aspects of the Economic and Social System:
 - the increase of job opportunities posted on the Web, that points out both how the recruiting is shifting toward a more “social” dimension, both gives insight on the job opportunities trends (also compared to the data coming from Administrative and Statistical Sources) and the economic upturn;
 - the changing directions, and the speed change, of specific sectors, through the observation of the most required skills, and how the territory affects the sectors’ distinctive characteristics due to social phenomena: e.g. it was interesting to notice that for the Plumber occupation in a centred Region of Italy between the most required skill there were the availability to travel and the knowledge of the Russian Language, due to a stable network of Russian material suppliers.
 - The emerging of new occupations not linkable to standard classifying systems.
- Of course, being the VET actors between the main recipients of the tool, the provision of training course tailored on the real needs expressed in detail directly by the firms and, in this way, the contribution to decrease the skills mismatch.

Description

WollyBi is a Digital Observatory on the Labour Market, realized by TabulaeX, spin-off of University of Milan Bicocca in collaboration with CRISP, Interuniversity Research Centre on Public Services. Thanks to a highly innovative approach based on the analysis of Big Data, it elaborates and presents information on the needs expressed by the firms through the job vacancies posted on the Web.

WollyBi is an Observatory focused on the Italian Labour Market, established with more than 750,000 job vacancies analysed by the web - constantly updated - and offers a complete view of the Italian Labour trends.

The three main dimension that is possible to choose as starting point to navigate the information are: the Geographical area, the Occupation and the Skills. It is therefore possible to analyse occupations and skills required by the companies on the web per type of contract proposed, economic sectors, educational qualifications and Job characteristics (full time, part time). In the following pages some navigation paths will be shown.

WollyBi provides its know-how to companies and organizations, both public and private. In particular targets at actors operating in education and training field, Public Administrations, Labour Consultants and Human Resources professionals.

The mission of the Observatory is to provide a decisional support about labour policies, territorial planning, monitoring and evaluation of interventions, policies regarding the educational and training system. The idea is that the labour demand expressed on the Web could allow to build a correspondence between occupations and skills, i.e. knowledge or competences required by firms, and eventually define a dictionary of skills.

It also allows to propose and organize adequate counselling services for human resources management, to formulate strategies of business organization, to arrange educational supply tailored to different professional needs, to propose innovative services and to create targeted training courses on the base of market demands.

The information provided by the monitor are twofold:

1. *Analysis of the dynamics of labour market through the data of the web job vacancies.* The information on the web vacancies are analysed by territories (regional and local), economic sector, type of contract and educational level and are used to provide an innovative monitoring of labour demand within the National territory which is possible to explore until the local level.
2. *Monitoring of the skills needs associated with the vacancies published by the companies through the web.* The project provides information about the professional needs, in terms of knowledge, skills and abilities, derived from the web vacancies. The skills derived from natural language are classified in three main groups: basic skills (they are standard and often transversal abilities which are acquired through formal education channel), professional skills (they are specific skills which are mainly acquired through the working experience and professional training) and personal skills (they are mainly related to transversal skills and personal attributes).

The data sources are identified through a selection of the most important websites for job offers. In particular it was chosen to investigate three main groups of sources:

- Specialized websites of job vacancies;
- Websites of the largest employment agencies;
- Websites of the major national newspapers.

The web crawling was carried out by software (crawlers) that automatically scans a network and reads its content. From the beginning more than 750,000 web based vacancies were extracted and processed. The most (54%) comes from the web sites of the private employment agencies, the 36% from the specialized job sites and 10% from the newspaper web sites. The variables considered for each web based vacancy are type of contract, sector of employment, occupation, region/area, and skills; they were viewed as a valuable source of information on the characteristics of the job offer. Due to the typical problems that occur in dealing with web data, some specific techniques were used. Normalization activities were conducted in order to

reduce the heterogeneity of data sources, including as much classification of employment contracts, skills, professions, etc. Specific statistical techniques were applied to reduce the problem that the same offer can be posted on multiple sites or repeated several times on the same site. Then taxonomies have been created to classify the information - about educational level, occupational groups, contracts, sectors, and skills - which comes from the natural languages.

The WollyBi product was born after a research study called "Skills Demand through the Web Job Vacancies" which has been realized for the first time in 2013 and was founded by Obiettivo Lavoro, which is one of the largest Italian private employment agencies. The project was realized in collaboration with three Regional Labour Market Observatories – Lombardy, Piedmont and Emilia Romagna and aimed at analysing the occupations and skill demand through a representative sample of web job vacancies.

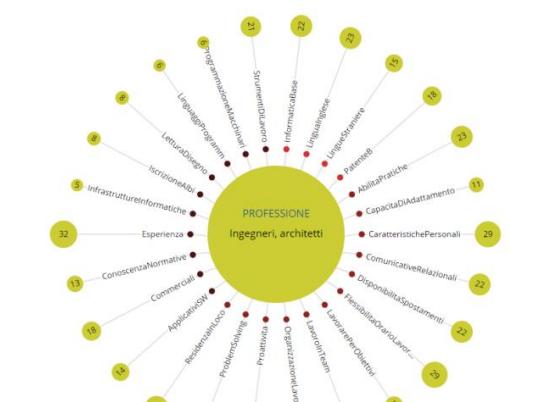
The idea to use web data to analyse the labour demand and skills needs was born as consequence of two different considerations:

1. The first is that the web is increasingly being used by companies and job seekers to spread the demand and supply taking advantage of the high heterogeneity and the enormous potential of its communication channels.
2. The second is that the traditional methods used to monitor labour, profession and skills, and then the skills surveys, have some problems. Surveys are costly, considering direct (implementation) and indirect (opportunity) costs; their implementation is not easy, thus they cannot have a high frequency; and they have a top-down approach, i.e. soft skills and occupation-specific skills are generally pre-defined. Accordingly, analysis of web based vacancies are less costly after their set up, they substantially reduce the time-to-market and information provided are related to really open job vacancies, and they allow a bottom up approach, as the skills come directly from the employers insertions outlining many specificities to industries and territorial levels.

About the skills, the positive response of the WollyBi users is motived by the possibility to understand:

- what the market needs in real time and how the trends are evolving: this is important especially to programme the provision of training course that last minimum 3 years (Vocational Schools), to have the possibility to monitor if the occupations requirements are changing;

- which are the specific skills included under the most used umbrella terms like “computer skills” to help disadvantaged subject, but not only, to be re-trained and enter the market: the crisis has affected, in addition to the young people, the middle-aged subjects, who once fired struggle to be reintegrated into the market;
- which are also the detailed skills linked to each occupation (e.g. not just a generally “software applications” for Architects but which are the most required by the firms);
- the degree of distance between occupations on the basis of required skills, to give a better service of vocational guidance. The Figure gives an example of the visualization of the required skills linked to the occupation of “Architect”.



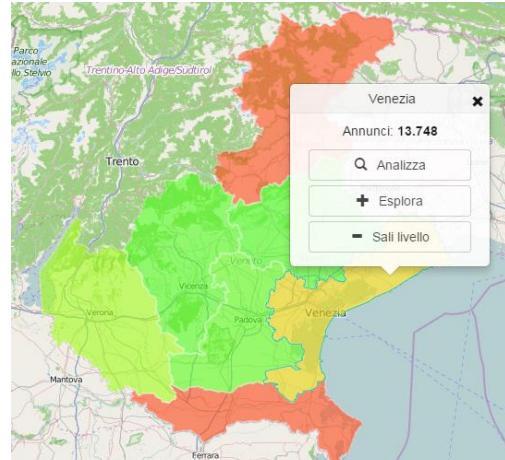
To explain how the WollyBi can be used in a real situation, these three navigation paths were reported, one for each dimension as starting point for the investigation:

- **I would like to activate some training course: what are the most required skills in my province or in my region?**

Entering the WollyBi through the Geographical Dimension it is possible to click on the territory of interest and choose the "Explore" option until you reach the desired granularity (Region, Province, Municipality). Then choosing the "Analyze" option it is possible to choose "Skill" between the variables on the left and observe the skill divided by usual category (soft, basic, professional).

Example: VENICE (Province)

- Number of job vacancies: 13,748
- Basic skills: English Language and Basic Computer Skills (i.e. Office)
- Professional skills: Experience, Software Applications (e.g. Autocad, Solidwork, Sap), Programming languages, Licences, Register Enrolment, Certifications.

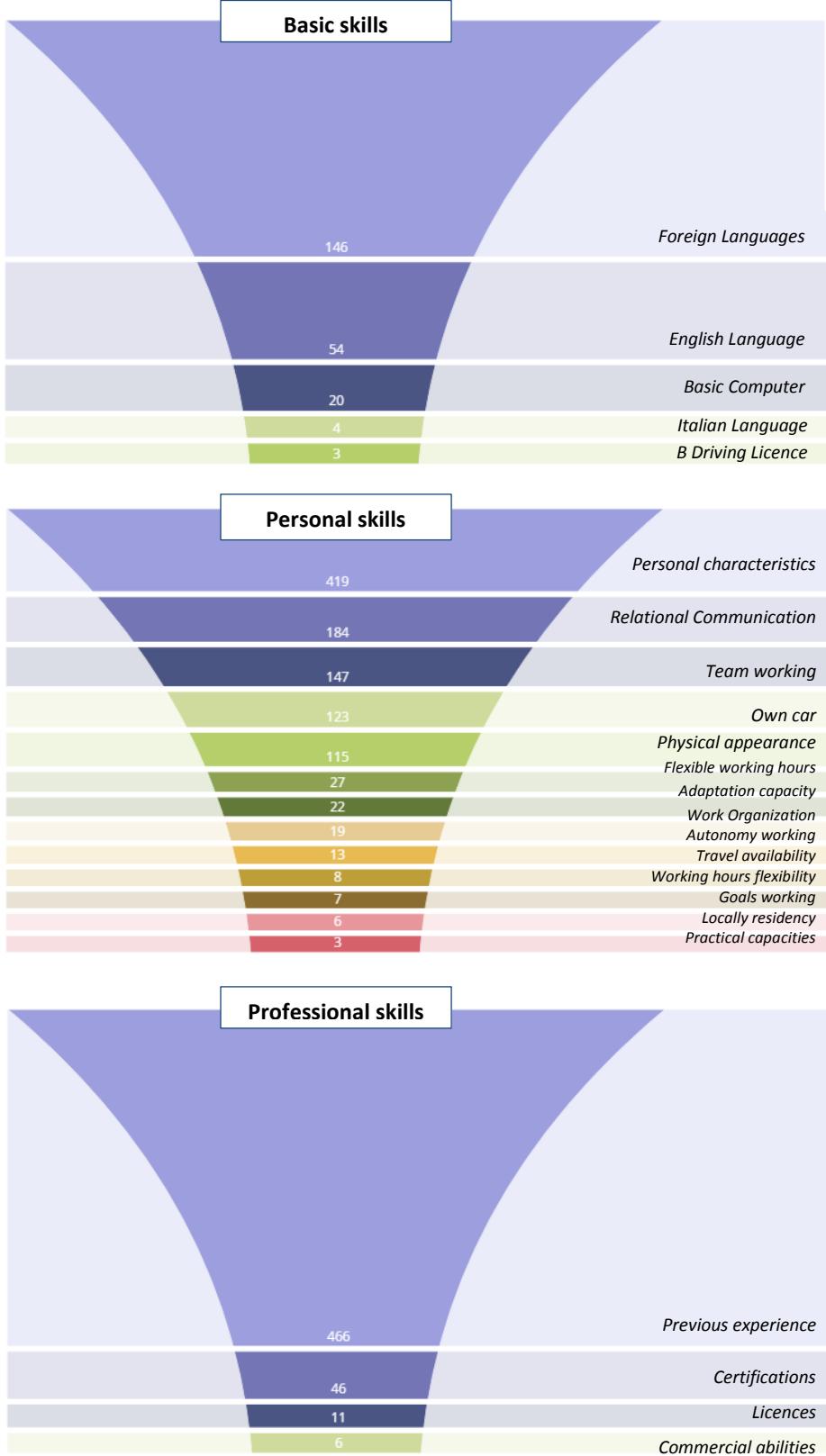


- **What are most requested skills linked to the profession I am training people for?**

Entering the WollyBi through the Occupation Dimension it is possible to click on the group of occupations of interest, and choosing the "Expand" option you reach the desired ISCO level to analyse it per the usual variables, like the "Skill" one.

Example: Tourism activities employees

- Number of job vacancies: 1,456



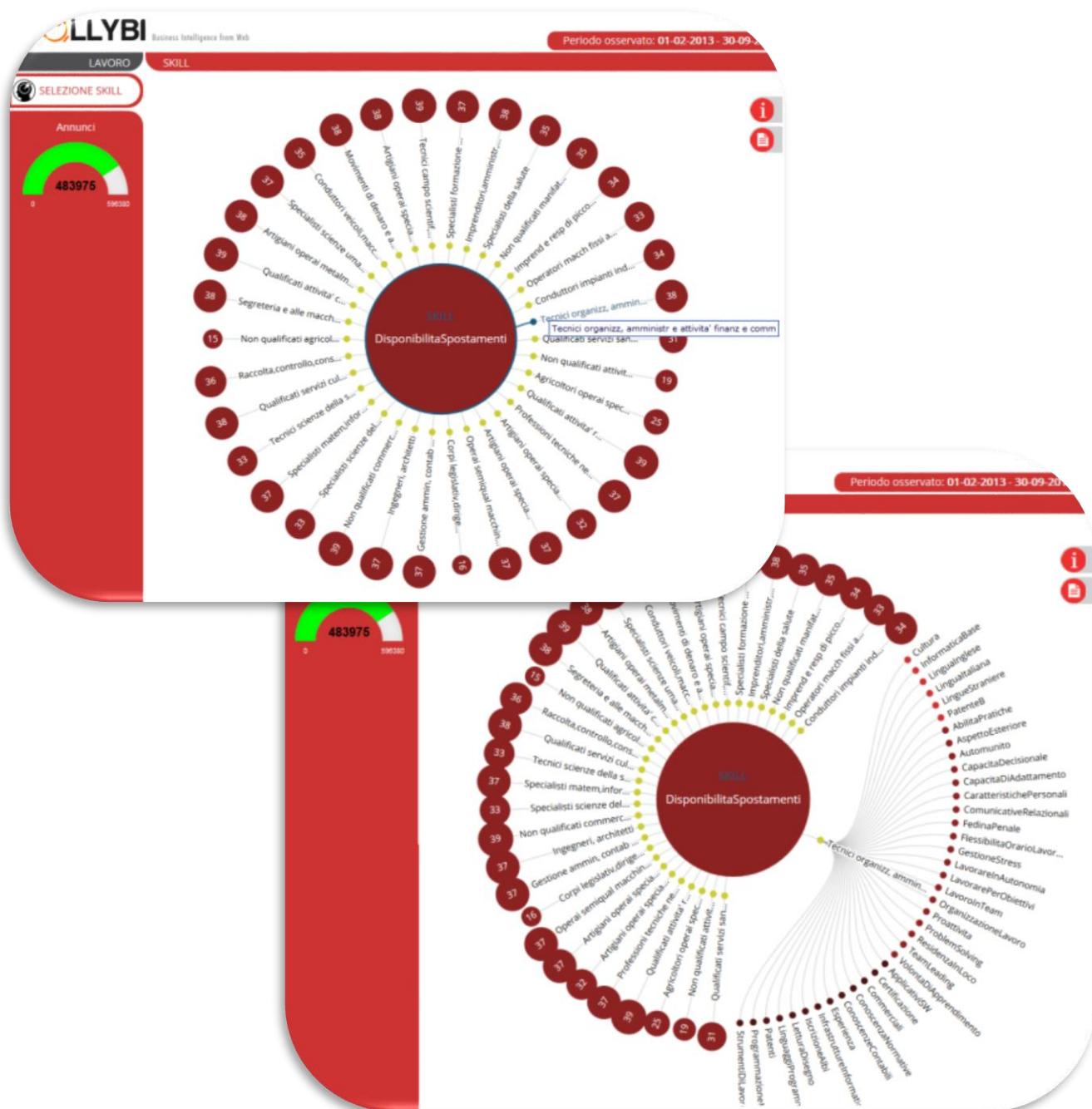
The requested skills are visualized like the Figure aside shows, divided in the usual categories (Basic, personal and professional).

The numbers in white, in the middle of the funnel chart, are the number of web job vacancies containing the mentioned skill.

Using the filter it is also possible to localize the occupation and the required skill related to it in a specific territory, replying to the further question **“What are the most required skill for a specific profession in my region? This profession requires different skills compared to other territories?”**.

- In a perspective of vocational guidance or re-placement of people who have lost their jobs it may be helpful to understand the skills of the person in front and propose different professions.

Entering the WollyBi through the Skill Dimension it is possible to click on one of the skill of the candidate: then, using the "Expand" option it is possible to see all the Occupation requiring that skill and also to see the other requested skills.



The WOLLYBI Methodology

Even if the methodology part could seem something for experts it is important to explain at general level how the tool works in order to replicate it and, moreover, to understand the classifying systems behind.

The web is becoming an increasingly important channel for posting vacancies and in general for matching labour demand and supply. The portal is a Digital Observatory for the Labour Market: thanks to a highly innovative approach based on the analysis of Big Data, it aims to develop tools to represent and analyse markets and services related phenomena.

Thinking about the replication of the portal for other foreign contexts, maybe focused on specific sectors, it would be necessary to define research engines that post job vacancies and eventually other sources , e.g. forums or social network (depending on the different customs in this field), also defining number and significance.

The use of programs that automatically search through various websites in order to find, gather and download vast amount of data brings some issues. These are mainly related to the legal and ethical uses of the crawling instruments. At present there are no general legal barriers to use web-crawling tools to obtain online content. In fact information on the web, if not explicitly restricted to selected users, is by definition public. On the other side web-crawlers access websites owned by other companies possibly without their permission; for companies that do business in the field job vacancies represent their most valuable data. As a consequence website owners may use so called "Robots exclusion standard" which is a standard request to robots (i.e. web crawlers) to ignore certain files or directories when crawling a site. This protocol is only advisory, however it signals a certain intent of the owner.

it is necessary to point out that legal environment on these issues is changing very rapidly, as well as the Internet itself. The development of technology is often ahead of that of legislation. Various countries may also have different regulations regarding use of some technologies and those regulations may change over time as well. As of today, there are only few legal disputes on the subject of web crawling for analytical purposes in the US, even less in the EU. In our case we asked some players of the Market and studied the legal clauses: it is forbidden the use of data for competition purpose, but our use aims at statistical analysis and this is allowed.

Structured Information Extraction and Text Classification Methodology

The process of extracting knowledge from the text of websites or other electronic sources requires either classifying the whole text into predefined categories or identifying relevant 'pieces of information' within the text, or both. Both text classification and Information extraction are part of the process used to turn textual data (i.e. unstructured information) into structured (table like) information as described below.

An example of transforming unstructured text into structured data.

Actual Text (i.e. Job Vacancies from the Web)

'Company X is looking for an engineer speaking German fluently'

→

Esco code	Qualification	Skill x: Language
2.1.4	Engineer	German
2.6.1	Lawyer	Spanish
7.1.2.6	Plumber	-

'Looking for a Lawyer dealing with Customers in Madrid'

→

'2 job positions for plumbers'

→

The next sub-section will present the information extraction and text classification methodologies and techniques that will be used in the project. The techniques were used to relate vacancy descriptions to ESCO Occupations, Skills, Competences, and Qualification codes.

Information Extraction

Information extraction allows text units to be filtered and extracted from documents that are successively 'enriched' with metadata specifying morpho-syntactic features. A typical Natural Language Processing (NLP) sequence is composed by the following steps: (i) Text Tokenisation and Normalisation, (ii) Part Of Speech (POS) Tagging, (iii) Word Sense Disambiguation, (iv) Lemmatisation and (v) Relevant Terms Selection. More specifically, the main goal of these procedures is the extraction of relevant terms that can be used to recognise the most significant concepts in the text.

Text Tokenisation and Normalisation (Hatcher, 2002) performs a first grouping of the extracted terms by introducing a partitioning scheme that establishes an equivalence class on terms. In particular, Text Tokenisation removes any punctuation splitting the document by spaces (to get the so called tokens), makes everything lowercase and eliminates stop words. Stop words usually provide little or no knowledge (e.g. articles, pronouns) and therefore are not considered for the subsequent steps. Normalisation attempts to reduce the 'entropy' of the input data by applying techniques in order to eliminate numbers or non-letter characters, unifying special characters, disambiguating sentence boundaries and identifying abbreviations or acronyms.

- *Example:* with tokenisation a string is transformed into a set of words, so 'Company X is looking for Engineers.' is transformed into <'Company', 'X', 'is', 'looking', 'for', 'Engineers'>; Abbreviations are expanded (e.g. Doc. is changed into Doctor).

The *POS Tagging* enriches the text with meta-information about the syntactical aspects associated to the extracted tokens, aiming at performing a second type of grouping of the words on the basis of their form and independently from the conjugations or declinations in which they appear (in this stage Named Entity Recognition procedures can possibly be

exploited to group and label named entities (multi words) such as names of persons, dates, organization, places, etc.). In other words, some concepts represented by several tokens (i.e. words) are considered as a single token (e.g. *JFK Airport*) and the words that have little informative power are removed, e.g., articles, prepositions.

The *Word Sense Disambiguation Step* tries to find the ‘correct’ meaning of ambiguous words through a probabilistic analysis of the word context (Stevenson, 2003; Kilgarriff, 2000).

Lemmatisation is performed on the list of disambiguated terms in order to reduce all the inflected forms to the respective lemma or citation form, thus introducing a second partitioning scheme on the set of extracted terms and establishing a new equivalence classes on them (e.g. is, are, was, etc. are recognized as conjugations of the verb ‘to be’). In lemmatisation plural words are replaced by their singular counterparts, and verb conjugations are reduced to their infinitive form. Stemming is similar to lemmatisation, but a word is reduced to its stem.

- Example: ‘studied’, ‘study’, and ‘studies’ are reduced to ‘stud’);

Moreover, the *Relevant Terms Selection* is carried out using a statistical analysis on the entire document corpora.

Finally, once relevant terms are detected, an *Information Categorisation* procedure is used to cluster lemmas into synsets (i.e., set of synonyms) in order to group the related concepts. In this way, it is possible to refer a concept independently from the particular term used for denoting it. Clustering can be performed using external linguistic resources e.g., ontologies, electronic dictionaries or thesauri (Amato). Synonyms are reconciled to a single representation.

- Example: ‘job’, ‘work’ are considered as if they were the same word.

Text classification

A classification process is framed into the Bag of Words approach, where each sentence is analysed as a bag of words, not considering the information provided by the word position or by the sentence structure.

The problem of text classification has been widely studied in the database, data mining, and information retrieval communities (Aggarwal and Zhai, 2012). Text categorisation (i.e. text classification, or topic spotting), is the activity of labelling natural language texts with thematic categories from a predefined set (Sebastiani, 2002). In the research community two major approaches have been developed:

- Knowledge engineering, or explicit rules, where a set of rules and codes are manually defined.
- Machine learning techniques, based on a general inductive process that automatically builds a classifier by learning from a set of pre-classified documents.

While the knowledge engineering approach guarantees full visibility and transparency as to how the classification process is constructed, it does so at the price of considerable human effort.

On the other side, the machine learning approach provides very effective results, considerable savings in terms of expert labour power, and straightforward portability to different domains, since no intervention from either knowledge engineers or domain experts is needed for the construction of the classifier or for its porting to a different set of categories (Sebastiani, 2002). Both approaches are briefly described:

- *Explicit rules:* A first possible approach to classify (and to extract information) from job vacancies is characterised by the use of explicit rules. The rules look for the presence of specific words or combination thereof in the text. The rule design process starts from the identification of appropriate official classification or taxonomies, or from the development of taxonomies obtained empirically through observation of the texts; then the taxonomic entries are organized in hierarchies. The rules are then designed using the taxonomic hierarchy and entries as reference, in order to obtain a comprehensive set of rules. The main advantage is that analysts are deeply involved in the rule formulation, assessment, and tuning. The disadvantages of the method lie mainly on the huge effort required from experts in developing and hand-writing all the rules. Furthermore, the set of rules is very language specific, and this limits the possibility of reusing a rule set for other countries.
Furthermore, the taxonomies and the set of rules require extensive updating and maintenance activities since the natural language evolves continuously.
- *Machine Learning:* Machine learning can be broken into the following categories: supervised learning, unsupervised learning and lightly supervised learning.
 - In *Supervised Learning*, a dataset consisting of (a) several text to classify and (b) the corresponding classification labels are provided. Both (a) and (b) are called a training set. The task is to construct an estimator from the training set which is able to predict the label of an unforeseen object.
Some examples where machine learning has been successfully used are: given a multicolour image of an object obtained from a telescope, determine whether that object is a star, a quasar, or a galaxy; given a photograph of a person, identify the person in the photo; given a list of movies a person has watched and their personal rating of the movie, recommend a list of movies they would like e.g., the Netflix Prize (Netflix Prize Official website, 2014) (Netflix Prize Wikipedia, 2014). Supervised classification algorithms are: Generalized Linear Models (Perceptron, Bayesian Ridge Regression), Support Vector Machines, Stochastic Gradient Descent, Naive Bayes and Decision Trees.
 - *Unsupervised Learning* addresses a different sort of problem. Here the data has no labels, the aim is to try to find hidden structure in unlabelled data, or in a broader sense unsupervised learning can be viewed as a means of discovering labels from the data itself. Unsupervised learning comprises tasks such as dimensionality reduction, clustering, and density estimation.

Several methods used in supervised learning have been borrowed from the data mining field.

- Supervised learning approaches require the availability of training datasets, i.e. objects already classified. The most effective approach is to manually label the objects. Unfortunately this process can require a considerable amount of human resources. Some methods have been developed to support people in performing classification tasks in order to create training sets, e.g. starting from a seed of objects manually classified, then a classifier is trained and further objects are classified. The results are manually (quickly) evaluated, and then they are used for training another classifier. The performance of the second classifier is better than the first, as the former was trained on a larger set of objects. This latter approach is called *lightly supervised learning*.

The whole Methodology Section was useful both to understand the believability of the information coming from the WollyBi both to have the idea of the complexity of the system behind the graphic interface. This last point, i.e. the necessity to define and solve a lot of technical and methodological issues, is one of the main constraints: especially at the beginning it is necessary a big investment, in terms of time and work.

Impact and Replicability

There is a chance that the analysis of labour demand through the web job vacancies will probably become part of the regular activities of the Regional Labour Market Observatories in the future, as it is considered a valuable informative source for unemployed people, companies and the training systems.

The investigation on the most required occupation and skills on the market (that could be seen associated to each occupation or in general) it's the real point of innovation for the contribution to the economic development: the whole set of characteristics (the bottom-up approach, the possibility to detail each skill, the time to market, etc.) give a wide range of opportunities in terms of:

- Redefinition of the VET offer, both for the individual courses providing and for the public governments, at any level, in charge for the VET policies definition: these subjects can use the occupation trends to decide how distribute the offer (e.g. which occupation training providing or the number of courses for occupation) and the skills details to decide how organize them (e.g. which subjects to teach). It is important to notice that analysing occupations and skills at territorial level the actors can see the differences between the Italian Regions or Macro-Areas.

- Contribution to the integration of the Skills Vocabulary where the Skills are linked to the Occupation: it could be, for instance, the one from ESCO European project, that is still evolving.
- Contribution to the integration/Redefinition of the Occupation Taxonomy: the Occupation analysis points out that there are new occupation emerging in the Market which is not possible to classify with Classic Taxonomy (e.g. ISCO).
- Job seekers' or employers' self-consciousness about the Labour opportunities and the lifelong learning: the monitor would be very useful for persons looking for a job, who would better understand which are the skills required by the specific profession, for companies, which would render more effective the recruiting process on the web, and for training agencies, that could apply the results of the project in order to design or redesign their learning services. This is important especially to set a new work awareness. The Italian Labour Market is changed, also pushed by the economic crisis: the job opportunities are becoming more and more transparent - the evolution of the web and social networks are a clear example of transparency of information on job opportunities - and this allows to increase the workers' choices; the lack of clarity in the professional development puts into action the people towards the search for alternatives; the access to specialized courses (e.g. master or intensive courses) represents a potential to improve their professional skills and to re-train themselves. If before the professional certainty could be placed into the stability of the organization, now the critical factor consists of the capabilities of the individual, in his human and social capital, which allows him to adapt to change and to build a path of continuing professional education.

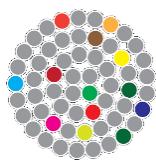
Another important characteristic of this Good Practice lies also in the technical realization of the tool: the emphasis on the graphic representation of results and the visualization of information makes WollyBi not just user-friendly but it really make easier to catch the meaning coming from the data. This is frequently a high barrier in the use of tools, for the public administration rather than for the other users: the way of information are presented can really change the degree of use and consequently of usefulness.

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Labor market integration as part of the General Concept for Securing Skilled Workers in Hesse. A regional approach.

Daniel Kanehart

Introduction

Labor market integration plays a key role in the Hessian labor market policy approach. By labor market integration the Hessian Ministry of Social Affairs and Integration means the effort to enable groups of people access to the Hessian labor market, which are in a disadvantageous situation. Such disadvantageous situations can be vary a lot as well as the reasons for being in such a situation. Therefore, the approach to integrate these people into the labor market is very broad and includes a wide variety of different means. One key aspect of the approach is not only including a wide range of means and projects, but also coordinating them in order to have a support system where all of the involved actors and their tasks complement each other, while mostly avoiding double structures, redundancies and as a result low transparency. Labor market integration and regional economic development are closely linked for at least two reason: The first is that integrating more people into the labor market and means providing more workforce for the companies, which benefit from that. The second is that every person integrated into the labor market and having a job is one less person receiving social security provisions.

Summary

In the State of Hesse in Germany, the General Concept for Securing Skilled Workers has been developed and put into action in 2012. A major part of this concept are the labor market integration strategies developed by each the 26 administrative districts. These strategies bring together many different labor market and VET related stakeholders in each region, such as the local Jobcenters, Youth Office, Social Office and regional economic aid in a coordinated approach to cooperate for the goal of improving labor market access especially for target groups with otherwise limited access. The Hessian Ministry of Social Affairs and Integration (HMSI) is in charge of coordinating the statewide distribution of financial means for the different regional strategies presented by each AD. Currently the total sum made available is about 30mio. € with one third coming from the European Social Fund (ESF). The distribution is largely dependent on target agreements made between the Ministry and each AD, negotiating the labor market and VET related needs and projected means and projects to tackle those needs.

Context and setting

The State of Hesse

Hesse is a federal state in the Federal Republic of Germany. It is situated in the Southern part of Germany, has an area 21,115 km² and a population of 6.07 million. The number of employees subject to social security amounted to 2.27 million in 2011 and the unemployment rate in the same year was as low as 5.6%.⁴² Hesse is divided into three administrative regions (Regierungspräsidien – Kassel, Gießen and Darmstadt), which in their turn comprise of 21 administrative districts (Landkreise) and five independent urban districts (Kreisfreie Städte). Most of the economic activity takes place in the Southern part of the federal state – an urban conglomeration called the Rhine-Main Area – whilst the Northern part faces challenges arising from shrinking and ageing population and loss of jobs.

The general concept for securing skilled workers in Hesse

The Hessian Ministry of Social Affairs and Integration (HMSI) is a central actor in regional labor market policies in Hesse. Its department III is responsible for work-related issues, especially labor market policy, labor market integration and professional training of employees. The Ministry launches many labor-market-related initiatives and a statewide labor market strategy is coordinated by the HMSI in cooperation with the Hessian Ministry of Economy, Transport, Urban and Regional Development (HMWEVL). This coordinated strategy is labeled “Gesamtkonzept Fachkräftesicherung Hessen” (general concept for securing skilled workers in Hesse). It is based on a resolution by the Hessian cabinet made in 2012. In this resolution, the respective ministries in Hesse were commissioned to develop such a general concept including all programs and initiatives by the Hessian state government as well as recommendations made by the commission for skilled workers Hesse (“Fachkräftekommission”). Based on the prognosis⁴³ that until 2018 there will be a lack of about 100.000 skilled workers, the goal of the concept primarily is to launch means, which aim at closing this gap. In the coordinated strategy, three major strategic fields of action were identified:

1. Professional education and professional training (initial and secondary)

Two big topics are part of this strategic field. The first is the initial professional education. Primary goals liked to this theme are to ensure that as many as possible young people in Hesse receive a high quality professional education and that the transition from the education phase to a job goes as smooth as possible. This includes the transition from school to an apprentice position as well as the transition to a first work position. These early goals are especially important to decrease the risks of future problems for young people trying to hold foot in the labor market. The second topic is concerning professional training for employees. Primary goals here are on the one hand to have unskilled workers gain a professional education, which enhances their employability and their long-term career perspectives. On the other hand, an important goal is to have already skilled workers improve and update their skills and qualifications for current and future needs in their jobs and the industry. These goals are

⁴² HA Hessen Agentur GmbH: Hessen 2012: Facts and Figures, http://www.investinhessen.de/mm/DaZa_2012_englisch_webansicht_300dpi.pdf, last downloaded on 26 July 2013.

⁴³ Prognosis made in the IWAK project regio pro. Details: <http://www.regio-pro.eu/>

especially important for the economic competitiveness of Hesse now and in the future as well as for the employees to maintain their status as skilled professionals with a high employability.

2. Potential-oriented labor market policy

Potential-oriented labor market policy is based on the belief that the potential of all groups and subgroups of different people in Hesse must be included into the labor market to gain their full potential. This especially includes all groups of people in situations that in many cases make it difficult for them to participate in proper work and employment. This can be the case due to many different reasons. Some of the identified groups, which receive support in form of initiatives or programs to enhance their labor market chances, are migrants, women, families, people with special needs and elderly people. Another important topic is gender specific job choices and labor market stereotypes, which make it especially difficult for females to pursue equal careers and gain equal payment to males.

3. Internationalization as important location factor – shaping immigration and integration

Immigrating workers are viewed upon as a big chance to meet the needs for skilled workforce in many industries in Hesse. Therefore, a dedicated strategy to especially attract skilled and highly skilled foreigners is needed. One of the biggest topics in this strategic field is the development and establishment of a welcome-culture to make Hesse an attractive place to move and work at. One of the core-elements here is the Welcome-Center, which has the goal to support and help foreigners who come to Hesse to work there. This includes information provision as well as courses and services.

In addition, bi- or multilingual content is to be extended on all institutional levels of the education system to minimize entry-barriers for foreign students. Several cooperation with European partner regions shall be expanded and a better support for workers from these regions, who are interested to come to Hesse shall be established. Besides the above-described big topics, each of the major fields is divided into several formal sub-themes.

For professional education and professional training (initial and secondary) the subthemes are:

- a. Information provision
- b. Optimizing the transition from school/education system in general to work
- c. Expanding in the field of job- and study-orientation
- d. Increasing permeability of the education system e. Improving the dual education and quality assurance
- e. Ensuring education and study degrees (reducing number of premature drop outs)
- f. Secondary professional education for employees
- g. Public VET funding and support
- h. Certification and improving transparency in offers and results

For potential-oriented labor market policy the subthemes are:

1. Maintaining employability with age appropriate work and early health care means
2. Increasing women's employment participation and overall volume of work hours
3. Raising awareness among women's job choices
4. Inclusion of people with special needs
5. Better integration of young professionals

6. Maintaining employability and prevention via creating places of work suitable for people with special needs
7. Sustainable strategy increasing chances of a re-entry into the labor market for people with special needs

For Internationalization as important location factor – shaping immigration and integration the subthemes are:

- a. Activating migration potentials
- b. Enhancing a welcome-culture
- c. Creating a welcome-culture by optimizing the immigration process
- d. Winning foreign students and ensuring their stay after they graduated
- e. Optimizing the procedure of recognizing foreign degrees
- f. Activating potentials of people with a migration background

Each of the subthemes is addressed with at minimum one, in most cases many different initiatives. While many of these initiatives are carried out by other organizations such as other ministries or in cooperation with them, the strategic coordinating actor is the HMSI in cooperation with the HMWEVL.

Description

The department III of the HMSI focuses on labor market integration, which in turn is a major part of the General Concept for Securing Skilled Workers in Hesse. It coordinates the state's labor market initiatives and projects, mainly those funded by the means of the ESF. The general strategic concept behind the coordination of these several initiatives and ESF projects is making labor market policy a regional issue and involving the 26 AD's into the strategy making process. This means that while the ministry is the main coordinating actor, regional actors in the 26 AD's are responsible for developing a regional labor market and VET strategy that includes needs and prospected means to tackle most relevant issues in the specific region. Since 2011, these strategies are the basis for the budget distribution among the 26 AD's. There is a predefined distribution formula, based on which the AD's get a prospective budget. The final budgets are negotiated with the ministry in target agreement negotiations. These target agreements include a strategy that brings together identified needs, prospected means and needed funding for the means. The regional strategy of each AD has to coordinate actions of the different labor market related actors in the region. In contrast to nationwide labor market strategies, which are based on the legal basis of SGB II (social security code II) and cover very broad means, the Hessian strategy is to have means, which are very regionally focused, especially targeting groups with problematic labor market access and involve as many regional actors as possible in a structured approach. Its target group, which often needs very individual support, is in many cases not covered by SGB II means. Thus, one of the most important aspects of the strategy evaluation during the target agreement negotiations is to which extend the presented strategy increases labor market access of people with otherwise limited access. About 2/3 of all the budget (about 20mio. €) is distributed in this process to the AD's. The reasoning behind this rather complex and demanding process is that with such limited funds they have to be very well used and must not be wasted. That is why they are very closely tied to the regional strategies. Involving many different labor market related actors in a region in the developed strategies is closely linked to the target groups,

too. People with limited access to the labor market often have very individual problem constellations, which in most cases require the involvement of different competences from different supporting organizations to solve. The efficiency of the strategies is much higher when not only directly labor market related organizations such as the Jobcenters, but also the social or your offices are involved and complement each others work. This is why it is important to have a strong coordination and a complementing structure of means for the target groups. Such a strong coordination and the effort behind developing it, turn the AD's into labor market actors themselves. It gives them responsibility on the one hand and empowers them on the other. The developed strategies are revisited on a regular basis. Yet, there is no specified regular cycle, but right now, the second round of regional strategies is running. During this second round, the overall quality of the strategies was largely improved, mostly due to the fact that some experience could be gained during the first round and the realization that this approach really works and is worth to invest into. In addition, many of the officials of the project Olov⁴⁴, who have great experience in the field and are very well embedded into networks of many different stakeholders where now involved in coordination and strategy development processes in the regions. One of the new focuses of the second and core features of the upcoming third round is a closer combination of supporting problematic groups on the one side and developing skilled workers on the other. New projects and initiatives should include concept on how to achieve both. One of the very successful pilot projects is the project Joblinge⁴⁵, which is a targeted approach to (re-)integrate young people into the VET-system and bring them into the position to get a certified professional qualification. "Impulse der Arbeitsmarktpolitik IdeA" (Impulses for labor market policies) is another branch of the current funding round especially developed for innovative projects in this theme. Joblinge is also representative for one of the other core elements of the Hessian strategy, which is supporting young people. About 2/3 of the whole funds are used to support young people under 27 years of age and their integration into the labor market. The main reason for that focus partly lies in the German VET-system: A formal professional training with an official qualification certificate is the absolute precondition to a successful labor market integration. Unemployment in the future becomes about 60% more likely without such a formal qualification certificate. Thus, it is most important to ensure that all young people get into a position to obtain professional education. In addition, unemployment often leads to further social problems. For regional companies this focus is also beneficial. Many of the young people supported by the programs of the labor market integration strategy have skills and talents that are very valuable for the companies. However, because of the problematic situation those young people are in, companies do not have access to these often-diverse skills and talents. Via targeted integration, approaches and programs such as Joblinge, companies get access to skills and talents of young people with non-standard biographies and most certainly different and fresh view on the work they are going to do. What has proven very difficult is matching identifies needs for skilled workers and job decisions of young people. Very often young adults are not interested in careers in certain industries even though a high demand for personnel in this industry opens up excellent chances and career-opportunities. Getting young people interested in jobs in industries and sectors with high demands is therefore another topic of high importance for the future. One of the general difficulties the Hessian strategy faces is measuring the success of the regional strategies or even single means. Most times, it is impossible to directly link certain labor market successes to single initiatives or projects. Program-related success

⁴⁴ <http://www.olv-hessen.de/> - A statewide strategy to with the goal to improve transparency and support for the difficult transition phase from school education to professional training and a regular job afterwards.

⁴⁵<http://www.joblinge.de/>

measurement thus is a topic of recent discussion in the ministry and ESF officials. In the past evaluation of strategies and programs was mostly done in communication with the regions, getting their more or less structured feedback about what works and what could be improved. In the future, methods and designs for measuring success of strategies or single projects are to be developed.

Impact and Replicability

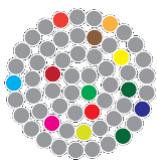
The impact of the specific regional focus of the Hessian labor market integration strategy is very high. Involving regional actors and fuelling their cooperation in structured strategy processes has proven very valuable. By getting different actors from different institutional contexts such as the local Jobcenters, Youth Office, Social Office and regional economic aid to work together and coordinate their approaches, much higher efficiency can be achieved than through just adding each of their respective actions together. This is where the strength of the Hessian strategy to improve labor market integration of groups with limited labor market access lies. However, the strategy requires a high amount of coordination work and close communication with each of the 26 administrative districts. Having target agreement negotiations with each one of them, is time and resource consuming but according to ministry officials very rewarding in terms of successful labor market policy. Right now Hesse is the only federal state in Germany with such a regional approach.

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Working in Germany; a crossborder partnership of the Netherlands and Germany

KWIZ Research & Consultancy

Introduction

Netwerk Noord or Netzwerk Nord is a partnership between the Dutch municipality Oldambt (Netherlands) and Landkreis Leer (Germany). Main goal is to improve the cross border cooperation on trade and industry, employability and labour market. The partnership has organized a lot of different projects. In this case study the subject is “working in Germany”. The main objectives of: “working in Germany” are:

- To qualify job seekers for jobs in Germany;
- To provide jobs for the unemployed in the north east of the Netherlands.

Dutch border municipalities, such as Oldambt, are confronted with a high unemployment rate. Many of the unemployed have poor job prospects. On the contrary, in German border areas there is a high demand for personnel in various professions and skill levels, due to a lack of labour force. This offers very good opportunities for Dutch job seekers to find a long-term job in Germany. So far, many Dutch unemployed persons from the border area have been given permanent employment in the German labour market. When necessary, vocational education and training is offered to provide qualified and skilled labour.

Summary

Netwerk Noord or Netzwerk Nord (German) is a partnership between the Dutch municipality Oldambt (Netherlands) and Landkreis Leer (Germany). Main goal is to improve the cross border cooperation on trade and industry and labour market. The main objective of the case Study “working in Germany” is to qualify jobseekers for jobs in Germany.

So they can get a job over there. The high demand for work in Germany and the high rate of unemployment in the Netherlands offer opportunities for a crossborder labour market to create substantial added economic value to the crossborder region. When a jobseeker participates in the program, vocational education and training will be offered to obtain the required qualifications.

An employment agency employs the participants on a temporary basis. After a period it will turn into a permanent job.

Context and setting

Key messages:

- Eastern Groningen and its border regions have the highest unemployment rates in the Netherlands. Over the next years, these regions also face serious socio-economic challenges arising from a shrinking and ageing population;
- The unemployment rate in German border regions (northwest) is much lower than in the Dutch border region of Eastern Groningen. There is a high demand for personnel in various professions and skill-levels, due to a lack of work force;
- Boundaries between the Netherlands and Germany are fading, easing cross-border cooperation and a shared labour market.

Economic developments eastern Groningen

The economic recession of the last couple of years led to a very large employment market in the province of Groningen. The number of jobseekers heavily increased whereas the number of jobs decreased. In the sectors of care and welfare, retail, technology and administrative corporate services there are still vacancies, although the amount of jobseekers in these sectors has rapidly increased over the last few years. This is especially true for jobseekers in the lower industrial jobs, which is the biggest group of jobseekers in Groningen.

Over the past decade, parts of East Groningen, including border areas, have been suffering from a shrinking and ageing population. Over the next years, these regions face serious socio-economic challenges as a result of the demographic shifts. Many young (educated) people are leaving the region. Elderly people stay behind, which causes an ageing population and ultimately a decrease of the total population. Facilities will start to disappear because of a lack of customers and the occupancy of houses and business premises will drop, causing a significant decrease of work in(rural)border areas.

The afore mentioned effects of the economic recession and current demographic shifts have resulted in a high rate of unemployment in the border regions of eastern Groningen. Particularly youth unemployment is an issue with imminent long-term consequences.

Recently there has been a number of economic developments and investments in the region causing some economic recovery. However, these developments alone will not get the entire border region out of its employment issues. The region will keep being confronted with a large group of hardly placeable job seekers who lack a basic start qualification for the labour market. Also, the expected economic recovery won't lead directly, to a big increase of available jobs in the border region. Moreover, with a slightly growing labour force in Groningen, this economic recovery won't lead to a decline of job seekers over the coming years. However, the labour market will become more dynamic, which will also lead to an increase in vacancies, especially in the corporate services (including employment agencies) and the export-related industries.

Economic developments

German border region Over the last couple of years, the German economy has been doing better than the Dutch economy. The German border regions also suffer from the consequences of ageing and young people leaving the region, resulting in a relatively small active labour force. Due to this lack of labour

force there is a high demand for personnel in various professions and skill-levels in German border regions. As a result, a lot of companies have shortages of staff, especially companies in sectors as care and welfare, technology, construction and manufacturing. This is where job seekers from the border regions can seize opportunities to be eligible for a job in Germany. The high demand for work in Germany and the high rate of unemployment in the Netherlands offer good opportunities for a crossborder labour market.

Eems Dollart Region

The Eems Dollart Region (EDR) has been established in 1977 after some years of preparation. After years of a strict separation between borders, the main goal was to create a “Europe of the regions” by building up and enhancing future contacts and networks between people, companies and organizations⁴⁶. The organization represents the common interests of both regions in various fields such as spatial planning, infrastructure, economic developments and regional identity. The EDR has approximately 100 members like municipalities, large cities in the Dutch-German border region, important business parties and the Dutch and German Chamber of Commerce. The EDR is being financed by its members, as well as the provinces of Groningen, Drenthe, Friesland and the German state of Niedersachsen. The close cross-border cooperation in the EDR has its origins in numerous and diverse social and cultural contacts. The two regions are closely intertwined geographically; Leer is connected to Groningen by a regular rail link with several trains daily. Language difficulties are often overcome in this region by the similarity between the dialects on either side of the border.

Cross-border boundaries are fading

It is becoming easier and easier for unemployed and job-seekers to find work across the border. Throughout the years, more and more contacts and networks within the EDR have been established between the people, businesses and organizations on both sides in the Dutch-German border-area. Recently in the context of Net(z)werk No(o)rd, there have been several projects, such as “working in Germany” in order to stimulate a cross-border labour market and partnership between German and Dutch authorities, vocational education institutes, employment agencies and industrial companies in the EDR. Also, the European Union is making efforts to stimulate cross-border cooperation and an international labour market. Cooperation across borders are a key tool in order to face socioeconomic and environmental challenges and is an important consideration in future policy making.

Description

The Net(z)werk No(o)rd is intended to stimulate further internationalization of the German-Dutch labour market. “Working in Germany” was initiated within the context of Net(z)werk No(o)rd. It aims to provide solutions for both the labour market issues in German and Dutch border regions. Net(z)werk No(o)rd has connections with authorities, business, vocational education and training institutes and job centres from both regions, providing multidisciplinary and cross-border cooperation. Also, the European Union is an important partner providing crucial (financial) support. The commitment and resources of these involved parties are the driving force behind “working in Germany”. The high demand for work in

⁴⁶ <http://www.edr.eu/en>

Germany and the high rate of unemployment in the Netherlands offer good opportunities but also requires a thought-out approach. After Dutch unemployed have been recruited they will be offered vocational education and training, in order to be deployed within the German labour market. Most importantly, “working in Germany” subsequently leads to:

- A declining rate of unemployment in Dutch border areas (Oldambt), and;
- A reduction of the current shortage of workforce in German border areas (Leer).

Methodology

The high demands in German border areas for personnel creates many opportunities for the unemployed and job-seekers in the province of Groningen. A few concrete examples of companies in the border area which have a high demand for personnel are:

- Volkswagen factory Emden
- Meyer werft Papenburg
- Enercon The approach of Net(z)werk No(o)rd is to qualify unemployed persons, especially in the region of Groningen, and to subsequently help them find long-term, stable work within demanding companies (Germany).

Within the context of “working in Germany”, Net(z)werk No(o)rd hosts various events and job markets to reach out to job seekers in the Netherlands, on which (German) employers offer their available jobs. When a job-seeker participates in the program they receive education and training from a German vocational education provider to obtain the required qualifications. The interesting component of the project is the fact that German and Dutch people are trained and qualified together, which means that they learn and practice the language of the other country. For Dutch job seekers, several agencies are taking care of removing possible barriers to work in Germany. These agencies take care of affairs concerning social security, legislation and insurance policies in Germany. These agencies also take care of required qualifications prior to working in Germany, in a specific sector. Sometimes additional vocational education and training is needed, as Dutch qualifications often are not directly acknowledged in Germany.

Scale and funding

Cross-border cooperation is not always a successful practice; often practical obstacles such as language barriers or national legislation are too difficult to overcome despite the opportunities. For that reason, the European Union stimulates cross-border cooperation. Therefore, the European Union initiated a number of funding programs that are intended to decrease the amount of barriers and to make it appealing for cross-region parties to cooperate with each other. One of these measures is the European Territorial Cooperation (ETC), better known as Interreg. Its goal is to intensify institutional cooperation across borders between regions located on European Union's internal and external borders, and regions within transnational areas⁴⁷. Net(z)werk No(o)rd has submitted an application for a grant out of the Interreg program. Currently, Net(z)werk No(o)rd makes use of grants out of the European Social Fund (ESF) program to finance “working in Germany”, which is the European Union's main financial instrument for supporting employment in the member states of the European Union as well as

⁴⁷ <http://www.interreg4c.eu/interreg-europe/>

promoting economic and social cohesion⁴⁸. These grants amount a total of seven million euro for the next five years.

Role of VET and policy

In The Netherlands, there are no fixed frameworks within which the VET policies are being made. The legal framework within which providers operate, are the Vocational Education Act (Dutch: Wet Educatie en Beroepsonderwijs) and the Act on Higher and University education (Dutch: Wet op het Hoger en Universitair onderwijs). All these acts state the professional requirements for the programs that are being offered. Funding for education is based on the number of students that manage to leave the program with a diploma. Whether this diploma has any relevancy to the labour market is unimportant. The main providers are general education institutions. In addition, there are institutions that offer specific sector-oriented education programs. Vocational training in Germany differs a lot from the Netherlands. In contrast to VET in the Netherlands, labour market developments play an important role in policy making. VET policy is not only guided by developments and demands on the labour market, but also by the need for individuals to acquire skills, knowledge and competences that will enable them to successfully prove themselves on the labour market. Training programmes are designed on the principle that they should be as broad as possible and as specific as necessary. For solving the issue of the high amount of jobseekers without a good qualification in Eastern Groningen, it is important that vocational education programs in specific sectors will be practiced and improved for this group of people. As mentioned, the vocational education system in Germany is much different compared to the Netherlands. Dutch qualifications often are not directly acknowledged in Germany. It is important that vocational training and education in the context of Net(z)werk No(o)rd qualifies for both the Dutch and German labour market. When a Dutch job seeker wants to work in Germany, they will receive education and training from a German vocational education provider in order to obtain a cross-border qualification. A temporary employment company will employ the participants on a trial basis. If this proves to be successful, they will be employed on a long-term basis. After completing the qualifying course, participants receive a certificate. Employment contracts are prepared and handed out before the end of the course.

Example: Enercon

In Germany the wind power industry is developing quickly, as a result of the energy transition taking place. A number of wind power businesses are located in The Eems Dollart Region. The company Enercon is one of the most important businesses in this field and is active in several locations in the Northwestern part of Germany. Enercon produces wind power systems and components for windmill constructions. With regard to the production of rotor blades, there is a shortage of employees for laminating operations. Since Enercon is located in the German-Dutch border area within the region, the company saw opportunities to employ long-term unemployed people in the province of Groningen, with help of Net(z)werk No(o)rd. They were offered specific vocational training for the laminating operations so that they could be placed into the company.

Critical factors of success

There are a number of fundamental conditions to achieve a cross-border cooperation which is beneficial for the economic developments of both regions. Within the context of the VET-EDS program it is important to identify these factors as they could be used to stimulate cross-border cooperation between

⁴⁸ <http://ec.europa.eu/social/main.jsp?catId=325>

other border regions. On both sides of the border the people, businesses and organizations are willing to work together In order for a successful cross-border cooperation, a multidisciplinary cooperation between the people, businesses and organizations from both sides of the border is mandatory. Small scale Start with a few projects on a small scale. All participants like policy makers, employers, educational organizations, job seekers etc. have to get used to work cross border.

Its important to have the right information about:

- Educational systems;
- Laws;
- VET;
- Language;
- Culture;

Qualifying vocational education and training

To begin solving the issue of the high amount jobseekers without a basic starting qualification in Eastern Groningen, it is important that vocational education programs in specific sectors will be practiced and improved for this group of people. Dutch qualifications often are not directly acknowledged in Germany. It is important that vocational training and education in the context of Net(z)werk No(o)rd qualifies for both the Dutch and German labour market.

Sharing knowledge of skills

The sharing of knowledge and skills, and the mobility of students and staff across borders is important to the development of vocational and technical education and should be encouraged. However, this international exchange and cooperation should be sensitive to local needs.

Sharing information about laws and national systems

Information about the educational system and, laws is important for preparing educational training programmes.

Constraints

Language and culture

When young people are not stimulated to learn different languages this will be a barrier for successful training and education people for jobs in Germany. Therefore young people must be stimulated to learn and use the German language. Although the regions are close together there are cultural differences between the Netherlands and Germany. For example, in the Netherlands people are more informal and don't like authority and that's quite the opposite in Germany.

Acknowledgment of qualifications both sides of the border

Both countries have different educational systems and won't acknowledge. Sometimes because of a lack of information but sometimes because of the system and the law. When you want a job in the craft industry in Germany you The German Meisterbrief is a barrier to get a job craft industry.

Laws

It is very difficult to change a law or an educational system. This can be an important constraint for VET in a cross-border cooperation.

Mobility and transport

Transport can be a constraint. It's important that people can get to the place for educational training or where they work. In some areas the public transport works very poorly. A solution is to arrange group transport. In the case study the employment agencies arranged for the employees small busses to transport them to work.

Commitment stakeholders

All participants must have the same amount of commitment. It is the most important condition for cooperation. Also all stakeholders must be identified, therefore you need information about the system.

Impact and Replicability

Cross-border vocational education and training improves job prospects in the Eems Dollart region. In the past 2 years at least 100 job seekers have found a regular job in Germany. Language difficulties can be overcome. German industrial companies reduce their potential reservations against foreign workers on the basis of positive experiences. The international cooperation of German and Dutch authorities, vocational education institutes, employment agencies and industrial companies prove that problems can be overcome. Companies in both regions, for example in the wind energy sector, realize that internationalization is a promising development for recruiting employees. Regional activities targeting the labour market have an inherent added economic value at the European level. The region is thus becoming an attractive new business location. Location decisions are always partly motivated by staffing needs, which explains the increasing importance of regional qualification projects. In sum, the cooperation projects have made an innovative contribution and created substantial added value in the area of cross-border knowledge exchange.

Replicability

The growing Europeanization of markets requires a stronger internationalization of vocational education and training. Vocational education and training is important, as unemployed and job seekers often lack necessary skills or qualification to find cross-border work. Moreover, more training might be needed for participants to get familiar with the other region's language and working culture. This is the only way of substantially maintaining the economic power of companies and the employability of employees in border-regions. This case study of cross-border vocational education and training improves job prospects in the Eems Dollart region. Net(z)werk No(o)rd's cross-border approach to VET is a critical factor in the project's success. Although, every region has its own laws, language, culture, education system etc, meaning the discusses approach cannot directly be duplicated to other regions. This case study can be an example for other regions on how to stimulate cross-border commitment and cooperation and how to effectively use vocational education and training to reach this goal. Within the context of the VET-EDS program it is important to take into account the critical factors for success when applying a similar approach to cross-border cooperation and internationalization of vocational education and training.

These critical factors were:

- On both sides of the border the people, businesses and organizations are willing to work together;
- Starting on a small scale;

- Qualifying vocational education and training;
- Sharing knowledge of skills;
- Sharing information about laws and national systems

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Hinckley Nuclear Plant Construction (and associated use of LMI)

Dr Andrew Dean

Introduction

In October 2014, the European Commission gave final approval for the construction of a new €20bn nuclear energy plant in the Heart of the South West. It will be the first new nuclear build in the UK for almost 20 years and the first of a new generation of European Pressurised Reactors (EPR) in the UK, producing electricity for around 5 million homes. At the peak of construction, around 5,500 people will be employed at the site, across a wide range of construction and civil engineering occupations. The site at Hinkley Point is in a remote rural location. As no similar plants have been built for many years, the skills needed to build the reactor will not be available locally. There is a large-scale VET requirement, focused on enabling local people to take up employment at the site and to compete with people attracted to work at Hinkley from outside the region. The Heart of the South West Local Enterprise Partnership (HotSW LEP) is responsible for the economic development of the area. It has responsibility for the targeting of EU Structural & Investment Funds (ESIF) and the development and delivery of a local skills strategy. In this capacity, it has been working with local strategic partners to assess the nature and scale of the opportunities arising from new nuclear build at Hinkley; to identify the employment and skills needs that will be generated by the development; and to support VET providers in making a co-ordinated and adequate response. This case study examines the tools that HotSW LEP has used to analyse the employment & skills needs arising from this major construction project.

Summary

Major infrastructure developments give policymakers the opportunity to boost GDP, GVA and numerous other measures of economic success. They also bring jobs and skills. The new Nuclear Power Plant planned for Hinkley in Somerset will, at its peak, employ around 5,500 people in its construction.

It will also employ large numbers of skilled staff over its lifetime. Sensibly it is a priority for the local policymakers associated with its employment geography. Chief amongst these are the HotSW LEP who have the ability to target ESIF funds in support of the developments and who have particular responsibility for driving economic growth in the area.

The LEP have used a suite of tools to explore what skills will be needed and when – and it is these that this report concerns itself with.

Context and setting

The UK VET system is highly market-oriented. Training providers compete with one another, seeking to build relationships with employers focused on meeting their training needs. The amount they charge employers is generally for the college or training provider to negotiate with employers, being dictated by:

- a) the employers requirements – e.g. whether the VET provider is being asked deliver training or just accredit training that is largely delivered by the employer; the amount of ‘off-the-job’ training that is required; the number of people the employer wishes to train and the consequent economies of scale; the cost of capital equipment and materials; whether training takes place at anti-social hours and so on; and
- b) the size of the public subsidy – which is dictated by the age of those being trained; trainees’ employment status prior to training; the level of the qualification being gained; and, key to our interest, whether a type or sector of training is considered a local strategic priority and has been identified as a priority for the targeting of funds (such as the European Social Fund) over which LEPs and local partners have discretion. UK VET providers are not, therefore, just involved in responding to data on anticipated labour market needs. They are players in a competitive market, weighing up a wide variety of financial factors and making complex commercial decisions about how they best position their organisation in the market and in relation to other players in the market.

HotSW LEP – strategic responsibilities & priorities

A highly influential review of economic development in England⁴⁹ conducted in 2012 argued that ‘Unfortunately, as a whole, the (UK VET) system is not delivering what the economy needs. The current system does not incentivise FE providers to run the courses that deliver the greatest economic benefit... In most instances, skills funding flows to the courses that students demand and which colleges can fill. It is hardly surprising then, that there is often a mismatch between the skills being taught and the skills that employers are demanding or the jobs likely to be on offer. This either results in employers needing to retrain students, or not being able to fill vacancies.’

Key recommendations were to:

- Put an increasing amount of VET funding in the hands of employers, including through the tax system; and to
- Devolve VET budgets to local areas, with Local Enterprise Partnerships (employer led-forums) having a key role in identifying priorities for expenditure. Although these changes are still in progress and the amount of funding devolved to local areas was significantly lower than that originally recommended, HotSW LEP has some considerable control over the targeting of European Structural & Investment Funds and Further Education Capital Funding in the area; as well as the scope to sponsor and prioritise local applications to a competitive pot of ‘Growth Deal’ funding, which can be used for skills development.

⁴⁹ Heseltine, M. No stone unturned in pursuit of growth, BIS, 2012

HotSW LEP & Hinkley Point

In its Strategic Economic Plan, HotSW LEP has identified the Hinkley nuclear development as being a one of four ‘immediate Golden Opportunities that are unique to our area and have the potential to transform its economic prospects’. While only 5,500 workers are expected to be employed on Hinkley’s construction at any one time, taking account of multiplier and the fact that some of these jobs will be relatively short-term, Hinkley is expected to generate 27,000 job opportunities over the entire period of its development, spread across construction, hospitality, accommodation, logistics, engineering and other sectors. Through its Board, its ‘People’ sub-group⁵⁰ and supported by the Somerset Employment and Skills Board⁵¹, the LEP has taken the decision to support the market for delivery of skills required at Hinkley through the following steps.

1. Immediately establishing a £1.7m Skills Fund for Hinkley, funded the 2007 - 2013 ESF programme, to help employees of local SMEs to acquire the range of skills they need to gain work as part of the overall Hinkley supply chain. The fund is managed by a single VET provider (Bridgewater College) on behalf of consortium of training providers. The level of subsidy provided for each incidence of training is flexible. Funding is routed through the VET providers to reduce the cost that employers would normally pay for this provision.
2. Setting up a Hinkley Point Training Agency to drive demand and support the supply of skills to the Hinkley development over the longer-term. Through this initiative the LEP aspires to secure a budget of between £5m to £15m per year for Hinkley-related training, by allocating part of the 2014 – 2020 ESF resources it effectively controls and by using this to leverage in additional ‘Growth Deal’ funds from central government.

The Hinkley Point Training Agency is also born of a concern to stop multiple providers from simultaneously knocking on the door of employers coming to the area to work on Hinkley, delivering competitive messages and potentially under-cutting each other on price; and a desire to instead to provide a co-ordinated suite of high quality training opportunities. Given the importance in the UK VET market of achieving ‘critical mass’, i.e. sufficient volume of work to adapt provision or make expansion into new areas worthwhile, working through HTPA to co-ordinate and differentiate the offer of different institutions is clearly in VET providers’ interests.

Description

Economic and Labour Market Models

To support Local Enterprise Partnerships (LEPs) in developing their thinking about the employment & skills needs of their areas, the UK Government⁵² has, for many years, sponsored ‘Working Futures’, a set

⁵⁰ The LEP has three sub-groups, focused on People, Business and Place

⁵¹ The Somerset Employment & Skills Board represents the Sub-LEP geography in which Hinkley Point is located. It feeds local priorities up to the wider LEP.

⁵² via the UK Commission on Employment & Skills

of freely available labour market projections at the regional and sub-regional level⁵³. Many LEPs supplement this information by buying into additional projections and models, such as the Local Economy Forecasting Model⁵⁴. While these models contain a high degree of sophistication, by necessity they are largely constructed on the basis of historic data, casting historic these into the future, with adjustments for known factors, such as demographic changes. For obvious reasons, fixed models do not and cannot anticipate economic ‘shocks’ or examine the potential impact of these on an area. Nor do they allow partners to explore the impact of large-scale developments, such as the building of a €20bn nuclear reactor on employment in other sectors, on female / male employment, migration, consumer spending, GVA, the occupational balance and so on.

Scenario Modelling

There are, however, more flexible modelling tools that allow users to generate projections for a variety of different growth scenarios, including the Heart of the South West Scenario Model, which HotSW LEP commissioned from Oxford Economics. This was commissioned to allow the LEP to consider the impact of a wide range of scenarios, such as the impact on that different economic growth rates in the area would have on employment levels and the implications of this for setting local employment targets. The HotSW LEP Scenario Model, provided in Excel format, allows users to generate scenarios for the following.

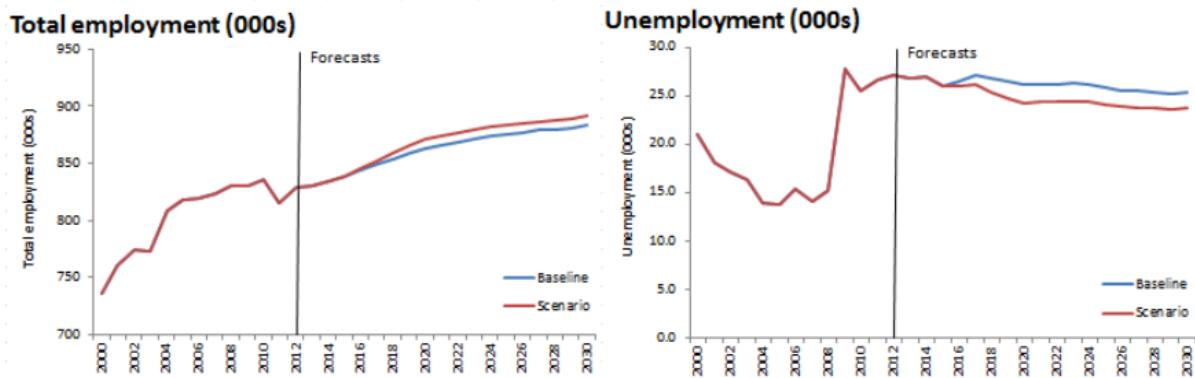
- Faster or lower jobs growth - Users can adjust a baseline average employment growth rate of 0.37% p.a. distributing the additional employment growth across 29 sectors. They can allocated this to specific sub-sectors and adjust the productivity of the additional growth. The productivity uplift can be adjusted for different sub-regional geographies.
- Job targets at LEP level. Users can examine the impact that the creation of a specific volume of additional jobs will have on the area (above the baseline scenario). They can distribute the additional jobs across the 29 sectors and adjust the productivity of the additional jobs.
- Jobs targets for sub-regions within the LEP area - As with the jobs targets at LEP Level, however allowing flexibility users to allocate the additional jobs to specific sub-regions, examining the impact across the LEP area.

Once scenarios are run, the model displays longitudinal data for the scenario, the baseline and difference between the two. Graphs for key variables, such as employment, unemployment, migration, GVA growth, workplace wages and consumer spending are automatically generated, as shown in Figure 1 below.

Figure 1: Examples of outputs of the HotSW Scenario Model

⁵³ These are discussed in greater detail later in this case study.

⁵⁴ <http://www.camecon.com/SubNational/SubNationalUK/ModellingCapability/LEFM/LEFMOOverview.aspx>



However, for labour market purposes, the ability to extract annual data on the longitudinal impact of the scenario on employment across 29 sectors and nine occupations is of particular interest. These are produced both for the LEP / Region and 15 sub-regional geographies. The tool also allows users to examine the multiplier effects of growth in particular sectors and locations (e.g. relating to a nuclear new build); the geographical distribution of these multiplier effects outside the immediate area; and the impact that growth in one sector (such as construction) has in others (such as accommodation & hospitality).

The HotSW LEP Scenario Model has been useful preparation of economic assessments for the Somerset and HotSW LEP economies, which take account of the Hinkley nuclear development and also provide a backdrop for the development of skills strategy for the area. However, by itself, the model does not produce outputs that are sufficiently precise to allow for VET planning. Its outputs do and have, therefore, been considered alongside other more specifically labour market oriented projections.

Working Futures Projections

The Working Futures projections are commissioned by the UK Commission for Employment and Skills⁵⁵ and are freely available to LEPs. Like the HotSW LEP Scenario Model, Working Futures provides projections of annual employment change both by occupation and sector. However, importantly, the model also provides projections of employment change by occupation within sectors, allowing users to assess how future employment growth in a sector such as construction will be spread across different occupations (Skilled Trades; Plant process & machine operatives etc.). Usefully, alongside projections of employment growth, the model also produces projections for replacement demand; the labour recruitment requirement generated by the need to replace people leaving the sector for reasons such as retirement. Combining these two dynamics allows users to identify a 'Total Requirement' for new labour in a sector. This is a much better indicator of any training requirement than data employment growth data alone. Figure 2 provides projections of change in Construction in the Heart of the South West.

Figure 2: Working Futures projections for Construction in the South West, 2010 – 2020.

⁵⁵ <https://www.gov.uk/government/publications/working-futures-2012-to-2022>

⁵⁶ Produced by the University of Warwick & Cambridge Econometrics

Heart of the South West : Construction Employment Levels (000s)				2010-2020		Total Requirement
	2010	2015	2020	Net Change	Replacement Demands	
1. Managers, directors and senior officials	4	5	6	2	2	4
2. Professional occupations	5	6	7	2	2	4
3. Associate professional and technical	3	4	4	1	1	2
4. Administrative and secretarial	3	4	4	1	2	2
5. Skilled trades occupations	32	36	40	8	12	20
6. Caring, leisure and other service	0	0	0	0	0	0
7. Sales and customer service	1	1	1	0	0	1
8. Process, plant and machine operatives	4	5	5	0	2	2
9. Elementary occupations	3	3	3	0	1	1
Total	55	63	69	14	21	36
Percentage Shares			2010	2015	2020	Percentage Changes
1. Managers, directors and senior officials	7.5	8.0	8.6	43.7	42.2	85.9
2. Professional occupations	8.9	9.4	9.9	39.4	37.0	76.4
3. Associate professional and technical	5.4	5.7	6.0	39.7	36.7	76.4
4. Administrative and secretarial	6.1	6.2	5.8	18.4	47.9	66.2
5. Skilled trades occupations	58.1	57.6	57.8	25.2	38.1	63.3
6. Caring, leisure and other service	0.1	0.1	0.1	36.0	44.2	80.3
7. Sales and customer service	1.4	1.5	1.5	32.2	33.0	65.2
8. Process, plant and machine operatives	7.8	7.2	6.6	6.0	40.3	46.2
9. Elementary occupations	4.6	4.1	3.8	3.9	34.0	37.9
Total	100.0	100.0	100.0	25.8	38.8	64.6

These projections are useful. They show that the Construction sector in the Heart of the South West is projected to grow rapidly over the next five years with the majority of this growth will be focused within Skilled Trades, which might lead a VET provider to conclude that it is worth expanding this broad area of their provision. However, they still lack the degree of specificity that college managers might want when deciding which curriculum areas within construction they might sensibly expand over the next five years.

Construction Skills Network Forecasts

These are a series of specific projections produced by Experien⁵⁷ for Construction Skills, and employer-led body responsible that supports ensuring that the training needs of the sector are met. The projections, which are updated every six months, cover a projected change in output and employment broken down by construction sub-sectors (e.g. infrastructure, housing, commercial etc).

In relation to VET planning and VET providers' responses to the nuclear development at Hinkley, the most useful outputs are:

- a) The projections produced for total employment growth across 28 different construction occupations, shown in A RAG Traffic Light coding system identifying occupations in which the recruitment requirement (equivalent to replacement plus expansion demand) is projected to be highest, as a proportion of overall employment, shown in
- b) This data shows considerable growth and a high annual average recruitment requirement is expected across a fairly broad range of construction occupations in the South West.

However, the data produced by this model is only available for the South West region, an area with a population of c3 million people. The Heart of the South West, which has a population of 1 million, forms only a part of this wider area. The data is interesting in that it shows that total construction employment in the South West is expected to rise by 22,000 over a five year period, at a much faster than the national rate. The Hinkley development, at its peak, is expected to employ around 5,500 people. The Hinkley development therefore sits within a much wider picture of construction expansion across a number of industry sub-sectors, particularly private housing. This is wider picture is generating growth and a high recruitment requirement in sectors not normally associated with a nuclear build, such as floorers, glaziers and plasterers. VET planners are therefore presented with a conundrum of whether to focus provision on a specific, potentially short-term development at Hinkley, or on broader and, in all likelihood, longer-term expansion within the construction sector.

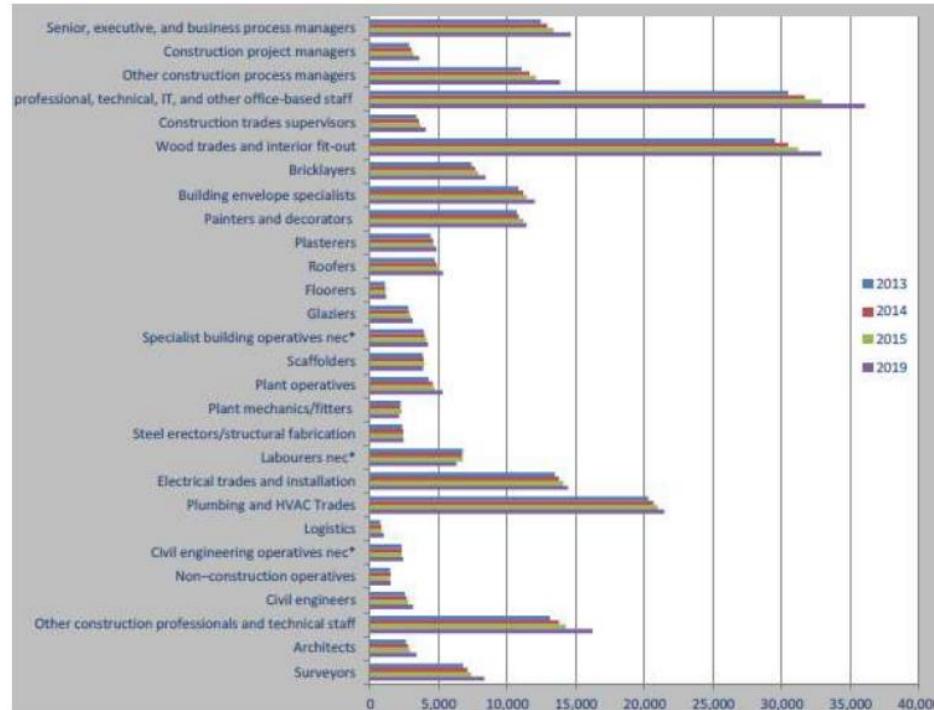
- c) Figure 4.
- d) Figure 3.
- e) A RAG Traffic Light coding system identifying occupations in which the recruitment requirement (equivalent to replacement plus expansion demand) is projected to be highest, as a proportion of overall employment, shown in
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⁵⁷ [https://www.citb.co.uk/documents/research/csn%20reports%202014-2018/csn_south_west_interactive%20\(new\).pdf](https://www.citb.co.uk/documents/research/csn%20reports%202014-2018/csn_south_west_interactive%20(new).pdf)

sectors not normally associated with a nuclear build, such as floorers, glaziers and plasterers. VET planners are therefore presented with a conundrum of whether to focus provision on a specific, potentially short-term development at Hinkley, or on broader and, in all likelihood, longer-term expansion within the construction sector.

g) Figure 4.

Figure 3: Experien / Constructionskills projections for employment in construction occupations, South West England



This data shows considerable growth and a high annual average recruitment requirement is expected across a fairly broad range of construction occupations in the South West. However, the data produced by this model is only available for the South West region, an area with a population of c3 million people. The Heart of the South West, which has a population of 1 million, forms only a part of this wider area. The data is interesting in that it shows that total construction employment in the South West is expected to rise by 22,000 over a five year period, at a much faster than the national rate. The Hinkley development, at its peak, is expected to employ around 5,500 people. The Hinkley development therefore sits within a much wider picture of construction expansion across a number of industry sub-sectors, particularly private housing. This is wider picture is generating growth and a high recruitment requirement in sectors not normally associated with a nuclear build, such as floorers, glaziers and plasterers. VET planners are therefore presented with a conundrum of whether to focus provision on a specific, potentially short-term development at Hinkley, or on broader and, in all likelihood, longer-term expansion within the construction sector.

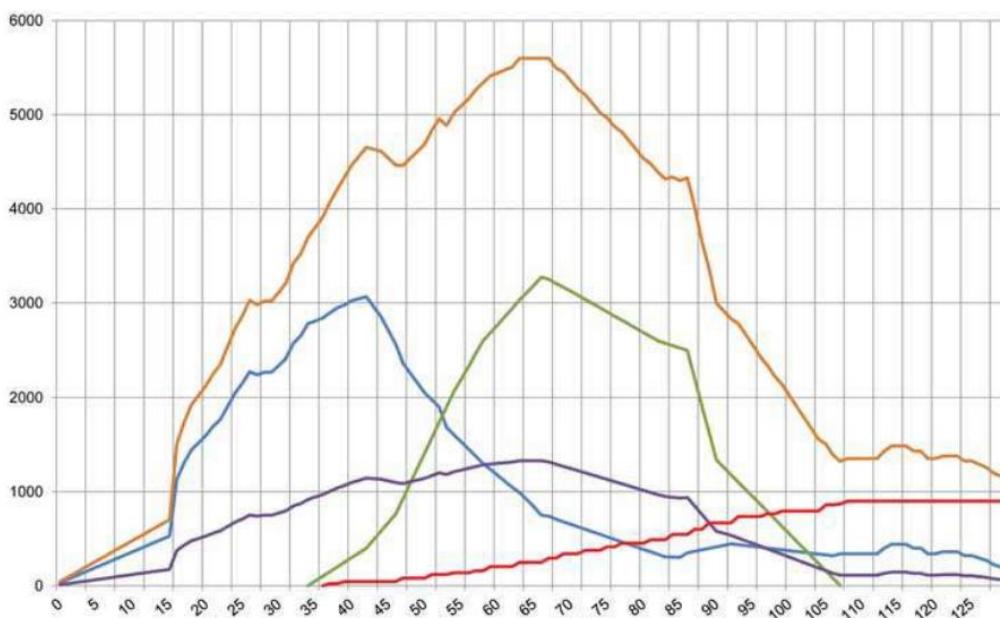
Figure 4: Experien / Construction skills projected recruitment requirement, South West England, 2015 – 2019



EDF Workforce Profiles

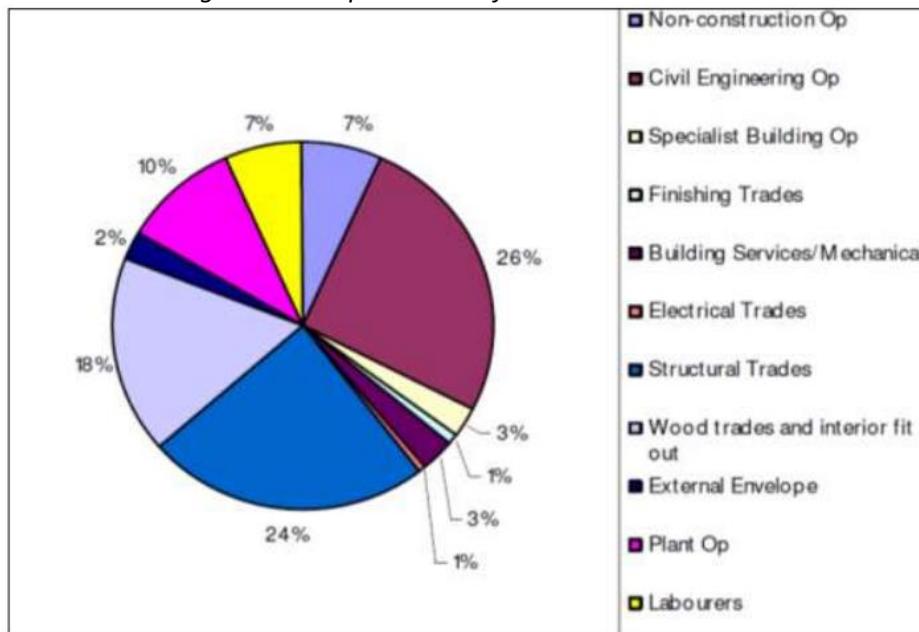
Based on their experience of building nuclear power stations elsewhere, EDF energy have a pretty clear understanding of the employment and skills requirement build Hinkley point. Relative to the data reviewed earlier, these projections are clearly extremely precise. Timelines showing the profile of the Hinkley workforce during construction is shown in Figure 5 below. For each of the broad categories shown in the graph ('Civils' = Civil Construction / 'M&E' = Mechanical & Electrical workers) – additional information on the expected recruitment of specific occupations over specific periods of time, as shown in Figure 6.

Figure 5: Hinkley Workforce Profile during construction, EDF Energy



Source: EDF Energy Construction Workforce Development Model / Workforce profile

Figure 6: Occupational Profile – Months 17 to 22



Source: EDF Energy Construction Workforce Development Model / Workforce profile

Clearly this information is the most useful to VET managers and planners considering how expand or adjust provision in response to the anticipated relatively short-term peak in demand that will be generated. However, the task for planners remains complex, with decision informed by issues such as their proximity to the development; the impact this has on the balance between demand generated by Hinkley and training demand generated by wider growth in the South West construction sector (which requires a fairly different set of skills); the duration over which demand is expected to rise; and the incentives that have been made available.

Impact and Replicability

The focus of the case study is on demand-side analysis at the sub-regional level. HotSW LEP has a population of c1 million people. With the exception of the Oxford Economics Scenario Model, which is available for cities and regions across Europe, the tools described are focused on England and are only available in the English language. Effective VET and skills planning depends on partners sharing a clear understanding of the economic changes taking place in an area and the impact that these may have on local labour markets, both in the immediate and longer-term future. VET providers in the UK exist in a highly competitive market and have been encouraged to be flexible and responsive, i.e. to be able to deliver training required by employers almost immediately on demand. This approach works well, where existing facilities are available and / or the training is to be delivered at the workplace, making use of employer facilities. However, this approach has its limits. Where capital investment and start-up costs are involved (e.g. due to the need to recruit new specialist staff) in anticipation of future expressed demand from employers, VET providers require a measure of assurance about the type and volume of training that will be needed in order to make a timely response. In this case study, we examine the employment forecasts that were available to HotSW LEP and VET providers and the extent to which these allowed them to consider and respond to the skills needs generated by the Hinkley Point nuclear development. At this stage, it is too early to tell how well co-ordinated or how well differentiated the overall balance of Hinkley-related VET provision is likely to become. However, in response to the intelligence of all kinds described above, it is that some local providers have invested heavily in responding to the opportunity. Bridgewater College, the nearest college to the site, has invested heavily in building new training facilities and designing new courses in response to the opportunity, including:

- An Energy Skills Centre with a Realistic Working Environment (RWE) that offers training in subjects including robotics, welding, electronics, process control, engineering, renewables and material science;
- A fully-operational Construction Skills and Innovation Centre at Cannington (close to Hinkley C) where all forms of groundwork, formwork, concrete pouring, construction plant and lifting operations will be taught.
- A new 13-day selection and pre-employment programme for people wishing to compete for steel fixing Apprenticeships that will be offered by contractors working with concrete at Hinkley Point.

Training providers that are further away from the development, for whom this is a more peripheral opportunity, are still considering how to respond and how to position themselves in the market. In doing so, they will be considering a wide range of market signals and projections of future demand, including the quantitative tools described in this report. They will be assessing not just the demands driven by Hinkley, but how the demand generated by Hinkley sits within the overall dynamics (e.g. employment growth, occupational change, changing skills requirements) of the sectors, such as construction, that they serve. They will also be considering the market opportunity in terms of the plans of competitor institutions and, to an extent, the availability of public subsidies. While projections of future market demand arising from the Hinkley development have been important (and will continue to be important) in driving VET responses to this particularly opportunity, they form only one part of the picture. Partners

agree that bringing a measure of coordination to the Hinkley-related VET offer is important. However, given UK arrangements, there can be no central ‘planning’ and new VET providers will be always be able to enter the market (albeit without access to additional Hinkley-related subsidies).

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Teknikcollege Skåne

Josef Lannemyr

Introduction

Teknikcollege is a concept of VET where municipalities, schools and companies in the manufacturing industry works together to increase the quality of the VET and make it better in tune with the companies' needs. The concept's purpose is to increase the number of students on the technological VET programs and thereby make easier for companies in the manufacturing industry to find qualified and skilled labor. Hence, it plays a vital role in the regional economic development strategy. What does Teknikcollege offer?

For Students: Teknikcollege offers attractive vocational education and training that can lead directly to a job on the completion of studies or provide a good basis for further studies, i.e. various engineering courses.

For Companies: Teknikcollege helps to secure the needs for skilled workers within manufacturing companies.

For Society: Collaboration with other municipalities and different providers of education and training guarantees effective use of resources and reduce the risk of outsourcing to other region or countries. Hence, the concept plays an important role in the regional development strategy. Teknikcollege Skåne is a good example of how the regions can work with competence and labour supply in cooperation with companies. It provides a clearer structure that could be used as a blueprint for other regions and that needs to address the problem of shortage of regional competence and labour.

Summary

Technological development and industrial companies are of considerable importance for Swedish economy and a high level of technical skills is essential for growth. Companies are in need of skilled employees with qualifications from upper secondary – as well as postsecondary levels. In order to increase the number of applicants for technology-oriented courses at different levels, stakeholders in industry have committed themselves to developing the concept of Teknikcollege. Teknikcollege is a model of competence centres where municipalities, education providers and companies collaborate with a common aim to increase the attraction and quality of technology-oriented courses for the needs of industry.

The Skåne region

Skåne is the southernmost county of Sweden. It is a part of the Öresund region which also includes Sjælland (Zeland), Lolland, Falster, Mön and Bornholm on the Danish side of the Öresund strait. The Danish and Swedish parts of the Öresund Region are linked together by the 16 km long Öresund Bridge, between Copenhagen and the Greater Malmö area, as well as ferry lines that run in northern Öresund between Helsingør and Helsingborg. Operating in an economy oriented toward foreign trade, Skåne is strategically located at the gateway to the rest of northern Europe. The largest city in Skåne is Malmö, which also is the third largest city in Sweden and the administrative centre of Skåne County. There are roughly 1.3 million inhabitants in the county, which is more than 13 percent of the total Swedish population. The average population density amounts to 176 inhabitants per km². As such, Skåne is one of Sweden's most densely populated regions, yet with a population density that is significantly lower than the OECD average (36 inhabitants per km², in 2011).

Nature of the Economic Development

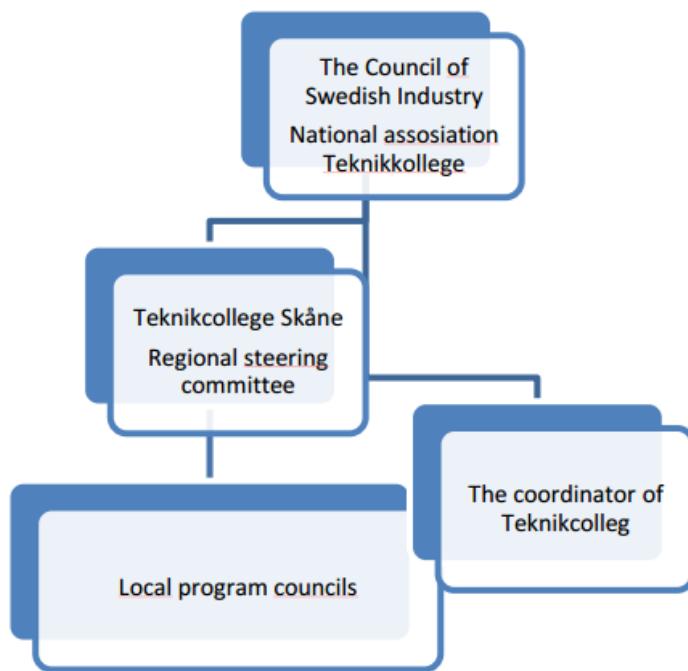
Like other parts of the western world Skåne is in a structural transition. That is to say that the share of employees in the service sector is increasing, whereas the corresponding share as of manufacturing is decreasing. Yet still the manufacturing industry accounts for roughly 12 percent of employment, and still particular segments of industry play a pivotal role in many of Skåne's municipalities. The economic structure of Skåne is largely the same as for Sweden as a whole. The main difference is that a larger share of the employed are within wholesale and retail trade and a smaller number is employed within manufacturing. According to a recent OECD report (OECD Territorial Reviews, Skåne Sweden, 2012), Skåne has distinguished itself as one of the most innovative regions in OECD. It has increasingly moved into high-skilled sectors and is classed by the OECD as a "knowledge and technology hub". Skåne spends a large share of its resources on R&D (nearly 5 percent of GDP), and "In terms of innovation inputs, the region is second to none". After the financial crisis, Skåne lost its position as the fastest growing region in Sweden, a position which to a large extent seems to be due to the building of the Öresund Bridge in 2000.

Teknikcollege Skåne

Teknikcollege is a concept of VET where municipalities, schools and companies in the manufacturing industry works together to increase the quality of the VET and make it better in tune with the companies' needs. The concept's purpose is to increase the number of students on the technological VET programs and thereby make easier for companies in the manufacturing industry to find qualified and skilled labor.

Organization

Teknikcollege Skåne's is run by regional steering committee. The committee consists of representatives from the stakeholders but also from regional companies and the PES. The Regional Steering committee is responsible for all parts of the Teknikcollege and that the region fulfills the certification requirements made by the Industry Council. The regional steering group is also responsible for the development of the Teknikcollege and should also work with promoting manufacturing industries. The regional steering committee is chaired by industry representative, and the regional companies representatives are in a majority.



Every Teknikcollege needs a coordinator. The coordinator has a crucial role and the function as a link between the regional and the national organization. The coordinator has also an important role in being the face of the organization and represent Teknikcollege in different forums and meetings. The tasks and responsibilities' of the Teknikcollege coordinator are defined in the statutes of Teknikcollege, He or she shall:

- Coordinate the inventory of skills needs in the region with links to relevant industries before an application to become Teknikcollege certified education is handed in
- Coordinate the quality assurance activities (regional and local) with follow-up and development of objectives, time and action plan as well as preform internal audit
- Establish the concept among local partners, companies, principals, teachers, and other stakeholders
- Assists the Regional Steering Committee in the application and review process according to schedule
- Coordinate and development regional Teknikcollege activities.
- Reporting and establish decisions made by the national association on the regional level.
- Representing their region at the different activities within the national association

Scale of Teknikcollege in Skåne

On a national level there are 28 active Teknikcollege regions and 128 certified educational providers and about 2000 affiliated companies. Skåne constitutes one Teknikcollege region which consists of the municipalities of Eslöv, Hörby, Höör, Kävlinge, Landskrona, Svalöv, Svedala, Trelleborg and Vellinge. One of the prerequisite for a Teknikcollege region is that at least three municipalities work together. At the moment are there 13 different educational programs to choose in between at seven different educational providers. There are about 350 students enrolled in one of the different educational programs during 2015. About 10 percent of the students are girls and the predominant program is *The*

Industrial Technology Program and in particular the Welding technology program. There are about 100 affiliated companies that are partners in the Skåne Teknikcollege region and about 30 of these are participating in the work of a local or regional steering committee.

Target groups

The Teknikcollege concept has three target groups: Students, Companies and Society. The key word is cooperation between the target groups.

For Students: Teknikcollege offers attractive vocational education and training that can lead directly to a job on the completion of studies or provide a good basis for further studies, e.g. various engineering courses. A broad technical education gives students significant opportunities to a smooth transition to working life. At Teknikcollege courses are offered and upper secondary school students have an opportunity to gain extended courses, the aim being to increase their lifelong employability. The teaching is based on integration between practical and theoretical subjects and the course is designed according to the skills requirements of the companies that collaborate in the Teknikcollege network. At Teknikcollege the teachers work as a team. Considerable focus is put to the student's personal development and ability to work in groups. The industrial companies of a region are never far from the students. Since the companies are involved in the quality assurance and content of the education, those studying at a certified Teknikcollege are attractive candidates for employment when they graduate from upper secondary school, or on the completion of further studies at a university of technology.

For Companies: Teknikcollege helps to secure the needs for skilled workers within industrial companies. Teknikcollege makes it possible for industrial companies to influence the planning of courses so that they correspond to future skill requirements. The majority of members in these steering groups come from industry and the steering groups are also chaired by a representative from the industry. This means that the industrial partners play an important role in influencing the scope and structure of the courses as well as their content. Involvement in the Teknikcollege network can take various forms, depending on the size of the company and the resources available. Participation is possible on a large as well as a small scale, thus making it possible for everyone to contribute. A company can collaborate with a provider of education by hosting study visits, by giving lectures or by providing problems and exercises taken from real life. A company can also participate through representation in a regional or local steering group and by offering practical experience and employment during summer vacation. For the individual company, the benefits of Teknikcollege are many. Apart from the possibility to influence the content of courses, there are opportunities to meet prospective employees and to acquire knowledge of their abilities, interests and employability. As a result, the companies' recruitment processes also become shorter.

For Society: Collaboration with other municipalities and different providers of education and training guarantees effective use of resources as far as municipalities are concerned.

An important factor of success within the concept of Teknikcollege is the collaboration of industrial companies with providers of education and training as well as with municipalities within a region. Teknikcollege helps to increase resource efficiency through collaboration in order to improve the quality of the courses. To be certified as Teknikcollege, it is necessary that providers of education and training from a minimum of three municipalities cooperate through agreements. Furthermore, these providers must work closely together with the region's industrial companies. This makes it possible to share costs and to benefit from each other's experiences and networks. The regions in Teknikcollege are a part of

the national network. This leads to exchange of experiences and nationally viable quality assurance of the municipality's different providers of vocational education and training. Above all, Teknikcollege provides a larger recruitment base, a higher status for technology oriented education and fresh opportunities for skills development for both companies and providers.

The ten criteria

The Teknikcollege concept exists mainly within upper secondary education, but also as a non – academic tertiary education. The core of concept is the cooperation between educational providers, municipalities and companies which constitute a rather unusual alliance in the Swedish educational system. Ten criteria guarantee the process of constantly developing Teknikcollege, so that the certified education provides industry with the quality that it requires. In order to meet the requirements for certification, and to be approved as Teknikcollege, all the criteria must be fulfilled. The criteria are described in length in the statuaries of Teknikcollege and will be recapped in the following section:

1. **A regional perspective:** Teknikcollege have always a regional perspective and is a shared resource among the municipalities and companies that are involved.
2. **An infrastructure for education:** Teknikcollege is primarily working with upper secondary education, but one of the criteria is that a functional collaboration also takes place between different types of non – academic and academic tertiary education, and between adults and adolescents.
3. **Clear profile:** The Teknikcollege educations should match the skill supply of the regional industry. Each region has its own industrial profile.
4. **Collaboration with working life:** Put into practice each Teknikcollege Region have a regional steering committee and local steering groups where the local business are in the majority, and the steering committee is chaired by industry representatives. It is of importance that all major and dominating industrial companies are represented in the steering committee to ensure the regional support.
5. **Quality assurance:** The regional steering committee is responsible for that all criteria are fulfilled, the quality of the education and the development within Teknikcollege.
6. **Creative and stimulating learning environment:** The teaching environment should stimulate creativity, commitment and should be as similar to working life conditions as possible.
7. **Equipment and machinery:** The regional steering committee should have knowledge and insight of the machinery and the equipment that is used in both schools and the companies connected to the regional Teknikcollege. The idea is that machinery and equipment should have high quality and be as modern as possible, this to ensure the learners employability.
8. **Coherent study days:** The criteria about coherent working days implies that the school day should be as similar as an ordinary working day as possible. This is to prepare the students for the working life to come at an early stage
9. **Team work and integration between subjects:** Within the Technical College teachers work in teams and take joint responsibility for student learning and development. Emphasis is placed on the student's personal development and ability to work in groups.
10. **Learning at workplaces:** The companies offering the students a workplace-based learning during good tutorial adds foundations for solid professional expertise. Students also have the opportunity to get project work, secondary jobs, internships and summer jobs.

What worked and why

One of the best proofs of the Teknikcollege concept is that it has spread all over Sweden. As described in a previous section there are now 28 active Teknikcollege regions and 128 certified educational providers and about 2000 affiliated companies. The key elements to the project's success and why we consider Teknikcollege to be a concept worth spreading are here listed:

- **Teknikcollege was initiated by industrial firms:** One of the corner stones in the Teknikcollege project is the connection with the regional industrial companies. That the initiative to create Teknikcollege Skåne came from the companies themselves is a very important factor for success. The regional companies become stakeholders and are through their engagement committed to take responsibility for the education of the pupils. Teknikcollege gives employers a real influence over the education which is one of the big accomplishments of the concept.
- **Supply of Competence is a business issue, not a school issue:** The educational providers cannot solely be responsible for cover the manufacturing industries' demand for labor. That the manufacturing industries reached this understanding opened doors to the regional companies and facilitated important parts of the Teknikcollege concept as on the job education (learning at workplaces) summer jobs, internships and so on. In a Sweden companies are accustomed to receive well educated and motivated labor from the educational system. This situation where about to change, as the interest for VET programs have been dropping, and the companies themselves needed to take some action. The Teknikcollege is a proof of this change of mindset and a very important factor for success.
- **Voluntary scheme:** There is a long tradition in Sweden were all, or almost all initiatives on the educational agenda come from the government and are in the form of mandatory requests. Teknikcollege is a different kind of initiative and that it is voluntary to participate, both as an educational provider and a regional company. That the concept is voluntary results in a different and more sincere commitment than if the concept were part of mandatory scheme. That companies puts a lot of time and resources in the project is also in it a proof of its success.
- **Spreading Best Practice:** The Teknikcollege organization constantly works with highlighting and spreading good practices. This is crucial for the development of the concept and one important aspect of the program. A best practice from one of their regions is quarterly appointed by the national Teknikcollege organization and their executive committee. The best practice should be a good example of interaction basted on the 10 criteria or a situation where Teknikcollege has reached out to media in a particular good manner. The Best Practice may include examples from a region, a locally Teknikcollege, local company or other activity. Every year there is a Teknikcollege congress where the regional organization met up and presents new and innovative ideas.
- **Open source between actors:** One of the preconditions for being able to spread best practices and knowledge between the different regions is that there is a sense of open source mentality between the education providers and involved companies. To have the open source mentality is stressed as by the Teknikcollege as one of the keys to success.
- **Perseverance among stakeholders:** Teknikcollege Skåne was founded in 2006 project and on a good way to be permanent institution. This gives credibility to the concept and shows on the long term commitment by from regional companies. It takes time to create a strong brand as an educational concept so perseverance is a necessity if the for success and makes the educations more attractive for learners.

Constraints

- **Unknown effects on the students:** Even though Teknikcollege Skåne has existed under almost one decade there hasn't been a complete evolution of the concept. However, there have been several internal audits, evaluations of independent researchers and there are regularly follow ups by the regional steering committee as a part of the quality assurance criteria. But to answer the million dollar questions: "are students within the Teknikcollege more successful than other VET-students" (i.e. are they more likely to have a job? do they earn more money?) there needs to be a more advanced evaluation. Statistics Sweden has been commissioned to produce longitudinal data that hopefully bring some more knowledge about the effects on the subject but there is no published report yet.
- **Unknown effects on the local labor market:** It is hard to analyze if Teknikcollege Skåne have had an effect on the regional labor market. This kind of studies are hard to carry out because for several obvious reasons. For one: it's hard to separate the different causes of the downward trend in manufacturing industries production in Sweden. What is due to the low demand in the European market and what is due to the shortage of skilled employment? It is virtually impossible to separate the effects and therefore hard to manifest the positive effects on the regional labor market. However, a recent survey made by an independent research institute⁵⁸ confirms that the employers are in general very positive to the Teknikcollege concept.

Impact and Replicability

Teknikcollege as a factor of growth Technological development and industrial companies are of considerable importance for Swedish economy and a high level of technical skills is essential for growth. Companies are in need of skilled employees with qualifications from upper secondary – as well as post-secondary levels. In order to increase the number of applicants for technology- oriented courses at different levels, stakeholders in industry have committed themselves to developing the concept of Teknikcollege. Teknikcollege Skåne is a good example of how the regions can work with competence and labour supply in cooperation with companies. It provides a clearer structure that could be used as a blueprint for other regions and projects of this kind.

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⁵⁸ Yrkesutbildning i förändring: från lärlingsutbildning till yrkescollege, Jonas Olsson, Malmö University, RATIO, 2015:18.



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Local Sectoral Skills Analysis

Dr Andrew Dean

Introduction

In 2012, the Marchmont Observatory was asked to undertake a range of work to enhance the economic evidence base of the Dorset Local Enterprise Partnership (LEP). This included work to:

- Produce the evidence base and recommendations for action for a Dorset LEP Skills Plan
- Develop a Dashboard to enable the LEP to monitor progress against agreed indicators

Critical to the work was a series of sectoral LMI reports that painted a picture of the skills and labour force needs within a number of economic sectors:

- Finance and banking
- Tourism, leisure, hospitality and international education
- Advanced engineering
- Food and drink
- Health
- Adult Social Care
- Creative industries
- Environmental goods and services
- Property and Construction
- Retail

This Good Practice looks specifically at the work in the economically significant Care Sector. The work was very well received and helped the LEP design its Skills Strategy and Strategic Economic Plan – an element of which will be critical to the delivery and targeting of European funds (ERDF and ESF).

Summary

This Case Study summarises the approach taken in analysing a major sector in the Dorset Local Enterprise Partnership (LEP) Area. This is best thought of as a subregion by European standards. The work was part of a suite of reports that used a mixed methodology to analyse the skills needs and challenges for a series of sectors. It is included in VET-EDS as the ultimate aim of the study was to seek to inform policymakers concerning what types of VET and skills provision will be needed in the short and medium term. The approach is reproducible given it combines a mixed methodology of quantitative analysis of datasets, and qualitative analysis of research, interviews and general sector intelligence. The work proved successful and popular and during subsequent work in the area the Sector Reports were cited amongst the most useful LEP outputs.

Context

Marchmont was engaged to produce the evidence base for the proposed Dorset LEP Skills Plan. The purpose of the Skills Plan was to inform provision planning, particularly in Further Education (FE), and drive growth in Dorset by identifying the skills gaps and eliminating skills shortages. It would also provide the basis of any future potential requirement on the LEP with regards to skills commissioning. The Dorset LEP region contains a population of 745,300. Its rural areas hold a population of some 213,900 people and contains some vibrant, growing towns. The coastline between Lyme Regis and Swanage has World Heritage status. Dorset is not as productive as it could be; GVA per employee is below the national average. This varies across the area, and is up to 21 percentage points below the national average. The area is characterised by a relatively low wage economy. Average earnings are not particularly high in Dorset. Wages are on average lower across the majority of sectors compared to the national average. The public sector is a significant employer across Dorset. It represents 30% of employment across the area (compared to 27% nationally). The level rises to 40% of jobs in the West Dorset area. The average salary in Dorset is now only £19,219 while the average home costs £254,891 – 13 times the average wage (National Housing Federation, 2014). In 2011, GVA in the Dorset LEP area was £12,465 million. This is projected to rise by 0.3% to £12,498 million in 2012 and by 20.2% to £14,987 million in 2021 (average growth of 1.9% per annum).

Detailed analysis was to focus on demand and supply of skills in the priority sectors:

- Finance and banking
- Tourism, leisure, hospitality and international education
- Advanced engineering
- Food and drink
- Adult social care
- Health
- Creative industries
- Environmental goods and services
- Property and Construction
- Retail

Detailed sections on each of these sectors were produced, which could be used as stand-alone documents for the purpose of sector based discussions and consultations. The analysis included a review of data on college provision. Reviews of this kind – ‘supply side’ – are not common in the UK and the exact provision of training is often not known (other than that which is directly paid for by the state). In addition Marchmont conducted interviews with a small selection of training providers, employer networks and strategic partners, to identify key issues and challenges that the Skills Plan should address. In addition to the review of the evidence, Marchmont produced a set of key messages and recommendations which could form the basis of the Skills Plan.

The final document sought to be easily digestible with a clear layout and indexing to assist the selective reader. The Skills Plan will be refreshed at agreed intervals and therefore needed to be written initially with a view to ease of updating. This case study looks specifically at the Adult Social Care Sector which is critical to the region and its ageing demographic.

Description

The report was set out as follows:

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The various analytical sections are set out below looking at the kinds of data and conclusions that could be made.

Introduction

A general introduction to the sector was build explaining that Dorset LEP identified Adult Social Care as a priority sector.

The sector was defined using enterprises falling under the following Standard Industrial Classifications (SIC):

- SIC 87.1 Residential nursing care activities
- SIC 87.30 Residential care activities for the elderly and disabled
- SIC 88.10 Social work activities without accommodation for the elderly/disabled.

This identified that the Adult Social Care sector provides services to people who, for reasons to do with age, disability, mental health, or social exclusion, are unable to look after themselves and require care, support, or protection. The majority of people working in the sector provide practical help with daily activities to service users. They also help people to adjust positively to changes in their lives, assist them in making choices about how they live, and help them to live more independently. It is a growing sector, which offers significant employment flexibility, predominantly in the private business and third sectors. Many people enter work in care motivated by a desire to help others.

Most draw significant pleasure from their work, from improving their clients' lives and making them feel happy. However, it is also a sector characterised by low pay, long and unsocial hours of work; and one in which pressure to raise efficiency is sometimes felt to leave little time for eye-to-eye contact and the compassionate engagement so valued by clients and workers alike. Despite this, in a recent survey of people working in Social Care, 88% of respondents said they were happy in their jobs, 54% of them very happy, 99% agreed that they liked feeling that they helped people and 96% felt that their work really made a difference.

Sector Profile

To analyse the sector profiles we used a variety of LMI. According to the National Minimum Dataset for Social Care (NMD-SC), this revealed that there were 499 establishments providing social care in the Dorset LEP area. Of these: 31% were Care Homes without Nursing; 10.5% were Care Homes with Nursing; 13.5% were providers of Domiciliary Care; and 12.5% were providers of Adult Community Care. Just over half of these establishments (53%) were in the private sector. One third (33%) were statutory organisations and one-in-eight (13%) was a voluntary or 'third' sector organisation. Most (61%) of the care establishments in the Dorset LEP area are small, employing between 10 and 49 staff. A further 25% have fewer than 10 employees. The Inter-Departmental Business Register (IDBR) data suggested that there were 200 Establishments in the sector in the Dorset LEP area in 2012, 5% more than there were in 2009. The large difference between the IDBR and NMD-SC data is due to the fact that NMD-SC includes all social care activities, including those supporting children. The IDBR data is a sub-set of this.

Employment profile

Data on employment by industrial sector is sourced from the Business Register Employment Survey (BRES) as this is a more reliable source for employee numbers than the IDBR, albeit one that is only available for 2009 to 2011. BRES also allows the analyst to drill down and look at the proportion of employment at district level, although considerable caution is needed when interpreting BRES data at this level. BRES is based on a sample survey, so estimates are subject to sampling errors. This revealed that in 2011 there were around 10,200 people employed in the Adult Social Care sector in the Dorset LEP area. Figure 1 shows that this equates to 3.2% of total employment. This is a significantly higher proportion of employment than that found in the South West (3.1%) or across Great Britain (2.5%) and the South East (2.5%). BRES suggests that the number of people employed in Adult Social Care grew by 57% (or 3,800 employees) in the Dorset LEP area between 2009 and 2011. This is a much faster rate of growth than that for England (21%) and the South West (38%). In fact, the rate of growth is almost suspiciously large, but the regional and national data also suggests that the sector is growing extremely rapidly. Long-term data showing employment growth over 20 years, broken down by occupation, is available from Working Futures. However, this is provided for 'Health and Social Work', of which Social care forms just part. The data is, nonetheless, interesting in showing:

- rapid (87%) growth in employment in the broad sector between 1990 and 2010; and
- exceptionally rapid (157%) growth in employment in Caring, leisure & other service occupations within the sector.

Occupational structure

A breakdown of the main job roles was revealed by analysis of the Annual Population Survey (October 2010-September 2011) estimates downloaded from NOMIS (Government data portal) and the Office for national statistics' (ONS) Labour Force Survey. This showed that 55% of employees in Social Care are employed as 'Care Workers', with a further 8% employed as 'Senior Care Workers'. One third of all jobs are not in front-line caring occupations or other management roles. Nationally, roughly a third (36%) of jobs are in residential care, almost half (45%) are in domiciliary care, 5% are in day care services and 14% are community-based.

Workforce characteristics

Analysis of the National Minimum data Set for Social Care (NMDS-SC) took place. This is an online database which holds data on the adult social care workforce. It is the leading source of workforce intelligence and holds information on around 25,000 establishments and 700,000 workers across England. It reveals that the vast majority (83%) of employees working within the sector in the Dorset LEP area are female and that the Care Sector workforce is also relatively old, by comparison with the workforce as a whole. The average age of workers in the sector is 43. As Figure 2 shows, the proportion of employees aged between 50 and 64 within the sector (31%) is significantly larger than that seen across all sectors (26%). There are also fewer people aged between 25 and 34 working in the sector relative to all sectors of the economy, and significantly fewer people working in Social Care who are aged 16 to 19. Although the workforce is relatively old, this has always been the case and there is little evidence of workforce 'ageing'.

Migration

Analysis of census data reveals that a significant minority (27%) of Care Sector employees within the Dorset LEP were born outside the UK. This is much higher than the average for all sectors, where just 8%

of employees were born outside the UK. The most common countries of origin were Poland (which accounts for 16% of non-UK born workers), the Philippines (15%), India (9%), Zimbabwe (8%) and South Africa (5%). All but the first of these are countries outside the European Union (EU). Whereas previously senior care workers and various forms of health workers (e.g. nurses working in nursing homes) could be recruited from outside the EU, all care-related occupations have now been removed from the last Migration Advisory Committee Shortage Occupation List. This change in national migration policy is a concern for employers who worry that it will exacerbate recruitment difficulties and could result in existing staff being required to leave the country when their work permits expire. Although this legislation does not apply to EU citizens, there is some evidence that the number of EU nationals entering care work in the UK may be in decline.

Employment projections

Projections of future employment in the sector highlighted LMI issues. The United Kingdom Commission for Employment and Skills (UKCES) 'Working Futures' data suggests that the number of people employed in 'Health and Social Care' is expected to fall very slightly between 2010 and 2020, despite overall employment in the Dorset LEP area being projected to rise by 7% between 2010 and 2020. This conflicts with other projections, such those made by Willtenburg et al, who predict that the social care workforce caring for older people will rise by 79% nationally between 2007 and 2032.

It also conflicts with projections made by W. Fenton for the Personal Social Services Research Unit. These suggest that the number of jobs in adult social care could grow by anything between 24% and 82% between 2010 and 2025.

This research generates four scenarios:

- A Base Case scenario - which assumes patterns of service remain constant, while demand increases as anticipated, resulting in a 65% rise in the number of jobs (to 2.8 million in 2025), and the number of people working in the sector rising by 53% (to 2.4 million).
- A Maximising Choice scenario – in which all who wish to have their publicly-funded social care provided in a highly personalised way in their own homes, resulting in the number of jobs nearly doubling, to 3.1 million by 2025, and the number of people working in adult social care rising to 2.6 million.
- A Contain and Community scenario - which envisages most care and support being provided by a largely unpaid workforce of family carers and community volunteers, resulting in paid jobs increasing by 37% to 2.3 million in 2025, and the number of people paid to work in the sector rising by 26% to 2.0 million.
- A Restricted Resources scenario – which assumes that future resources for adult social care will be very limited, with higher client-staff ratios in publicly-funded residential care, resulting in the number of jobs increasing by 24%, and the number of people working in the sector increasing by 14% to 1.8 million.

A further set of scenarios, developed by Skills for Care in 2008, suggest that if all citizens were to be afforded the capacity to acquire personalised Care, for example through 'Direct Payments', this could result in a near 80% rise in the overall workforce by 2025, with a nine-fold increase in the number of Personal Assistants and a static picture for employees in residential care settings.

Occupational projections

Occupational projections for the Care sector are only available at national level from the Working Futures III data. These suggest that employment growth is likely to be concentrated among Professional occupations and Caring occupations. The number of Administrative and Elementary jobs is projected to fall, suggesting that the sector will become increasingly skilled and knowledge intensive over time.

Demographic change

On Census day 2011, 22.4% of the population of the Dorset LEP area (166,000 people) was aged 65 or over. This is significantly higher than the national average, of 16.3% being aged 65 or over. According to ONS population projections, the number of people in this age group is expected to grow by 31%, or 52,000, between 2010 and 2025. The rate of population growth among people aged 85 and over is projected to be even higher: 49% between 2010 and 2025. Although older people are not the only ones who need care (and not all older people need care), this demographic trend is expected to be a major driver of employment expansion within the sector. The Dilnot Commission estimated that approximately three-quarters of people aged 65 and over will need some form of care, of which half can expect care costs of up to £20,000 and a quarter, costs of over £100,000. It also pointed out that, over the last four years, demand for care services has outstripped expenditure and that funding for care has not kept pace with general NHS funding. Real expenditure on Adult Social Care increased by 70% over the period 1994/5 to 2009/10, compared with a 110% rise across the NHS as a whole.

Pay and wages

The National Minimum Data Set for Social Care shows that wages in the Care sector are low, averaging £15,444, compared with £18,461 for all sectors in Bournemouth, £18,500 in Dorset and £21,140 in Poole. The average wage for Care Workers, the largest employment group in the sector, is just £14,237. According to the NMDS-SC, in September 2011, Senior Care Workers were paid an average of £7.15 per hour while Care Workers were paid an average of £6.65 per hour, a figure roughly 10% higher than the national minimum wage (£6.08 per hour in October 2011). National analysis of the 2009 Annual Survey of Hours and Earnings suggests that residential care workers are paid around 62% of the all-industry average earnings.

Skills Supply

In this section, we looked at the flow of skills into the sector, focusing on trends in: Further Education (FE) courses started by 16 to 19 year-olds with 'learning aims' relevant to the sector;

- the number of Apprenticeship starts and achievements relevant to the sector; and
- the volume of HE qualifications gained in subjects relevant to the sector.

Further Education

In 2011/12, 7,960 16 to 19 year old residents of Dorset LEP were learning within FE. Not all of these young people attended FE providers located within the Dorset LEP area, which is evident from the fact that LEP-based providers supported 6,260 learners in the same academic year. Together, these 7,960 young people were enrolled onto programmes with a total of 28,670 'learner aims' (essentially a measure of courses). The number of learner aims exceeds the number of learners, as most young people study three or four subjects. Between 2009/10 and 2011/12, the number of 16 to 19 year olds resident in the Dorset LEP area who were learning within FE fell by 730 learners, or -8.4%. The number of young people learning at Dorset LEP-based providers also fell, but by a smaller number - 390 learners, or -5.8%. This decline, which provides important context for the figures below, is due to a combination of factors,

including the decline in the total number of young people and a rise in the proportion of young people remaining within school sixth forms from age 16 onwards. In 2011/12, 910 enrolments were in subject areas relevant to the Adult Social Care sector. The number of enrolments in these subjects has risen significantly over the last three years, from 640 in 2009/10. Dorset LEP providers accounted for 760 enrolments with learning aims relevant to the sector, suggesting that 150 or more residents of the LEP area were studying subjects relevant to Adult Social Care in other geographical areas.

Impact and Replicability

The work enabled the LEP to identify particular sectoral challenges and to seek to address these. The approach is replicable where similar data can be found. It combines quantitative with qualitative intelligence from a mixture of academic and non-academic sources alongside interviews and sector intelligence.

Incidence of training

Perhaps unsurprisingly, given this regulatory requirement, the incidence of training, particularly accredited training, within the sector is high. According to the Labour Force Survey, 40% of Care sector employees reported receiving training in the last 13 weeks, a figure far higher than the allsector average of 13%. 84% of Care sector employers, interviewed for the Employer Skills Survey 2011 (ESS), reported that they provided training for staff, compared with 59% of employers across all sectors. ESS 2011 also showed that employers in the Social Care sector are more likely to have training plans and budgets in place and to adopt high-performing working practices, such as formal procedures for identifying 'high potential' individuals. The inference here is that, by comparison with other sectors, the availability of development opportunities for those pursuing careers and progression within the sector (as opposed to 'jobs') is relatively good.

Motivations for training

It would also certainly be wrong to suggest that compliance with legislative standards was the key driving force behind training within the sector. When interviewed by Inter-logistics , managers in the Care sector identified their primary motivations for encouraging staff to obtain qualifications as being to enable them to deliver high-quality, person-centred care, through being better at the job, with higher levels of skill and knowledge. Through doing this, they also aim to enhance their organisation's reputation and marketability, to reduce costs and to attract and retain good quality staff, promoting them to more senior posts as opportunities arise.

Qualification levels

However, despite this focus on training, large numbers of people in the Social Care workforce continue to have low levels of qualification.

When providing data for the NMD-SC, managers of care service providers in the Dorset LEP area reported that:

- 49% of their staff had no qualifications;
- a further 8% had qualifications below Level 2;
- 14% had qualifications at Level 2; and

- 8% held qualifications at Level 3 and Level 4.

This is a dramatically different qualifications profile to that for the working age population as a whole, derived from the Labour Force Survey (LFS), which suggested that just 4% of employees in the Dorset LEP area as a whole had no qualifications and 34% held qualifications at Level 4 and above. At the national level, managers completing the NMD-SC reported that 60% of Social Care staff had no qualifications directly relevant to their employment, while national analysis of LFS suggested that 17.25% of the Skills for Care & Development workforce were qualified to Level 2 or below, compared with just 1.35% of people working across all public service-focused Sector Skill Council (SSC) footprints. The overall conclusion is clear: the highest level of qualification held by employees working is significantly lower than the average.

Skills gaps

According to the ESS 2011, 17% of employers in the Care sector had a skills gap (a member of staff who was not fully proficient to perform their current job). This is slightly higher than the all-sector average (13%). The proportion of all employees (52 per 1,000) considered to have a skills gap was very little different to that for all sectors (54 per 1,000). It is difficult to know exactly how to interpret this data. Employer responses may, for example, reflect the extent to which they feel that ‘skills’ are required in a sector which can sometimes be referred to as ‘low-skilled’ relative to other sectors, such as Engineering, where the concept of ‘skill’ (as opposed to ‘aptitude’ or ‘attribute’) may be more obvious.

However, we do know that, where skills gaps do exist, they are most common among Caring and Professional occupations and that the skills that are most often found to be missing are:

- job-specific skills, which are cited by 54% of Social Care sector employers with Skills-Shortage Vacancies (SSVs), compared with 67% of employers in all sectors;
- customer-handling skills, which are cited by 49% of Social Care sector employers with SSVs, compared with 43% of employers in all sectors;
- planning and organisation skills, cited by 49% in Social Care, compared with 43% in all sectors;
- written communication skills, 46% in Social Care, compared with 35% in all sectors;
- oral communication, 44% in Social Care, compared with 40% in all sectors.

Other skills that employers find more difficult to obtain in Care, relative to other sectors are:

- Basic IT Literacy, cited by 26% of Social Care sector employers with skills gaps, compared with 17% of employers in other sectors;
- literacy skills, cited by 34% of Social Care sector employers, compared with 29% in all sectors;
- numeracy skills, cited by 22% of Social Care employees, compared with 18% in all sectors.

These skills gaps most often occur as a result of people being new to a role and having not yet completed their training. However, where they occur, they can have serious implications for employers, increasing the workload for other members of staff and creating difficulties in introducing new working practices and meeting quality standards. They point to a skills and training requirement in both core job-related competencies, such as customer-handling and a need for a focus on basic IT skills, literacy and numeracy.

Financial returns to progression

One of the challenges facing the sector is that the financial rewards associated with gaining higher levels of qualification or Senior Care Worker status appear relatively limited. Although hourly rates of pay do rise with the level of social care-related qualification held:

- Care Workers with a Level 3 qualification earn 26 pence per hour (3.9%) more than Care Workers whose highest qualification is at Level 2;
- Care Workers with a highest qualification at Level 2 earn four pence per hour (0.6%) more than those with no qualifications at all; and
- Senior Care Workers with a Level 4 as their highest qualification earn 17 pence per hour (2.3%) more than Senior Care Workers with a Level 3.

The differential in earnings between Care Workers and Senior Care Workers with the same level of qualification is also fairly small, amounting to:

- 46 pence per hour (6.9%) for those with Level 2 qualifications;
- 43 pence per hour (6.2%) for those with Level 3 qualifications; and
- 55 pence (7.9%) for those with qualifications at Level 4.

Recruitment and retention

Care sector organisations in the Dorset LEP area had to replace 19.6% of their workforce during 2011. Turnover rates are particularly high among lower grades, with employers in the Dorset LEP area having to replace 28% of Care workers, compared with 15% of Senior Care Workers and 10% of Social Workers. The most common reasons for staff leaving employment were ‘personal reasons’ (21%), ‘transferral to another employer’ (14%), Undisclosed (11%) and ‘career development’ (11%).

High turnover rates clearly impact on continuity of care. In a sector where the quality of personal relationships are critical, excessive staff turnover can have a negative impact on clients’ experiences. Improving staff retention through measures such as improving supervisory management, Human Resource (HR) systems and progression opportunities, are a priority for the sector.

Many of these processes are also central to effective staff recruitment, which is a linked concern for employers. Interestingly, however, ESS 2011 also found that employers in the Care sector were less likely than average to find their vacancies hard to fill. This may owe something to there being fewer entry requirements than exist for many other industries or to the role of employment agencies serving the sector. It may also be indicative of a highly mobile and transient workforce moving rapidly between posts, enabling employers to fill vacancies fairly readily, albeit on a short-term basis.

Apprenticeships

The 2012 Department of Health strategy, Caring for our future: reforming care and support, sets out an ambition for:

- doubling the number of Apprentices in the Care sector to 100,000 over the next five years; and
- establishing Higher Level Apprenticeships as a progression route for Care managers.

Historically, Apprenticeship take-up up in Adult Social Care was low, partly due to a requirement that personal care could only be provided by people aged 18 or over. This requirement has been relaxed and

care can now be provided by 16 to 18 years olds provided that they are suitably trained, competent and supervised. This change, allied with the drive to increase Apprenticeship numbers, particularly among young people, has resulted in a rapid rise in Apprenticeship numbers in recent years at both Intermediate (Level 2) and Advanced (Level 3) Level.

Other actions

Other actions that Dorset LEP could take to promote and develop the opportunities that the sector provides include:

- supporting networking and collaboration within the sector,
- development of a centre of excellence for the Care sector within the Dorset LEP area to complement, build and promote the spread of best practice in skills development;
- development of sector-focused appropriate business support programmes, including management and leadership and the effective utilisation of Superfast Broadband by the sector;
- promoting better use of sector intelligence, such as through interrogation of NMDS-SC as a business tool.

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Agreement between the regional authorities, training centers and the University of the Basque Country to support action plans in Gipuzkoa' SMEs on a vulnerable situation

Eugenia Atin, Raquel Serrano

Introduction

- This good practice understands that regional development networks imply not only the recognition of the existence of a plurality of actors, but the articulation of these actors in platforms with a common structure and process for discussing priorities and making decisions related to common public resources.
- It is a practice based on the use of regional authorities, local development agencies, vocational training centers and the University of the Basque Country, for building a both balanced and sustainable territorial economic development.
- It reflects the nature of the Erasmus + programmes in relation to the need of cooperation between different actors and establishes a cooperative process which should involve all agents on an effective coordination network for sectorial policies and action plans.
- It reflects the close relationship between vocational training centres and SMEs and makes use of it to support the competitiveness of SMEs
- This practice is expected to directly impact on the survival of SMEs on a vulnerable situation by developing actions to improve their situation throughout their life cycle and access new markets.

Summary

Garaituz is a Support Plan for Gipuzkoan SMEs on a vulnerable situation. It has been developed by the Provincial Government Council of Gipuzkoan through its General Directorate for Territorial Development in 2014 and it is currently active. The aim is to facilitate coordination and cooperation between different actors (regional authorities, local development agencies, vocational training centres and the University of the Basque Country) for competitiveness of companies with a high degree of vulnerability (commercial, financial, dependence on clients, inheritance, etc.), designing for them an action plan. It offers SMEs assistance in the following three areas:

- Implementation of the viability plan
- Management model definition and implementation
- Enhancement of productive competitiveness

Context and setting

The Basque Country is a Spanish region situated in the north of the country comprising the provinces of Álava, Gipuzkoa, and Bizkaia, also called Historical Territories. With a total area of 1,909 square kilometers, Gipuzkoa is the smallest historic territory in the Basque autonomous Community. The province has 89 municipalities and a population of 709,607 inhabitants (2011). Donostia-San Sebastián is the capital however, only one fourth of the people from Gipuzkoa lives in the capital. This small but intense territory, considered more as a dispersed big city than as a small province, is divided into comarcas (shires), each with its own character. Regarding the labour market, the occupancy rate is 70.3% of the working population. The great recession has had an impact on the labour market which results in very high rates of unemployment in Gipuzkoa (the rate is 15.3% while the unemployment rate in 2012 was 12.1). The main sectors regarding employment are: 4.4% work in the primary sector (agriculture, stockbreeding, and fishing), 55.7% in the secondary (industry), and 39.9% in the tertiary sector (services) and today, the strongest industrial sectors of the Gipuzkoan economy is the machine tool sector.

The Basque Country enjoys a high level of self-government in matters as important as health, education, research, security, housing, employment, economic development or taxation. The Provincial Councils are the executive institutions of the Basque Government with relevant competencies which allow them to prioritise investments in their territories. Under this intricate system, the Provincial Councils administer most of the budget of each of the provinces but are coordinated by the Basque Government. The good practice selected has been developed by the Provincial Government Council of Gipuzkoa through its General Directorate for Territorial Development in 2014 and it is currently active. The aim is to facilitate coordination and cooperation between different actors, (regional authorities, local development agencies, vocational training centers and the University of the Basque Country) for building a both balanced and sustainable territorial economic development. To do this, the Provincial Council of Gipuzkoa understands that regional development networks imply not only the recognition of the existence of a plurality of actors, but the articulation of these actors in platforms with a common structure and process for discussing priorities and making decisions related to common public resources to address the economic crisis.

The promotion of regional development needs to develop a common overview of all assets, drivers and resources (material and intangible) which are located in Gipuzkoa and which constitute its territorial capital. In the same way, regarding the challenges facing the territory, the EU Territorial Agenda highlights the importance of strengthening territorial cohesion as an ongoing and cooperative process which should involve all agents on an effective coordination network for sectorial policies and action plans. This process requires a coordinated view of the concepts of "competitiveness and "capital", which are increasingly complex because a competitive territory is not only based on a positive economic dynamics but also on an environmental sustainability, and a social and cultural development of the territory. In this regard, the Provincial Council of Gipuzkoa takes into consideration four-dimensions for a balanced, sustainable and cohesive territorial development: the social and human development; economic development; sustainable development; and institutional development.

Therefore, according to the Provincial Council of Gipuzkoa the emergence from the economic crisis will not exclusively come from the tools used in the past which were mainly based on subsidies, but from new strategies on territorial, social and economic models developed through a partnership with regional development agencies of Gipuzkoa and other key players. Tackling the crisis requires working with new

formulas and innovation processes. In this context the Provincial Council of Gipuzkoa is fostering a cooperative working context and network between different agents: the active involvement of development agencies, educational institutions and companies, in seeking solutions to the crisis. The current economic situation is negatively affecting most companies due to the domestic market reduction and a greater difficulty in accessing foreign markets. The unemployment rate growth is a clear effect of the crisis in Gipuzkoa.

In line with the European strategy for inclusive growth, territorial, economic and social cohesion and improving the employment and sustainable development, the Provincial Council of Gipuzkoa is promoting different initiatives within the framework of an intelligent spatial strategy which supports start ups, business innovation, internationalization; cooperation between SMEs and leading companies, promotion of training and learning, tc. To develop this mix of policies, the Provincial Council of Gipuzkoa has promoted different cooperation networks with the key agents of the territories. The following good practice is located in this context and it is focused on supporting the competitiveness of SMEs. SMEs are a key player in creating and maintaining employment at European and also Basque level.

Taking into account this key role, the Europe 2020 Strategy and various programmes and activities of community support, are directed to SMEs in order to boost growth and employment by developing policies to improve their situation throughout their life cycle and access new markets. The competitiveness of enterprises is located in multiple sections. While innovation is an important issue, the managing of many other aspects both tangible and intangible is also a strategic point for a sustainable growth. These conditions are particularly relevant for an important number of SMEs that have neither technological knowledge or the time, human and material resources that enable them to access markets with higher levels of demand.

In this scenario, the Provincial Council of Gipuzkoa formalized under the programme Garaituz "an action plan" based, in a first phase, on a collaboration agreement with the local development agencies of Gipuzkoa, grouped in the Basque Association of Development Agencies Garapen, with the aim of improving competitiveness and ensuring the sustainability of Gipuzkoa's SMEs which are on a vulnerable situation. This agreement provided support for making a diagnosis of the main difficulties of the industrial sector, especially SMEs, with the objective of providing further guidance for the design of future institutional support plans.

In a second phase, the Provincial Council of Gipuzkoa formalizes under the Garaituz programme a second collaboration agreement with, again the participation of local development agencies of Gipuzkoa but also with education agents coming from vocational training centers and represented by Tknika (Centre for Innovation in Basque Vocational Training promoted by the Basque Department of Education, Universities & Research) and with the University of the Basque Country.

As result of the diagnostic phase, a number of proposals for intervention were identified aiming to tackle the problems on the SMEs on a vulnerable situation. In this second phase the goal is to develop an action plan for each SME focusing on the following activities:

- Implementation of the viability plan
- Management model definition and implementation
- Enhancement of productive competitiveness

The last two activities, management model implementation and improving industrial competitiveness, are to be developed by educational agents. The Provincial Council established an agreement with the University of the Basque Country to support companies on the definition and implementation of the management model through its experts. In addition, the Provincial Council established an agreement with Tknika (Centre for Innovation in Basque Vocational Training) in order for experts from the vocational training centres to support companies to enhance productive competitiveness. At this point through its own network of vocational training centers, Tknika supports a range of innovative projects where knowledge is transferred to companies through the innovation teams among the trainers of the training centres. This step includes the development of specific projects to advise companies and support them in their innovation process, especially SMEs where the training centres offer technical support to innovate in certain technologies.

Description

a) Scale

The proposed best practice is located on the Gipuzkoa region, one of the three Historical Territories of the Basque Country. The province of Gipuzkoa has 89 municipalities. This small but intense territory, considered more as a dispersed big city than as a small province, is divided into comarcas (shires), each with its own character. Although the scope of the Garaituz programme is regional, its execution is carried out at local level on the different municipalities (or shires). The local development agents in their municipalities are the ones who identify and select the SMEs which are in a vulnerable situation to take part on this programme. In addition, the vocational training centres of Gipuzkoa close to these SMEs are the ones who support companies in improving their innovation processes for greater productivity. It is also important to highlight the specific type of project management of small-scale projects. Each action plan consists of a theoretical part and an empirical part, which can be tailored to the individual SME's needs and interests.

b) Type of VET and policy

The Garaituz programme has been launched by the Provincial Government Council of Gipuzkoa through its General Directorate for Territorial Development which depends of the Department of Environment and Regional Planning. The Department is committed to a regional strategy aimed at developing a knowledge society (education, knowledge, innovation and territory), based on the people. It is about building a competitive territory based on the knowledge society, where the role is that of the person and the integral development of it. A territory aware of its rights and duties through participation and active attitude of desire to learn and to turn knowledge into the base of an advanced and cohesive society. Therefore its commitment is to build an attractive space for economic activity and people development, committed to a competitive economy based on a knowledge society and a social and territorial sustainable model. This objective involves promoting the transformation of business models contributing to the generation of new models of relationships based on participation and on shared project organizations where people are actively involved in the business project and where organizations contribute to the mutual generation of shared value.

Gipuzkoa aims to integrate into its economic decision making, social and environmental considerations. A territory that aims to share a model of common values and a participatory approach in the decision-

making processes and to encourage good practice and constant interaction among stakeholders, in order to foster innovation, competitiveness, sustainability and social cohesion. In all regions there is a strong ambition to feed the interaction between the strands of the triple helix, knowledge institutions, companies and regional authorities. All quote the knowledge paradox: an abundance of scientific research on innovation potential and training content, an excellent infrastructure but still disappointingly few new products and services brought to the market. In practically all regions therefore institutional initiatives exist to promote the interaction between the three strands of the helix. These initiatives are particularly aimed at SMEs.

Larger industries are better positioned to be involved in joint research projects with academic institutions. They have the structure and the capacity to participate in public-private, often nationally funded, research programmes. There are few examples of SMEs, whereas this could be a potentially effective way of boosting innovation to the point where it may have a large scale market impact. Tackling the crisis requires working with new formulas and innovation processes.

In this context the Provincial Council of Gipuzkoa is fostering a cooperative working context and network which implies that the new strategies on territorial, social and economic models must be developed through a partnership with different regional agents: the active involvement of development agencies, educational institutions and companies in seeking solutions and promoting innovation in the organizational models of companies. This is a new model of relationship that the Provincial Council of Gipuzkoa has promoted jointly with the agents of the territory and it is coincident with the proposals of the European innovation strategies facilitating the adoption of a balanced mix of policies. The Provincial Council believes that competitiveness depends on a set of physical and human resources, knowledge and relationships that interact in the territory composing an ecosystem.

c) Target groups

The competitiveness of companies is linked to multiple factors. While innovation is a key issue, the management of other tangible and intangible aspects is the key for a sustainable growth. These constraints are particularly relevant to a large number of small and medium enterprises which have neither the knowledge nor technological, human and materials resources that enable them to access markets with higher levels of demand. Small and medium enterprises are a key player in creating and maintaining employment at Basque and European level. Taking into account that SMEs play a key role in the economic recovery of regions, the Europe 2020 Strategy and various support programmes and activities are addressed mainly to SMEs in order to boost growth and employment by developing policies to promote entrepreneurship, improve their situation throughout its lifecycle and access new markets. In this context, the Provincial Council of Gipuzkoa and the local development agencies Gipuzkoa, grouped in the Basque Association of Development Agencies Garapen, formalized under the programme Garaituz an action plan under a collaboration agreement on February 14, 2014 with the aim of improving competitiveness and ensuring sustainability of SMEs in Gipuzkoa which are in a vulnerable situation. This agreement has provided financial support for making a diagnosis of the main difficulties of the industrial sector, and especially SMEs, with the objective of providing further guidance on the design of institutional support plans.

Basically, the business segment that has led the initiative is characterized by its small size (less than 50 employees) and industrial activity being mainly auxiliary companies. This type of company reached in

Gipuzkoa highly significant figures. Totaling 2,834 companies in Gipuzkoa with more than 10 workers, this type of SMEs correspond to 84% of them and 39% of employment.

Under the collaboration agreement, the local development agencies, as intermediate agents for competitiveness on territories, undertake:

- To develop a diagnosis of the situation of Gipuzkoa' SMEs which currently are under an economic, financial, dependency or costs vulnerable situation. This diagnosis is based on the selection and identification of SMEs by local development agencies which require their know-how of the shires/ municipalities they belong to.
- To draw conclusions to establish the methodological framework for subsequent extrapolation to the rest of Gipuzkoa' SMEs on a vulnerable situation and subsequent institutional plan or plans for intervention adapted to the reality of this type of companies.

The economic crisis has accentuated the special difficulties of these small businesses. The major constraints of such businesses are related to the difficulties on obtaining financing, emphasizing their structural weaknesses. At the same time, this structural vulnerability hinders their efficiency in an increasingly open market. Most of these companies have grown under the umbrella of leading companies without generating skills, equipment, processes or management systems and without a clear market orientation as a competitive advantage to deal with the crisis. In this open environment, the competitiveness of small businesses depends largely on the collaboration environment that exists in the territory between institutions, agents and companies. The existence of an area of complementary and inter-enterprise cooperation enables a commercial and technological smart specialization between companies. The result of this relationship is that together they might offer a package of complex products or services and can feed a reciprocal innovation process. The small size of companies in Gipuzkoa makes cooperation essential.



Considering the difficulties and shortcomings of small businesses in the conceptualization of their difficulties, the Provincial Council of Gipuzkoa and the development agencies have formulated a model of analysis and evaluation which contains 19 potential vulnerabilities grouped into three groups:

1. Structural vulnerability: strategy, size, participation and management structure
2. Operational vulnerability: marketing area, production area, financial and economic area and R&D area
3. Economic and financial vulnerability

c) Organisations involved and stakeholders (demand and supply side)

As result of the diagnostic phase, a number of proposals for intervention were identified for responding to the detected problems. These proposals are integrated in six lines of action:

- Implementation of the viability plan
- Management model definition and implementation
- Enhancing productive competitiveness
- Ensuring business continuity
- Diversifying commercial risk
- Increasing in dimension

Due to the restrictions on public economic resources, priority has been given to the three first actions' lines by the Provincial Government Council of Gipuzkoa. Based on this original diagnosis the call for tenders that regulates Garaituz programme was published in the Gipuzkoa Official Bulletin on October 6th of 2014. The programme established that the first line of actions will be developed by expert companies or professionals who provide consulting services to SMEs participating in the programme. It also established that the second of the lines will be developed by the University of the Basque Country -UPV / EHU-, and the third one by Tknika, being Garapen the agent who coordinates the involvement of the various stakeholders.

- I. Garapen was founded in 1992 as the Basque Association of Development Agencies when the local agencies saw that although each of them was autonomous and developed their activity in geographically differentiated territories, there was a need to cooperate and coordinate some of their actions. It was established under the spirit of inter-institutional co-operation between the Basque Government and the Regional Councils and thus Garapen is more a meeting point for agencies than an additional structure that assumes specific services delegated by agencies. There are 17 Agencies at Basque Country, 15 of which are associated. These cover 76 per cent of the population in Alava, 73 per cent of Gipuzkoa and 51 per cent of Bizkaia. Their closeness to the life in the town allows these Agencies to adapt policies to the reality of their environment. The Development Agencies have developed in this ideological context and, together with them, the need to find an institution able to become a common place for all of them, a place where to exchange information, to offer support and to take advantage of the best of each Agency for the benefit of all of them. Nowadays Garapen is a professional association that intends to bring together development agencies constituted by local institutions in the Basque Country, with the aim to conceptualise endogenous economic development on the local level; work on its strategic development and operational application. At this point it's a key agent on the support to companies at local level, specially SMEs. Regarding Garaituz program, local development agencies associated in Garapen has been working for too long to promote awareness-raising, dissemination and advice relating to business management and systems for organising the work of businesses in the Autonomous Region of the Basque Country. To do this, various activities are foreseen within different economic sectors and in certain business areas, which are firmed up in four working plans, which are in turn broken down into various programs of intervention. In this line, local development agencies in Gipuzkoa have a very close knowledge of the situation of the companies in their territory, which is key issue for their identification and to encourage them to participate as beneficiaries of Garaituz program.

- II. The second agent of the Collaboration Agreement is the University of the Basque Country. The Convention enables, with the thrust of the Vice Rectorate of the Campus of Gipuzkoa, that expert staff of the University- Faculty of Business Studies of Donostia-San Sebastián and Polytechnic College of Donostia-San Sebastián-, in collaboration with students in their final year of degree, postgraduates or graduates of the 2012-13 and 2013-14 classes, support the companies participating in the Garaituz programme in the line of intervention related to management model definition and implementation. From the perspective of the University of the Basque Country- UPV / EHU-, the Garaituz programme's objectives fully align with its mission, its main general objectives and main lines of action. It should be noted that among these objectives, the University aims to stimulate the transfer of research results to the social environment to which it is due. Furthermore, it also fits with the strategic objective of promoting and encouraging initiatives related to lifelong learning, voluntary practices, entrepreneurship and employability. Moreover, the territorial approach fits with the vision of the University of the Basque Country of generating a multicampus model with a clear vocation of adapting to the socio-economic conditions of each of the three Basque Provinces. Therefore, the performance of the University of the Basque Country under Garaituz programme is established in a clear integrative perspective in relation to the various relationships and alliances that are built with other institutions in the Basque Country, as well as other agents, both of public and private nature.
- III. The third agent of the Collaboration Agreement is Tknika, acting on behalf of all the existing vocational training centers of Gipuzkoa. Tknika is the Centre for Innovation in Basque Vocational Training promoted by the Basque Department of Education, Universities & Research, under the direct auspices of the Sub-Department of Vocational Training & Lifelong Learning. Innovation is at the core of Tknika in its ongoing efforts to place Basque Vocational Training at the European forefront. Tknika is modelled after some of the world's most advanced vocational training centres. Tknika has developed an innovation model for the Basque Vocational Training System. Under the Tknika Innovation Model, the Centre's innovation management model, Tknika incorporates into its activities companies, technology centres, research centres, universities and other institutions that can add value to the system – all based on the dynamic of open innovation. From the perspective of Tknika, the Garaituz programme's objectives fully align with its mission, with its specialization areas and critical initiatives directed to SMEs. Tknika is a tool for the innovation on vocational training centres and aims to transfer this innovation from the trainers to the students on initial vocational training and to the companies, mainly SMEs, through the training of their workers and through technical assistance to their innovation process. Therefore vocational training centers in Gipuzkoa play an important role on specific transfer to companies based on the acquired knowledge of the innovation teams. In this way, the teachers of the training centres work with SMEs on specific projects. This step includes the development of specific projects to advise companies and support them in their innovation process, especially SMEs where the training centres offer technical support to innovate in certain technologies. Therefore, the performance of the 18 vocational training centres through TKNIKA and under the Garaituz programme is established to improve the competitiveness of SMEs from the province of Gipuzkoa by providing experience and knowledge.

e) How is it organized

- **Line 1. Carry out the Implementation of the viability plan:** Many companies are facing a serious financial situation. For some time, the main financial sources have not met the needs of these companies and it has also contributed to the current situation. The local development agencies are responsible for monitoring the overall process. To develop this action line it is necessary to address these two axes:
 - Locate the profitability of the company in a positive way, carrying out the adjustments that are necessary.
 - Stabilize the financial situation.
- **Line 2. Definition and implementation of the management model:** Over the last years we have had an industrial manufacturing without diversification of customers or products. Businesses that are in a critical situation lack direction so it is necessary to focus on this area to ensure their future, which raises the definition of these three sub-priorities:
 - Defining the strategic framework.
 - Institutional reorganization.
 - Definition of the management plan.
- **Line 3. Enhancing productive competitiveness:** Technology and organization of industrial manufacturing in Gipuzkoa must be adapted to the needs of clients. Although there might exist throughout this process a strategy of differentiation it is necessary to improve the overall process. In short, there has to be an analysis and an improvement of the production process. There are specific fields for action:
 - To increase the productivity.
 - to reduce manufacturing costs.
 - to reduce cost related to purchases.

The preliminary stages of the Garaituz programme related to the diagnosis have been addressed from a methodological framework based on an innovative model of networking with local development agencies, and, the Provincial Government Council of Gipuzkoa keeps and expands this scheme of cooperation in the implementation phase with the effective involvement of academic institutions in the dynamics of partnership between the Provincial Government, local development agencies and businesses. This coordination among different actors facilitates the viability of the plans and enhances through joint learning, the capacities of the companies.

Consequently, the support lines of the Provincial Council under this programme will materialize as follows:

- **Line 1. Carry out the Implementation of the viability plans:** The Provincial Council's support consists of subsidizing, at least 80%, and up to 25,000 euros, the cost of counseling or external assistance.
- **Line 2. Definition and implementation of the management model:** The Provincial Council establishes an agreement with the University of the Basque Country for the experts to support the SMEs in this task.
- **Line 3. Enhancing productive competitiveness.** The Provincial Government establishes an agreement with the Centre for Innovation in Basque Vocational Training for experts from the vocational training centers to support SMEs in this task.

To be eligible SMEs shall commit to participate in all three lines to be coordinated at regional level by their respective local development agency. Applications that do not include the commitment of the company to participate in the three lines will not be taken into consideration.

While for the first line the beneficiary company will receive a direct subsidy, in the other two sections, companies directly receive the support of academic experts both individually or through participation in the groups which will be created at district level between the development agency, the companies and the academic experts. The cost of experts is assumed by the Provincial Council of Gipuzkoa through the agreements with academic institutions. The total budget of the Garaituz programme is 2,500,000 euros.

f) What worked and why

In November 2014, 99 beneficiary SMEs were targeted and all the collaborating agents taking part in the programme have already started working with them. Currently, the technical team composed by academic institutions is doing the work of allocation of centres for each company, to carry out the work of relevant expertise as accurately as possible. To do this, they are making individualized meetings in order to identify the needs of the companies; to assign the most appropriate resources in each case, taking into account the criteria of geographical proximity and technical capacity. Although it is difficult to reach SMEs and to make them participate in programmes financed by public funds, this has been achieved through the close relationship with SMEs of two major agents included in the agreement: the local development agencies and the vocational training centers. These two agents have a long history of cooperation with SMEs involving them in their transformation, innovation and training projects, and they are the best connoisseurs regarding the needs related to competitiveness of the business of small and medium companies in their territories and fields of influence. In addition in the Basque Country there is a long history of public-private cooperation that comes from the worst economic crisis of the past decades. This has made again possible a new collaboration in terms of economic and territorial development.

g) Constraints

It is too early to know the barriers that will arise in the development of the projects in the SMEs, but we can point out that one of the main limitations to this type of project is usually the lack of economic resources to develop all actions needed on the defined action plan for each SMEs. At this point where only the diagnosis has been carried out there are three more priorities related to the competitiveness of the SMEs on a vulnerable situation:

- Ensuring business continuity.
- Diversification of commercial risk.
- Increase in dimension.

Due to the restrictions on public economic resources, priority has been given by the Provincial Government Council of Gipuzkoa to the other three action lines.

Impact and Replicability

Current times show that things are moving quickly and unexpectedly, with the development of a new economy and changes in different industries that make our companies have to struggle and survive in

an open field of fierce competition. This forces the SMEs also to have to perform better or differently from others. Employability is also evolving towards much more complex levels of professionalism that require increasingly higher professional qualifications.

Intense transformations will take place and will make the economy have to rethink many of the existing models and extensively change the current production model. A scenario in which the sustained creation of value will be a prerequisite for the SMEs to be competitive so they can open new opportunities for growth, job creation and maintenance and social welfare. Direct collaboration between SMEs and knowledge institutions and territorial development agencies in joint projects is rare and even more rare if established mainly on a regional or local level. Even in so-called 'science parks' where SMEs and knowledge institutions are located in close proximity of each other joint projects are rare.

The strongest obstacle from the point of view of SMEs for a collaboration with higher education institutions, however, seems not even to be a lack of communication. It is rather a question of different views on project setup (financially) and expected outcome. At this point, the economic crisis has a positive impact on bringing together regional authorities, local development agencies, vocational training centers and the university, with the aim of improving competitiveness and ensuring sustainability of SMEs in Gipuzkoa which are in a vulnerable situation. In addition to this collaborative network, the expected impact is the sustainability of 100 SMEs which are currently on a vulnerable situation by acting on their economic viability, management model and productivity competitiveness.

The business segment that has led the initiative is characterized by its small size (less than 50 employees) and industrial activity being mainly auxiliary companies. This type of company reached in Gipuzkoa highly significant figures. Totaling 2,834 companies in Gipuzkoa with more than 10 workers, this type of SMSs are the 84% of them and 39% of employment. Although it is too early to know medium-long term effects on the sustainability of these businesses, the conclusions of the pilot projects could bring light for providing further guidance on the designing of future institutional support plans. The transferability of this practice to other European regions could not be so easy depending on the collaborative network available at regional level.

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The Observatory of the Competitiveness and the Labour Market in the Moravia - Silesian Region

Marta Salavová

Introduction

The presented good practice was implemented in the Moravia-Silesian Region in the Czech Republic as one of projects in the frame of the Regional Employment Pact. The Labour Market Observatory was established in 2012. It represents an institution facilitating cooperation among the regional partners. At the same time it brings an example of labor market information tool usable and transferable in different regions based on available data about occupations and occupational groups. The main LMI tool called "Occupational cards" has been already transferred to other European region (the Malopolska region in Poland).

Summary

The Observatory of competitiveness and Labour Market has been established as a key instrument in the Regional Employment Pact. Its purpose is to identify key challenges of the region related to education and labour market, a support in design of priority interventions and their implementation and monitoring and evaluation of their impact. The Pact is an agreement of key players within the region to address these challenges; for this purpose it has both the authority and responsibility. Its strategic goal till 2020 is to achieve above-average employment rate and rank the Moravia-Silesian Region among the top 5 regions in the Czech Republic – not an easy task. The main value added of the concept of the MS Observatory is the wide range of users from public and private sectors profiting from its outputs and cooperative nature.

Context and setting

The Observatory of the Competitiveness and the Labour Market in the Moravia-Silesian Region (hereinafter referred to as the “MS Observatory”) is located in the third most populated region of the Czech Republic. The Moravia-Silesian Region has been established as a selfgoverning region in 2001 with Ostrava, as its administration centre. It is one of larger Czech regions bordering both with Poland and Slovakia, with intensive cooperation with its Polish and Slovak neighbors. The Moravia-Silesian Region (MSR) is one of the country's most industrialised regions, still very focused on heavy industry with increasing importance of automotive, and IT sector. On the other hand the region has also lower level of entrepreneurial activity within the country. It is highly urbanized and one quarter of its population lives in Ostrava. The largest concentration of heavy industry within the region causes significant environmental issues. Situation in the labour market highly depends on three major employers (all in metal processing industry, which prospects are not very bright in the country). If they close their business, the regional employment will be reduced by almost 10 per cent. The employment rate of population is below the Czech average (63 per cent vs. 67 per cent in 2012) constantly, though the employment structure is more or less comparable. The most portion of labour force works in the manufacturing (27 per cent vs. national average 26 per cent), further in the wholesale and retail trade; repair of motor vehicles and motorcycles sector (13 per cent vs. 12 per cent) and in the construction (8 per cent vs. 7 per cent). The region suffers from long-term population decline. It is predominantly caused by the outward migration of the highly educated and the young.

However innovation and R&D activity remains under country average, despite growing importance of regional universities, both in terms of number of students and R&D performance. Because of close distance of three Landscape Protected Areas and large number of places of interest the tourism also represents significant opportunity for shifting of region's economy focus. The MS Observatory predicts that 20.5 thousand jobs in manufacturing will disappear till 2020, the largest decreasing will be in Metal processing industry (NACE 24; -28 per cent), Textile industry (NACE 13+14+15; -25 per cent), Manufacturing of other non-metallic mineral products ((NACE 23; -20per cent) and Manufacturing of fabricated metal products, except machinery and equipment (NACE 25; - 20per cent). The wage level in region is lower than the Czech average by 6 per cent. Average monthly gross wages reached in MSR 22 111 CZK (around 835 €) in 2011. Lower wages are influenced by the fact that key employers in the region are positioned in the lower parts in the industry value chain and focus on activities with lower value added. The MSR suffer from the high rate of unemployment, this rate is the second/third highest in the CR and circulates around 9 per cent in the period 2010 – 2012, compared to the national average about 7 per cent. There are large differences according to education levels: in 2012 the rate was only 3.8per cent for individuals with tertiary education (ISCED5-6), but 34.1per cent for individuals with lower secondary education or less (ISCED 0-2). For population with ISCED 3-4 level education, the unemployment rate was 7.8 per cent. The rate of unemployment differs also according to sex and age, women, the young (aged 15-19) and the older (aged 50+) have higher unemployment rate and face great difficulties in finding jobs. The people aged 55+ (especially women) then often prefer earlier retirement to be unemployed. The share of tertiary educated persons quickly rises, but it is still under the country average. The Moravia-Silesian Region has very high level of unemployment and suffers also from high level of skills mismatch. Therefore the employment level is under country average. Labour market threats are also enhanced by concentration of employment in a limited number of key employers, especially in metalworking industry. Share of long-term unemployed persons is very high – around 50%.

The employment in industry should decline in years to come; the region is facing structural changes. This represents major challenge both for the labour market and education policy in region. There are also signs of a mismatch in the development of technical professional skills. The types of programmes offered by tertiary professional schools in the region do not seem to match the skill needs of the regional industry whereas the Bachelor degrees offered by HEIs do not meet the needs for more professional and experience-based skills. Whereas secondary level VET has a long tradition in the Czech Republic, tertiary professional schools were introduced in 1992 to develop a nonuniversity vocational higher education sector (HVET). The HVET sector lacks tradition and does not have a good reputation amongst employers. This, and the fact that students have to pay tuition fees, makes HVET unattractive to both students and employers. Moreover, technically focused HVET programmes are expected to be provided by universities through Bachelor programmes. However, these types of programmes have not yet been developed, largely due to the accreditation system, which focuses more on research programmes.

Description

Scale

The MS Observatory provides free information and analyses on key issues related to regional development in the Moravia-Silesian Region. It provides information, analyses and forecasts of the current and future demands and supply on the labour market. The aim of the Observatory is to collect, publish and analyse data in selected thematic areas and also to offer them to users of public and private sectors.

Type of VET and policy

The main body holding executive powers in the field of education (IVET and CVET) at the national level is the Ministry of education, youth and sports (MEYS). Its key responsibilities include especially the development of national education strategy and priorities; development of curricular policy and ensuring the quality of education on the basis of the objectives and content of education; coordination of public administration and funding of education. The MEYS holds the main responsibility of administration and establishing the rules for higher education but the higher education institutions are granted broad academic autonomy. The responsibility for retraining under the public employment services is held by the Ministry of Labour and Social Affairs. The systems of statutory training are administered by the line ministries (e.g. the Ministry of Health responsible for training of health staff, Ministry of Interior Affaires responsible for public administration staff training, etc.). A private provision of training services is not regulated. However, if an institution awards nationwide valid CVET certificates, it needs accreditation from the relevant ministerial body. Institutions providing language education or (re)training on behalf of the Labour Office need to apply for accreditation at the MEYS.

At regional level, the regional assembly and regional council are responsible for establishing public VET schools⁵⁹ at upper secondary and tertiary professional levels. The regional assembly decides on the number, structure, provision, quality and funding of the schools. The regional council is elected by the assembly and holds executive powers. It forms expert advisory commissions in various fields, including

⁵⁹ Majority of VET schools are public schools established by regions. The rest includes private schools, church schools and schools run directly by ministries (state schools).

education. All schools (including VET schools) enjoy a high level of autonomy. School directors hold significant powers. They are responsible for preparation and implementation of school curricula based on approved national curricula, for the quality of pedagogical work and human resources policy, for educational management and efficient use of financial resources. A school council as an advisory body is established at schools. The population ageing will have consequences for education and training systems. The role of adult education and training will increase considerably and schools (especially basic and secondary) will face the problem of less young students. This process has already started. Secondary VET schools are supported by national and regional authorities and by the European structural funds to develop their capabilities for adult education. The educational policy in the MSR is based upon the Long-term Programme and the Annual Report on the state of art and development of the educational system. The system has to react especially on the demographic changes, demand for skills and occupations in the labour market, the interest of young people in different educational programmes and the capacity of VET schools. The analyses of these four areas influences the tasks in optimizing network of schools, modernisation of educational programmes, promoting the collaboration between schools and employers, enhancing the accessibility and quality of career guidance, using the school capacity for adult education etc.

Target groups, organisations involved and stakeholders (demand and supply side)

The Observatory outputs cover several thematic areas and provide information on occupational, sectoral, educational and regional level. The main value added of the concept of the MS Observatory is the wide range of users from public and private sectors profiting from its outputs and cooperative nature. According to the Observatory focus there are various user groups – career guidance counsellors, schools, PES, employers and regional authorities itself. The Observatory offers analyses, publications and statistical data related to Moravian-Silesian Region all in one place: (1) Economics and business, (2) Innovation and (3) Human Resources, Territory (4) and it compares them with other regions in the Czech Republic.

Each part contains data sets and detailed indicators (statistic data)

- indicators for all regions and the entire Czech Republic
- on selected indicators also data for districts of MSR - in the part „Human Resources“ current analyses, studies and surveys - profiles of key professions in MSR (50 in total)

The users can use at the same time the publications and analyses developed for each area and also outputs from different thematic surveys.

Human resources part brings in addition to major time series also database containing profiles of major occupational groups in regional labour market. This tool – Labour Market Information (LMI) – Regional Occupation Card – is based on ISCO classification. Occupational clusters are designed by mixed approach, combining 2, 3 or even 4-digit ISCO groups. Profiles of 50 most important occupational groups on the regional labour market were created in the LMI. Once again they consist of sets of indicators describing employability (trends, sectoral structure, unemployment rate, job seekers, vacancies), earnings, qualification (skills needed, graduates forecast, graduates unemployment) and age structure. Indicators are based also on the LFS, Public Employment Services statistics (job seekers, vacancies), Ministry of Education statistics on students and graduates by field and level of study, forecasts of



graduates, forecast of sectoral employment (national level only) and Information System on Average Earnings).

Example of the Occupational Card:

REGIONAL LABOUR MARKET OBSERVATORY OF MORAVIA-SILESIA					
Name of the occupational group		Founders and welders			
Number of people employed (2011)			9600 person		
Employment trend (since 2005)			NO CHANGE ➔		
Employment by industry in region					
Industry	What part of this group jobs is created by this industry (2011)?	What is the industry employment trend within the region (2008-2011)?	What is the industry forecast (for whole country) till 2020		
Metallurgy and metalworking industry	48%	SMALL DECLINE 🐦	SMALL DECLINE 🐦		
Automotive and mechanical engineering	38%	SMALL DECLINE 🐦	NO CHANGE ➔		
-	-	-	-		
Other industries	14%				
Labour market opportunities for the occupational group					
Indicator	This group	Region average			
Job seekers (2011 average and trend during this period)	517 🐦	-			
Job vacancies (2011 average and trend during this period)	243 🚀	-			
Job seekers per one vacancy (2011 average)	2,1	12,8			
Unemployment rate (2011)	5,1%	11,9%			
Median wage (2011)	27 500 Kč	19 500 Kč			
Qualification					
Level of education for workers within this group	Best suitable field of study				
Share of employees with tertiary degree	Engineering and metal processing				
Share of employees with secondary degree	Secondary (ISCED 3c)				
Number of graduates of best suitable field of study in the region	738 persons				
Forecast of graduates for this field of study (2011-2016)	SIGNIFICANT DECLINE 🐦				
Age structure					
Share of persons in the group aged 50+ in the region	Share of persons in the group aged 50+ in the country	Ageing index (region vs. national average)			
18%	24%	0,73			
Summary of key findings					

The main added value of the tool – Regional Occupation Profile – is that it starts with detailed identification of user needs in the region of the impact, combines both qualitative and quantitative approaches to data and information gathering and analysis, it provides simple and understandable outputs and it is used by stakeholders to concrete and practical measures.

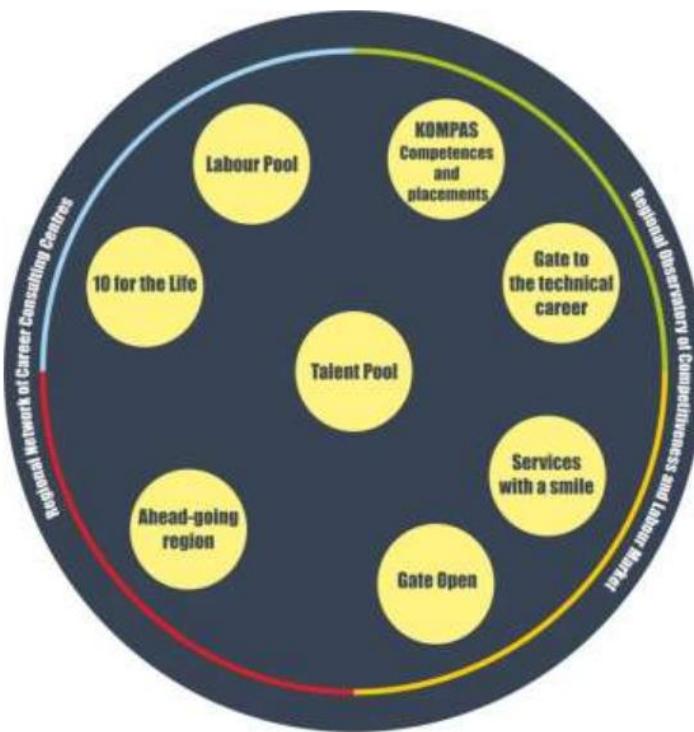
9 main topics of the Labour Market indicators:

- Group description (ISCO code, name and synonyms used in vacancies advertising),
- Employment development analysis (total employment, trends in employment since 2005),

- Labour market opportunities analysis (number of vacancies and job seekers, unemployment rate, share of hard-to-fill vacancies and share of job seekers per 1 vacancy),
- Sector employment analysis (key employment sectors for the particular group and analysis and forecast of employment for these sectors),
- Qualification analysis (suitable field of education, share of persons with other-thanrecommended qualification, level of education),
- Earnings analysis (used also as a proxy for occupation attractiveness on the labour market both for graduates and for adults, providing information on wage median, wage growth and comparison with similar occupations),
- Graduates (number of graduates of the most suitable field(s) of study, forecast of graduates for next 3 years, unemployment rate of graduates and its development),
- Age structure (% of young and old workers),
- Summary of key findings. Brief qualitative information, ca in range of one paragraph, focused on main trends, influences and factors to be considered by the specific occupation.

The main value added of this approach is the complexity of information about each occupation and the possibility to see pros and cons. For example the comparison of ageing workforce and number of graduates give us the information about possibility of replacement of workers. As it is described further, an extremely important part of users is represented by regional authorities and key stakeholders that formulate the MSR vision and development priorities. There are also users from other regions and from national level (ministries etc.) - methodologies and examples of tools developed within the MSR are important inspiration for them. Occupational cards serve both to career guidance (at school as well as in the PES) and in an aggregated level (list of top growing, most needed etc. occupations) again to regional policy makers. Employers also take advantage of these profiles - they help them to recruit new workers and graduates and provide them detailed information about overall market development, which they cannot obtain otherwise. The Observatory operates as a key instrument in the MSR Employment Pact and is also an important partner for leading stakeholders that shape region's policies. It provides information, analyses and predictions of current and future supply and demand on the labour market, supported by intelligence from the field of economics and business, innovation and development that will be the basis for smart public interventions in further projects. The Observatory is not a standalone project and has strong application focus – it does not do research in the area of education and labour market, but always provides analysis together with policy recommendations. Its purpose is therefore to identify key challenges of the region related to education and labour market, support in design of priority interventions and their implementation and monitoring and evaluation of their impact. The Observatory now plays an important role in shaping of regional policy and in regional development. Since its creation it participated in a number of key regional documents in the area of competitiveness, labour market and education system.

Regional Observatory setting and linkage to Development priorities:



Recently, the MS Observatory has been involved in drafting of an ITI - Integrated Territorial Intervention - which covers the city of Ostrava and neighbouring districts. Within the ITI, it provided analyses and activities proposals for the key pillars of Work and Entrepreneurship.

The Observatory has also participated in design and implementation of Regional Innovation Strategy (RIS). But its importance has already surpassed the MSR. Not only was the Observatory involved in the National Innovation Strategy and development of methodologies for all other regions how to approach the setting of priorities in the area of labour market and competitiveness within particular region. Also, the Moravian-Silesian Observatory now works together with the National Observatory for Employment and Training in drafting of methodology how to implement system of observatories in all Czech regions. This proposal is supported by the Ministry of Labour and Social Affairs (which should provide financing for such activity) and may significantly change the way the LMI is gathered, analysed and used in the whole country. The Observatory is aimed not only to the development of the regional labour market in the Moravian-Silesian Region but also contributes significantly to the system development tools such as development of the cooperative TEPs network in the Czech Republic, the Regional Innovation Strategy (RIS) and the Regional Development Strategy (RDS). Thus the Observatory in fact influences all key

regional policies and has impact on wide range of areas - with VET and labour market being just two of them. Overview of policies, strategies and actions influenced by the Observatory:

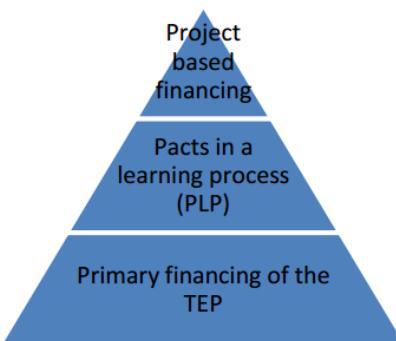
Policy/Strategy/Action	Impact
Regional Development Strategy (RIS)	Regional (priorities for the MSR)
Regional Innovation Strategy (RIS)	Regional (priorities for the MSR) and national (methodology and guidance for other regions, support of national innovation strategy)
Territorial Employment Pacts	Regional (priorities for the MSR) and national (methodology and guidance for other regions)
System of Observatories in the CZ	National (methodology and guidance for other regions, together with the National Observatory)
Integrated Territorial Intervention for the larger Ostrava	Regional (identification of priorities of the Ostrava agglomeration)

How it is organized

The MS Observatory is based on the consortium of RDA, Inc. (The Regional Development Agency, Inc.) and RPIC-ViP, Ltd. The Regional Development Agency (RDA; in Czech "Agentura pro regionální rozvoj, a.s.") is a jointstock company 100per cent owned by the Moravian-Silesian Region. It was established to support various aspects of regional development, and it is involved in a wide range of activities on behalf of the Moravian-Silesian Region. All of the RDA's activities are targeted to benefit the Region, its people, companies and institutions. Within the MS Observatory the RDA is responsible for the preparation of databases and documents in the thematic areas of the Territory, Economics and Business and Innovation RPIC-ViP Ltd. is an educational, innovative and counselling company operating in the labour market since 1999. It offers services of 30 qualified consultants and project managers and takes a share not only in the dynamic development of the Moravian-Silesian Region but it is involved in programs on the level of the Czech Republic as well as European Union. This company is specialized in counselling and project management in the field of Human Resources management and development and in projects with the focus on key competencies development, counselling and education for small and mid-sized companies, specialized counselling services for public sector, companies and investors, etc. Within the MS Observatory the RPIC-ViP, Ltd. is responsible for technical solutions of the website MS Observatory and preparation of data bases and documents in the thematic area of Human Resources. The Moravian-Silesian Region funded the establishment of the Observatory in 2012. Within the first phase the main objective was a creation of united portal, incl. SW application and filling up with data. The current stage of its development (2013+) is aimed at creation of information base for "smart inventions" for promotion of economic development and employment (processing, sharing and interpretation of information, data and analyses for development of human resources, labour market and competitiveness in MS Region). The MS Observatory is an internal project of the Moravian-Silesian Employment Pact and the system development of the Territorial employment pacts (TEPs). Its operation belongs to the Integrated Employment Development Program. The start-up of the TEPs is planned to be funded from the Human Resources and Employment Operational Programme during 2015-2023, the sustainability will be ensured by partners and signatories from own sources in regions. The public funding from national and EU sources will continue to provide services of regional labour market observatories. Regional labour market observatories will be part of a national information system, made

up of national and regional observatories. The financing of the TEPs is planned to be carried out in three levels:

- Primary financing of the TEP: covers the main activities and functioning of the Pact itself. Primary financing comprises meeting and communication of partners, information service, and other related services for the key institutions in region, working/operation of regional Observatory of the LM, production of analyses, predictions, coordination of program of employment development and system intervention for its fulfilment. The program of employment development is a consensus of partners on problem solving – e.g. PR of technical education in the given region, measure to evaluate the success of interventions, career guidance innovations, interventions to prevent unemployment, settlement of the system of traineeships in enterprises.
- Pacts in a learning process: financing of the methodological, educational and advisory support for the system development of the TEPs in the Czech Republic, cooperative work and services for the MoLSA at the central level, and participation of the TEPs in international nets. The pacts in a learning process is a network sharing its know-how and cooperation inside this network is important part of the whole system functioning. It includes sharing of good practice examples, interconnection of information systems, methodological support, development, testing and dissemination of innovative solutions. Therefore methodical, educational and counselling support of the TEPs has to be further funded. The information flow has to be ensured also among regions and between regions and the central institutions.
- Project based financing: involvement of the Pact and its partner into system projects, especially in projects with higher importance of cooperation of the key regional stakeholders,



The decision of the Ministry of Labour and Social Affairs (MoLSA) to support the system development of the TEPs is the first step which led to the creation of methodological framework. The methodological framework draws on the recommendations of the OECD and experience of the existing pacts/observatories in four regions of the Czech Republic. Principal investigators on the level of system development of the TEPs are the Ministry of Labour and Social Affairs (MoLSA), and representatives of the Moravia-Silesian Employment Pact and The Usti Region Employment Pact. The system development was formed on the initiative of the MoravianSilesian Observatory. The first Territorial Employment Pact was established in 2011 in the MSR (The Moravia-Silesian Employment Pact - MSEP). This initiative was inspired by the Austrian model which has been step by step given to those interested in all regions of the Czech Republic. The Austrian Centre for Social Innovation (Zentrum für soziale Innovation) provides

them information/consulting service on request. The main objective of the Territorial employment pacts is to support the active employment policy in the region with engagement of the key regional entities, such as representatives of employers, representatives of regional policy and the regional/local Labour Office. The supportive activities should be mainly focused on unemployment prevention and strengthening of competitiveness in/of the region. Four Territorial employment pacts were established to date:

- The Moravia-Silesian Employment Pact (the first Pact and the main initiator)
- The Usti Region Employment Pact
- The South Bohemian Employment Pact
- The Liberec Employment Pact

What worked and why

One of the most important strengths of the whole project is grounded in the fact that the activities of the MS Observatory are closely tied with regional policy and strategies for which it provides critical information and data. It is recognized and respected by majority of stakeholders in the MoraviaSilesian Region, including employers. However, the Observatory is widely acknowledged not only in Moravia-Silesian region and the system of regional observatories is strongly supported by the Ministry of Labour and Social Affairs. This should contribute to easier access to funding in next few years (except of the share of EU funding). The similar platform of observatories is being extended to other regions. The labour market information tool – Occupational card is based on available regional data. Its structure is easy to understand and complex in the same time. The similar approach was first successfully implemented on the national level. On both – the regional and national level- the structure (choice of indicators and occupations covered) was discussed with target groups of users. The regional occupational card is targeted on different target group of users than the national version (Sector Councils). The regional cards provide information in particular for the career guidance counsellors and other regional stakeholder, and it is available on the website of the Moravia-Silesian LM Observatory. Constraints The dependence on project financing and EU funding was identified as weak point that constraints further development of the activities of the Observatory. Consequently, coordination of the activities of the Observatory and its goals are dependent on availability of project calls with suitable focus. This issue is connected with a concern whether there will be enough sources to cover Observatory's activities after 2020. Furthermore, there is the potential to enhance the labour market intelligence tools in terms of coverage, level of detail and customization for every user group.

Impact and replicability

The Observatory itself brings not only state-of-the-art labour market information tools - its strength lies more in the area of policy and decision making and in integration of good labour market intelligence in design and implementation of development strategies. The presented labour market information tool – Occupational cards is easy to transfer on the regional level, as evidenced by its transfer to the regional labour market observatory in the Malopolska region (Poland) in 2015.

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Regional Innovation Strategy – Ústecký Region

Zdeňka Matoušková

Introduction

Regional Innovation Strategy aims at effective direction of financial resources – European, national, regional and private – on the activities that strengthening the regional innovation capacity of the region. Innovation does not consist only on high-tech discovery processes. Research is very important but the preparedness of business to accept and use the results of the research as well as the availability of human resources with corresponding skills is, besides the other factors, important too. Regional Innovation Strategy is a precondition for receiving support from European Regional Development Fund for the period 2014-2020. Regional innovation strategy includes the deep analysis of current situation and formulates the longterm strategic vision of the region. Based on the analysis and the vision the main areas for promoting are identified. The promotion from the public sources will be concentrated on the human resources, research institutions and regional business. During the preparation of the strategy and its realization the private - public partnership is boosting. This case study describes how the Regional Innovation Strategy was developed, what methods was used and who was involved in this process. The Strategy represents a ground for alignment of VET policy and economic development policy of the region.

Summary

Strategic documents give to all stakeholders the important information on the future development for the individual areas. The Regional Innovation Strategy consists of two basic sections. The first one is an analytical section defines the position of the region, the second one is an proposal section. Proposal section identifies two main areas where the public resources should be allocated and the strategic objectives which should be reached in these areas. Several specific measures for each of the areas are proposed and their implementation will be monitored by specific indicator. The important feature of the Regional Innovation Strategy is a fact that in the phase of preparation and realization all important regional stakeholders are involved. Together, stakeholders are best placed to set ambitious but realistic objectives as well as to follow up and monitor the expected achievements.

Context and setting



Economy and geography of the Ústecký Region Ústecký Region is one out of 14 Regions (NUTS 3) in the Czech Republic. In comparison with the other Regions Ustecky Region belongs to the larger Regions, its area (5,335 km²) is the seven largest one and covers nearly 7 per cent of the total CR's area. Agricultural land represent nearly 52 percent of the total area and the rest is nonagricultural land namely forest land (36 per cent). Region is located in the north western part of the Czech Republic and shares the border with Germany (Saxony). This boarder character provides a lot of opportunities for collaboration with Saxony. The collaboration enhances by EuroRegion Elbe/Labe and aims at Regional planning, nature and environment, business development and tourism/ development of infrastructure, civil protection and rescue, traffic, culture, education, sport, health and social services. Demography situation in the Region is not favorable, the number of population decline continuously. In the period 2008-2013 the total population in Region shrank by nearly 11 thousands persons and nowadays 825 thousand people live there. This situation is caused by negative migration balance, especially young and well educated people leave the Region, as well as by negative natural demography development. Aging process troubled the whole Czech Republic is visible also in Ustecky Region still the share of people 65+ is lower than the Czech average. The Region is highly urbanized, 81% out of the total population lives in the cities (according to the Czech law the city is a municipality with more than 3 thousands inhabitants). An important trend that has affected the economy of the Ústecký Region since 1990 is the restructuring of traditional sectors. This mainly concerns heavy industry concentrated in the basin areas of the Region, specifically mining and quarrying, energy, the chemical industry, glass, ceramics and porcelain production, metallurgy and the metalworking industry. Regardless of this process the structure of the economy shows the persistent industrial nature with a high proportion of traditional sectors. According to employment in the individual sectors, in addition to the traditional significance of the mining and energy industries there are other clearly important sectors, such as the automotive industry (production of parts and accessories), mechanical engineering and electrical engineering. Other important sectors in terms of employment include the chemical industry, glass and ceramics production, and the manufacture of building materials and metallurgy including the manufacture of fabricated metal products. There is an obvious abrupt decline in the traditional textile industry. As a result of structural changes in the economy of the Ústecký Region, there was a sharp increase in unemployment. Among the Regions of the Czech Republic, there is the highest average unemployment rate in the long term. Unemployment in the Ústecký Region it is approximately 4 - 6 percentage points higher than the average. In the year 2014 the unemployment rate was 11 %, there was 17 applicants per one vacancy. From the territorial point of view, the unemployment rate in the Ústecký Region is differentiated. This is due to the good transport links (and therefore available job offers) to Prague and Central Bohemia from some parts of the Region and due to a different economic base. A negative trend is the high proportion of the long-term unemployed (unemployable); it reaches the highest values among the Regions of the Czech Republic. More than 40 % of the unemployed are without a job for over a year. Vocational education and training The educational structure of the population is not a strong point of the Ústecký Region. There is one of the highest shares of persons with incomplete or only elementary education and those without any education, and one of the lowest shares of university graduates. Although the employment of university graduates in the Czech Republic has been growing, the dynamics of this trend is lower in the Ústí nad Labem Region than in most other Regions. In this Region there are

96 secondary schools, 9 higher professional schools and 1 university. The number of students has been continuously decreasing in recent years because of negative demographic trends. As part of the restructuring of the network of secondary and higher professional schools in the Ústecký Region, in recent years there have been mergers of these schools, and a network of backbone schools has been created. The aim is to optimally serve the catchment areas, reduction in operating costs and improving the effectiveness of the investment costs. The problem with the vocational education system in the Ústecký Region is the mismatch between its field specialisation and the labour market, or the demands of major companies on human resources. Schools are not always able to obtain students in fields for which there is a demand in the labour market. The declining population size of individual years leads to an increase in the capacity of more attractive schools (especially grammar schools and business schools). This is also one of the reasons for the lower interest in apprenticeship fields. The lower interest in studying vocational fields has led to the existential problems of some secondary vocational schools. The Regional university (UJEP) performs as the scientific, pedagogic and cultural & educational centre of the Ústecký Region. The university educates more than 10 thousands students not only from the Ustecký Region. The university has historically positioned itself in the field of humanities that is a bit in a contradiction with the industrial orientation of the Region. Nowadays there are 8 faculties (Faculty of: Social and Economic Studies; Art and Design; Philosophy, Education, Health Studies, Environment; Production Technology and Management; Science). There are also detached facilities of other public universities in the Ústí nad Labem Region. There are branches of the Faculty of Transportation Sciences and the Faculty of Nuclear Sciences and Physical Engineering of the Czech Technical University in Děčín, a branch of the Faculty of Mechanical Engineering of the CTU in Chomutov, and branches of the Faculty of Chemical Technology of the Institute of Chemical Technology and the Faculty of Mining and Geology of the Technical University of Ostrava in Most. There is a relatively large number of private universities and their detached facilities in the Region. However, their role in terms of R&D is marginal.

Description

Scale

Regional Innovation Strategy plays a crucial role in further economic and social development of the Ustecký Region. This strategy is based on the deep analysis of the current situation and formulates the vision of the region, main areas that should change and how these changes will be achieved by individual measures. The basic tool for the strategy implementation will be the action plan. The realization of these changes will be promoting by European Funds in the period 2014-2020. The strategy consists of two sections – Analytical section and Proposal section.

Analytical section aims at

- Position of the region – economic development, labour market and wages, economic structure, performance and competitiveness of the main sectors located in the Region (mining and energy, chemical industry, mechanical engineering, glass, porcelain and building materials), external economic links, innovation activity of enterprises, human resources;
- Research and development, innovative business – description of the facilities carrying out research and development, specialization, results, application (transfer results into practice);

- Public administration and its role in the region's innovation system – interventions in the innovation system, overview of the existing plans and programmes;
- Main actors in the innovation system - results of the stakeholders analysis – universities and research organizations, innovation companies, other actors;
- SWOT analysis. Proposal section consists of:
 - A. Vision that is based on the answers to three main questions:
 - *What we are? A region with a specific economic base affected by the ongoing transformation of mining and heavy industry and historically focused on a lower value added; A region with limited capacities for research and development and with their difficult application in the commercial sector; A region with lower-qualified human resources and a discrepancy between the education system and the labour market needs.*
 - *What we want to be? A region with a growing economy that creates attractive employment opportunities; A region with an emphasis on preserving traditional sectors while increasing their added value; A region open to collaboration in research, development and innovation.*
 - *How to achieve it? Through the concentration of forces into selected areas of development; Through the mobilisation of all actors and their mutual cooperation; Through the utilisation of the internal potential of the region as well as external sources of funds.*

Vision of Ústecký Region

The Ústecký Region is economically growing and creates employment opportunities for educated people. Traditional sectors are modernising, increasing their added value and seeking new directions of development. There is an increasing number of companies that actively use knowledge and new technologies. This is made possible through the cooperation with a strengthened regional research and with research and development centres in the Czech Republic and Saxony. The important part of the proposal section is a formation the indicators of successful vision implementation, i.e. economic performance compared to the other regions, the proportion of university-educated employees in the regional economy, the share of goods with a higher added value in the regional export, positive selective migration into the region.

- B. Key change areas that are identical with three priorities identified by management group of the Innovation Strategy. The innovation strategy focuses only on two first priorities: Human resources to increase the innovation and technology performance of the regional economy and Strengthening the innovation features of the regional economy.

Type of VET and policy

The availability of technically trained, qualified and skilled labour force for companies and research organisations in the region is one of the most significant identified barriers to the innovation system. The problem of shortage of technically trained, qualified and skilled labour force is reflected not only in innovation-oriented companies, but also in many companies in the manufacturing industry, and concerns not only highly skilled university graduates, but also technically educated secondary school graduates and skilled blue-collar workers. The lack of qualified applicants also affects the research and

development facilities in the region. In the area of human resources, three main groups of issues that affect the conditions for the development of innovative business and excellent research were identified.

1. At the university level: The demand of the corporate sector (especially industry) in the region does not meet the offer of education in science and technology. The field specialisation of the University does not correspond to the focus of the local industry. The professional and personal profiles of many graduates do not meet the requirements of the private sector. There is a continued negative balance of migration of talented young people who leave to study outside the Ústecký Region, and many of them do not return after graduation. In addition, university graduates are not too interested in starting their own business. The aim is to establish cooperation of university students with specific businesses in the Ústecký Region, both before and after graduation. This will help to ensure a high-quality labour force for enterprises especially in areas that are crucial for the region. It is also necessary to support the gradual change of specialisation of the University and place a greater emphasis on technical and natural sciences and the interconnection with practice and research collaboration with other universities not only in the Czech Republic. The long-term goal is also to encourage the graduates of the University to set up their own businesses using the know-how of the university. The basis of all measures is a long-term systematic work with students at the University and in other technical and science-oriented fields in the Czech Republic, and with companies that create the demand for educated labour force.

The aim is to ensure a skilled labour force for innovation companies in the Ústecký Region and at the same time to expand the job offer in the region in order to increase the proportion of graduates of the University finding adequate employment in the regional economy and to reduce the number of university students who do not return to the region after graduation (reduce the outflow of talent).

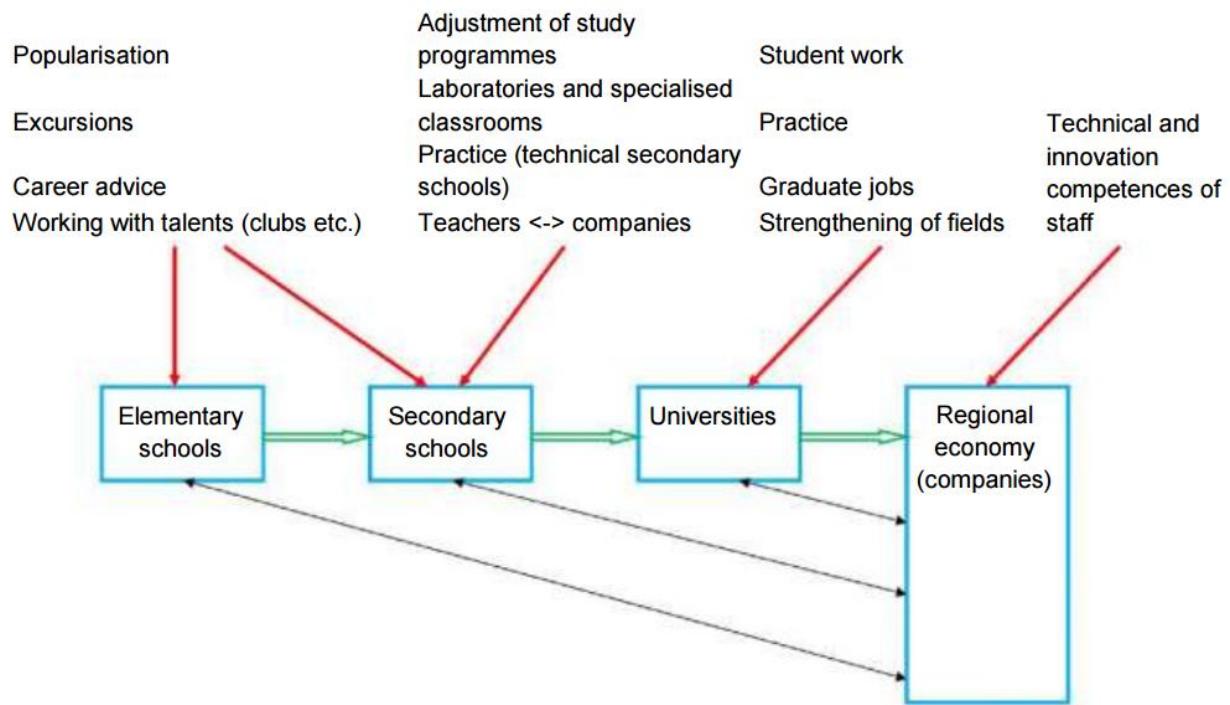
2. At the secondary school level: Secondary technical school graduates are insufficiently prepared for practical work for companies, both in terms of expertise and in terms of motivation. Poor quality (personal and professional) of graduates of technical fields is caused, among other things, by little interest in these fields and little motivation to pursue technical careers in manufacturing companies. The problem is also little consistency between the needs and requirements of companies on the one hand and educational programmes and the content of secondary technical school curricula on the other. Students at general secondary schools (grammar schools) do not envision their future careers in the technology sector and do not choose technical or science-oriented universities. To improve the current situation, it is possible to take advantage of the ongoing processes at the level of secondary education, where the region is the main authority (building a system of backbone secondary schools, strengthening of technical disciplines, improving the facilities for teaching technical skills). The potential of these changes will be supported by the popularisation of technology and science as a whole, and especially attractive jobs in major regional companies. Overall, there will be an increase in collaboration between vocational secondary schools and the private sector. The aim is to improve the quality of education at vocational schools, increase the relevance of education in relation to the needs of the corporate sector, and increase the number of secondary school students who will continue their studies in technical and science-oriented universities.

3. At the elementary school level, there is an insufficient emphasis on science education and technical skills and a low popularity of these disciplines. The aim is to support these fields and motivate elementary school pupils with better learning capacities to choose technical fields at the next level of education. The objective is to find the potential candidates for future careers in technical

(science-oriented) fields, work systematically with talents and motivate them to opt for further technical education. The overall objective of the change area is to ensure that companies that seek innovation cooperate with the education system in the long term and acquire high-quality human resources, both at the level of top experts (own research and development) and in the category of technical workers and skilled blue-collar workers. Four strategic objectives were stipulated. The progress in their implementation of individual measures will be monitored by several indicators.

Strategic objective	Indicator
Increase the number of young graduates employed in the region	The number of university-educated employees aged up to 30 in the region.
Improve the quality of teaching science and technology in secondary schools	Unemployment rate of graduates of local technical secondary schools
Increase the popularity of science and technology to attract talent	The percentage of elementary school pupils entering secondary schools of technical and scientific focus The percentage of secondary school students entering technical faculties of universities
Improve the professional qualification of employees	The number of suggestions for improvement/innovation made by permanent employees of companies
Entire key area	Number of graduates (at all levels) residing in Ústecký region who will work in the region five years after graduation Saturation of the companies demand in Ústecký region for science and technology-educated labour force (measured by a survey among companies)

The strategic objectives should be achieved by specific measures. Measures proposed may be represented as follows:



Target groups

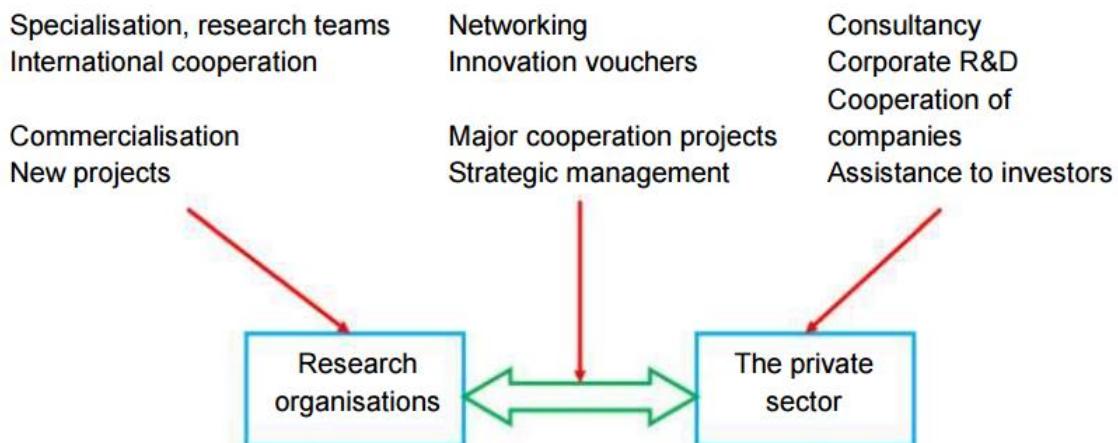
Target groups relates to two identified priority areas. Measures from the priority Human resources to increase the innovation and technology performance of the regional economy aims at the following target groups:

- students of universities of technical and science focus;
- students at technology and science oriented secondary schools;
- teachers;
- pupils at elementary schools;
- students at grammar schools;
- employees of companies in selected fields;
- companies, mainly innovation companies.

Priority Strengthening the innovation features of the regional economy The collaboration between research organisations and the corporate sector and other businesses to find opportunities for innovation and in the introduction of innovations and the development of technologies and new products is very low. Even in cases where companies build their competitiveness on innovation, most innovations arise within the companies, without the involvement of universities or public or private research institutions. Conversely, if the local academic sector cooperates with companies, these are often companies outside the region, and it is a collaboration with lower training requirements (measurements, etc.). The overall objective of the change area is that the greater part of companies in the Ústecký Region use innovation to increase the added value of their activities and as the main source of their competitive advantage in the market. This applies both to large companies in the traditional sectors and to small and medium-sized enterprises. At the same time, the development of R&D facilities in the region will seek to make maximum use of their potential for applied research. Three strategic objectives were stipulated. The progress in their implementation of individual measures will be monitored by several indicators.

Strategic objective	Indicator
Increase the rate of technology transfer between research organisations and companies	Number of collaborations (companies with R&D) facilities in and outside the region, research teams in the region with Czech centers of excellence, joint, RDI projects with partners in Saxony. Revenue growth of research organization in applied research, commercialization of knowledge and technology transfer.
Increase the number of new innovation companies and the number of innovation activities in the existing companies Strategic	Number of enterprises with innovation activities Number of R&D employees in the private sector
Increase the quality and scope of regional research with application potential	Number of application results of research organization in Ústecký region
Entire key area	Corporate R&D expenditure Increase in the turnover of supported companies Growth in the productivity of the regional economy

The strategic objectives should be achieved by specific measures. Measures proposed may be represented as follows:



Target groups for these objectives are:

- companies in selected priority sectors and innovation companies,
- R&D organisations in the Ústí nad Labem Region, Czech Republic and Saxony,
- new investors in the Region,
- University,
- research organisations.

How is it organized

The development of the strategy was governed by special management group consist of 15 members, the representatives of key stakeholders in the Ústecký Region, i.e. Regional authority, Regional chamber of commerce, Regional office of Czechinvest (Czech Investment and Business Development Agency), the most important employers in the region, university and research institutions located in the Region. Management group has defined three priority areas: • Human resources to increase the innovation and technology performance of the regional economy • Technology transfer and cooperation between research organization and business sector • Innovation in public sphere For each of these priority areas the working groups were established from the Regional experts. The working groups proposed individual measures – its description, implementation The private sector Research organisations body, collaborative bodies, and financial resources. Company Berman Group an international economic development consulting firm providing advisory services in competitiveness, innovation and Regional development was selected as complier of the Regional innovation strategy. MORE Regional innovation strategy was deeply discussed in the Regional authority (Regional council) and approved by it (Regional assembly) at the beginning of the year 2014. In addition to this, the Innovation Strategy was actively discussed also with other platforms operating in the region.

These include in particular:

- The Standing Regional Conference of the Ústí nad Labem Region.
- Working groups of the Employment Pact of the Ústí nad Labem Region.
- Specialised departments of the Regional Chamber of Commerce of the Ústí nad Labem Region.

The source of the data for the analysis was publicly available information of the Czech Statistical Office, Ministry of Labour and Social Affairs, Ministry of Education, Youth and Sports. Another input was a personal survey among major organisations of the research and development system and the public administration, which provided information on the research specialisation of the Region and the interventions of the public sphere.

Extensive information about the position of the Region in terms of relevant indicators were provided by analytical documents at the level of the Ústí nad Labem Region:

- The Development Programme of the Ústecký Region - Regional Profile): population, economy, social infrastructure, transport and transport infrastructure, technical infrastructure and the environment;
- Analysis of the innovation potential for technology transfer: innovation performance of the Czech Republic, the innovation potential of the Ústecký Region, innovation infrastructure in the Region, support for research, development and innovation in the Czech Republic from public sources;
- Market survey of the research and development needs of businesses in the Ústecký Region: a survey in the form of structured interviews among more than 100 potential innovation companies in the Ústecký Region

The following methods were used to interpret the analytical findings:

- SWOT analysis;
- problem analysis;
- stakeholder analysis;
- analysis of the position of selected companies in the value chain was examined in the survey of R&D needs of businesses. Implementation structure Implementation structure is four phase. At advisory level there is Science, Research and Innovation Council of the Ústecký Region composed of the representatives of the regional government (councillors) and other institutions.

This advisory body gives their expert view of the individual measures to the Board of the Regional Council for Competitiveness, the members include representatives of the business sector, research organisations, the public sector and other support organisations. Also three specialised innovation platforms are involved in the preparation of the strategy realization; the members are the representatives of companies and research organisations in the individual sectors that were identified as the strategic sector for future development of Ústecký region. These platforms are: Chemistry innovation platform, Coal mining and utilisation, related fields, landscape restoration innovation platform and Glass and ceramics innovation platform. Regional Development Department of the Regional Authority is the executive unit. Its role is especially managerial and organisational, execution of monitoring and evaluation of implemented measures, preparation of action plans.

What worked and why

It is too early to assess what worked, because only the phase of Strategy preparation and its approval has finished. Positive experience connects with the organisation of Strategy development. The external firm hiring as a main complier had a positive impact on the quality of the strategy. The firm has an objective view on the economic and education process in the region has an excellent analytical team and experience with leading the working group. Involving the decisive regional stakeholders to the

strategy preparation is the other important feature. It is an condition for their identification with the aims of the strategy.

Constrains

Working group functioning was a challenge, because it was difficult to find out the term for their meetings. All of the members were very busy persons. More constrains can appear during the implementation phase. In the area of human resources the following barriers can be: Protest of inhabitants, especially the parents of young people against the optimisation of the regional education system. This optimisation depends on the massive political support because it needs to take unpopular steps – merging/closing of schools. The lack of internal financial resources will not make the implementation of the individual measures possible. The capacity utilisation of teachers at elementary and secondary schools and their related (un)willingness to implement new activities aimed at improving the quality of teaching and enhancing the pupils/students interest in science and technology In the area of innovation features of the regional economy the main barrier will be unsatisfactory development of communication between universities and companies in the region. This will constrain their regular cooperation and implementation of the R&D results and innovation process in the companies. The lack of regional and private sources can aggravate the shift of the regional economy to the innovative economy, to the enhancing the innovative features of the regional economy.

Impact and Replicability

The main aim of the Strategy is to promote economic development and competitiveness based on the knowledge and innovation use and direct human resources to the strategic business. It is impossible to evaluate the impact because the implementation plan is nowadays ended. Still the strategy is very important information source for career advisors, schools, university and research institution, to ensure graduates will receive such knowledge needed by labour market, the unemployed people will be retrained for strategic business and R&D results will find the practical usage. The Strategy is easily replicated in the other region.

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