

















## **Attracting people to the educational pathways that lead to the metal, engineering and technology-based industry**

**Experiences and examples of actions undertaken by members of the EMF and CEEMET**

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## Trade union

### **1. Initiatives related to this topic that you have been involved in over the past decade:**

Cooperation with education and VET :

- Exams organised by the sector
- Adaptation of the job profile
- Continuous training for teachers
- Lending material
- Conception and diffusion of promotion tools and pedagogical tools
- Liaise with the education system and companies

Actions for workers looking for a job:

- Develop programmes and support training institutes
- Financing specific actions

Actions to train workers :

- Premium for companies and to a certain extent for workers
- Measures via collective agreements
- Publications, guidance

## Evaluation

Good cooperation with the VET actors, SP have an interest but VET continue to attract less and less people. It is often difficult to fill in the open positions. Many workers live these sectors after they had lost their job.

Actions are conducted on a permanent basis and continue to evolve.

Employment trend and the media coverage of plant closure and restructuring, delocalisations are not conducive to promote the attractiveness of the sector.

## **Trade union**

### **Attracting people to VET and to the industry**

#### **Summary**

At national and at the European level is necessary to establish long-term strategies, not strategies that have one or five years long but it is a comprehensive and long-term vision for the development of VET.

Clearly each step should be aimed at both specific points related to economic trends within the development of each member state's specific labour market needs, and second - every step must be the result of many shared initiatives, best practices and innovation solutions to help promotion and development of VET.

In Bulgaria there are two nationally representative trade union confederations: KNSB and PODKREPA. Their policy in recent years is purposed to actively participate in social and economic life in the country and thus to reinforce the trade union movement.

On a sectoral level, we have representatives in groups and committees for vocational training and education and we participate in discussions and issues related to offering a flexible and stable policy on vocational training and education and development of the national labor market to be much more adequate to the new challenges of a global economy

#### **What initiatives to attract people to VET and the industry have worked well and why?**

All initiatives that have the ability to meet regional needs for training and retraining of employees, initiatives aimed at reporting, or rather respect for special needs for education at sectoral level.

#### **What has not worked well and why?**

- When there is no link between training and needs of the economy and business - it closes the labour market.
- When there are no non-stop initiatives and working nets to provoke and stimulate the access to vocational training and retraining and obtaining higher qualifications by every worker at any time.

### **Joint contribution**

The following summary of activities and projects includes ongoing and completed joint activities by DI and Dansk Metal. This review therefore covers both questions 1 and 3. For each activity / project, an assessment of the initiative is given.

Regarding all below mentioned initiatives, it is too early to assess whether they have helped to make VET more attractive.

### **Initiatives we have been involved in through 2009/2010**

Overall objective of strengthening vocational education in the metal industry sector:

VET-programmes for the MET-industry should appear as relevant and attractive to all young people with different educational qualifications and aspirations as well as ensure that the labour market need for skilled employees is being met. An active effort is being made to convince all young people in vocational education and training to stay on. This includes both the young people who have the educational qualifications, skills and ambitions of wanting something more as well as the young who need a helping hand along the way to complete their education.

Thus we put strong focus on strengthening vocational education and training, in order for it to be challenging for all young people and to ensure that there are challenges and opportunities including subjects at higher levels for the brighter pupils. Strengthening VET through a flexible range of courses for different student groups will help to attract and retain all young people with different educational qualifications.

There are a number of initiatives to ensure this:

#### **Development of optional high-level subjects**

Within the VET-programmes for the MET-sector high-level subject courses are being developed for those students who have the educational qualifications and skills to undertake training at a higher level than the compulsory level. The aim is to retain students in VET-education so that they do not leave because they are bored. A number of vocational schools today offer specially tailored basic VET aimed at these students. The optional high-level subjects are an instrument for the vocational schools to provide challenges for the highly skilled students. The high-level courses are indicated in the final VET-certificate.

#### **EUX**

EUX is a new education possibility where students receive both a vocational and general upper secondary education in a comprehensive course. EUX is a diploma at secondary level in VET.

The EUX programme is based on individualized training, so the compulsory foundation program on the course will be different for students in, for example, technical studies and students in commercial studies. The courses will also take into account that subjects in vocational education can contribute to the student's study competence.

The EUX was introduced in 2010 and is still under implementation.

#### **Centres of Excellence**

Centres of Excellence is a nationwide project which gives talented students in VET an opportunity to become even better. In two training centres environments are set up in which apprentices in cleantech and manufacturing are challenged and offered education at a higher professional level. Simultaneously the Centres aim at broaden the focus and expertise of the vocational schools involved.

The Centres are financed and managed by Industriens Fond and DI, with Dansk Metal and other social partners as associate partners.

#### Evaluation of initiatives:

Development of high-level subjects models, EUX and Centres of Excellence etc are all part of a series of initiatives to strengthen training, so the academically strong pupils are challenged and hence remain in VET-education.

Moreover, the new opportunities to undertake VET at a higher level aim to attract more young people to VET, such as highly competent young people who would otherwise choose for instance a general secondary-level education.

#### **Needs analysis in Cleantech**

To create optimum growing conditions for Cleantech companies in Denmark, DI and Dansk Metal have implemented a project which identifies training needs in energy-/environment subjects. The project will ensure the availability of the necessary initial and continued VET that businesses in this sector need now and in the future.

#### Evaluation of the initiative

Analysis has shown that current VET available generally covers training needs in the energy-/environment subjects.

#### **Professionalism in tomorrow's technical vocational education**

"Industriens uddannelser", secretariat for the joint Industry Trade Committees (founded by DI, Dansk Metal and 3F) completed a study in 2009 of what a technical VET-education can be used for in the long term. The study was conducted in cooperation with Roskilde University, commissioned by the Central Analysis and Forecast Unit under the Ministry of Education. The aim was to investigate whether this type of education provides a good basis for lifelong learning and whether it offers several career possibilities. The study focused on 10 industrial courses which vary in length and subject focus.

#### Evaluation of the initiative:

The project's main conclusion is that there are many different career opportunities for people with a technical VET-education. Career paths for those who graduated in 2001 are characterized by high levels of mobility. The skilled are mobile vertically, horizontally and across industries. Nevertheless, some groups are only slightly or not mobile at all. This does not suggest that a technical education is an obstacle in meeting career goals. However, some limitations were identified that mainly focused on opportunities for further and continued education and training. It is therefore possible to improve young people's career prospects after they have completed technical education.

#### **Job profile analysis**

"Industriens uddannelser", secretariat for the joint Industry Trade Committees (founded by DI, Dansk Metal and 3F) launched a study in 2009, with financial support from the Industry Education Fund, where the aim is to anticipate future job profiles and skills needed in manufacturing. The analysis will culminate in a series of concrete recommendations for new or revised educational structures in the industrial VET-programmes.

#### Evaluation of the initiative:

The recommendations will feed into the education committees' decision making regarding which initial and continued VET that is needed in the manufacturing industry within the next 10 years. The conclusions will be implemented in future curricula of the VET-programmes.

#### **Youth-to-youth**

"Industriens uddannelser", secretariat for the joint Industry Trade Committees (founded by DI, Dansk Metal and 3F) launched youth-to-youth campaign in mid 2008, which continued in 2009. The campaign aimed to engage those already in apprenticeships as role models and send them out to visit students in the graduating classes to talk about their own educational choices and daily life as an apprentice in the company and at a vocational school. The aim is to get young people to think of VET as a future choice to a greater extent than they do already.

Assessment of the Initiative:

The youth-to-youth campaign was ended due to resource reasons.

**Windmill industry vocational skills needs**

“Industriens uddannelser”, secretariat for the joint Industry Trade Committees (founded by DI, Dansk Metal and 3F) launched an analysis project of the wind industry's professional competency requirements in 2008 under the Ministry of Education's Central Analysis and Forecast Unit (CAP). The focus of the project was to identify which tasks skilled employees in the wind industry perform and what skills such tasks require - now and in future. The project included both qualitative and quantitative studies. The project results have relevance for several of the education committees responsible for the development of technical education. The project was completed in February 2009.

Assessment of the Initiative:

The project has so far not resulted in the development of new subjects or courses.

**Trainer Guide (International project)**

Trainer Guide is an electronic tool developed in Denmark to streamline the guidance performed by the companies relating to the training of apprentices. The idea has been translated into a project supported by the EU. Through cooperation with 6 countries, editing and development of new elements has been done in parallel, both in the international and national models. The international project was completed in June 2010. The Trainer Guide Association ensures ongoing updating of the Danish version.

Assessment of the Initiative:

There is a need for a major marketing initiative of the Trainer Guide.

**VET-LSA (International project)**

The project provided an evaluation and comparison of learning outcomes in a number of educational areas from a European perspective. The selected programmes (including engineering) and the matching tasks / functions in the related areas of employment were compared in seven participating countries. Based on this information, a common international framework was developed in 2009 that would later form the basis for the development of international joint tests.

Assessment of the Initiative:

Subsequently, the Minister of Education has chosen not to pursue this process for, among other things, economic reasons.

Many of the above / initiatives continue to run and we continue to be involved.



### Joint contribution

#### **Initiatives on attracting young people to VET and the industry that we have been involved in over the past decade:**

The Federation of Finnish Technology Industries organises every year in 10 – 15 locations in the different parts of Finland training and workshops for teachers and heads of secondary schools to introduce them to job opportunities, work environment, staff, innovations, products and services of technology industry. We also finance and support every year about 15 secondary school – industry co-operation projects. As a result of these initiatives about 10 000 pupils and teachers a year carry out study visits to technology industry companies.

The Federation of the Finnish Technology Industry organises together with the Finnish Software Entrepreneurs Association a competition for the general upper secondary school students regarding the new business ideas based on the use of ICT. The students participate in the competition and work on the project as a team.

In 2008 – 2010 the Federation of Finnish Technology Industries and Metalworkers' Union have been undertaking a special initiative to minimize the negative impact of the recession on students' interest in iVET studies in the MET industry fields. Our aim is on one hand to activate and support the companies to provide secondary school pupils and iVET students with interesting and challenging summer jobs, placements for workplace study periods and practical study periods and on the other hand to bring positive publicity to bright iVET students who are practicing in the MET industry through interviews and stories in the local and national media as well as in the internet, e.g. [www.opiskelijaboxi.fi](http://www.opiskelijaboxi.fi). The employees of the social partners also visit several secondary and iVET schools every year.

The Federation of Finnish Technology Industries produces short DVDs on job opportunities, competences requirements, innovations and R&D in technology industry, e.g. <http://www.youtube.com/watch?v=9v9vEdMd36c>, for the use of schools.

The curricula for iVET degrees in the MET industry fields were renewed recently in 2008 – 2009 to improve the quality and impact of iVET education and to increase the flexibility and renewal capabilities of the iVET system. That work was carried out in close collaboration between the National Board of Education, iVET schools, the Employers and Employees organizations and companies. The work continues now at the local level in order to implement the new curricula in close co-operation with schools and industry. At the national level the curricula renewal work continues with continuous VET qualifications.

Due to the Social Partners' initiative the Ministry of Education and Culture also initiated a pilot program in 6 regions in 2009 – 2012 concerning technician and team leaders' training in mechanical engineering. The training is meant for skilled workers in technology industry having a minimum of 3 years work experience and typically also an iVET qualification. The Federation of Finnish Technology Industries and the Metalworkers' Union have been and are involved in design of the curriculum and assessment of the outcomes of the pilot project. We have also organised together some training courses related to e.g. mentoring and sharing silent knowledge within companies and partner networks.

The Social Partners are also members of the sector specific and general Education and Training and Skills Councils together with the representatives of the educational institutions. The main role of these Councils is to anticipate the future competences needs in the concerned sectors and propose measures to meet these needs.



The Federation of Finnish Technology Industry reports on the outputs of the different activities and projects on yearly basis to its governing body. We also assess and evaluate the outcomes and impact of our initiatives in view of our member companies needs using independent researchers. The next evaluation regarding our initiatives to improve the attractiveness of technology industry will be carried out in the springtime of 2011. Both qualitative and quantitative indicators have been identified.

Our experience is that changes in the education system take place rather slowly and therefore it is important to agree not only on the overall objectives but also on the concrete intermediate milestones and to get the companies and teachers committed into the long term co-operation. It is also important to plan well the lifecycle of the project/program - the initial pilot phase, the scaling up phase and finally the phase when the new practices and outcomes are impeded in the education system. We prioritize initiatives where our member companies are very actively involved and where we can clearly bring some added value to teachers and schools. Innovative outcomes and ways of learning interest different stakeholders even if the initiative has been a small scale one.

### **Has the situation has improved/worsened and has the debate progressed?**

There are many positive outcomes from the joint programs, emerging positive trends e.g. in terms of the number of students applying for iVET education and training, and also national level initiatives to improve the quality and impact of iVET.

Because of the changing age structure, the changed interests of young people, and the ongoing global structural change we are however facing a continued and increasing challenge of improving both the attractiveness and quality of education and training in MET industry related fields. The quality challenge applies to all sectors of education and training. The quantitative challenge concerns particularly iVET.

### **What can be done jointly at European level on this issue?**

We can jointly draw attention to the importance of MET industry for the European economy, employment and people's every day life. We can also bring publicity to the MET industry's renewal capability, its role in new important innovations and the skilled people working in the MET industry in various professions.

We can also jointly continue underlining the need to focus on quality and excellence in VET as well as in the university sector education and emphasize the importance of the learning outcome approach and assessment in terms of qualifications and degrees.

The Industrial Policy for globalisation era – flagship initiative might offer an interesting framework to address the above mention issues among others.

## **Employers' organisation**

### **Initiatives on attracting people to VET and the industry that we have been involved in over the past decade:**

The attractiveness of industrial jobs is an important target of the policy developed by our sector since many years. Strongly based on its local network, UIMM has set up several information actions on jobs and on occupational guidance, mainly targeted at teachers, parents and guidance advisers, under the slogan "Bravo l'industrie". The goal of this initiative is to raise awareness on the industry and the jobs linked to it in order to accompany companies in their search for motivated and qualified employees. The initiative targets three types of public: young people, those who deliver guidance (parents, teachers and guidance advisers) and employees. We also finance regularly studies on jobs and the image of industry.

Several actions have been lead: some quite traditional such as information events on jobs, company visits and conferences. And other more original like a wide campaign to attract young girls in order to valorise their commitment in scientific and technical pathways.

Young people guidance is an important issue, tackled by our sector since many years, and for which we have developed an accompanying methodology called "Education to occupational choices" dedicated to young people, apprentices, students and employees.

### **Initiatives that have worked well and why**

☞ Information in schools on companies and the jobs they propose, thanks to meetings with professionals. And thus as a consequence, the perception / image of the industry is improved for those who have benefited from this initiative

Partnership contrat « Bravo l'industrie »

- 24 000 partnership contracts
- 140 000 young ambassadors of the industry
- 6 000 participating companies

☞ The process launched on guidance with the methodology on « education to occupational choices » allowing young people to work on their guidance or occupational project; the following tools have been created and implemented:

- A game of professions , which allows young people to discover their interests and to put them in adequacy with corresponding jobs ;
- Practical courses at University: module of five practical courses during the 1st year of University allowing the student to discover a professional universe and to check if his/her training pathway is relevant. The Personalised Occupational Project (« Projet Professionnel Personnalisé ») is already supported by teachers and is an integral part of the university pathway.
- A device called « Before Thesis » which enables students wishing to pursue their studies with a Doctorate to have a personal and global reflection on their pathway and occupational future. Around 20 universities are engaged in this device.

In the Training Centers for the Apprentices of the Industry, the implementation of the « Education to occupational choice » methodology, proposed to industrial apprentices from the lowest level to the engineer level, has led to a reduction of the number of apprentice terminating their contract before the end (to a level of 6% compared to 25% at national level).

### **What has *not* worked well and why**

☞ It has not been possible to change fundamentally the image of the industry perceived by parents, teachers, and guidance advisers.

Why ? :

- The media often give only negative information on the economic world (redundancies, stress at work, pollution etc.)
- It is difficult to create the contact with some of the teachers and guidance advisers (in secondary schools and universities etc) when it comes to acting directly
- Parents do not consider industrial jobs as valorising / positive for their children

☞ Multimedia tools used are rapidly obsolete and do not always answer the expectations of the targeted groups.

### **Has the situation improved or worsened and has the debate progressed?**

We can consider that the situation is improving thanks to the current national debate on young people and employment. One of the levers is the attention given to occupational integration which increases the interest for professionalising training. However, the industry is still not considered / perceived as a sector creating employment.

The educational system is committed to increasing the links with the economic world, even if the image/perception of the industry and the valorisation of technical and scientific pathways are long to change in the mindsets.

### **Currently involvement in initiatives**

The sector is more than ever engaged in actions of information, guidance and discovery of the industry and its jobs. We continue, with the support of our regional/local network and with external partners, to implement new actions but also to pursue those who are well functioning:

- With the Ministry of National Education (“class in enterprise”, “skills booklet” etc)
- By our attendance and mandates in ministerial and private bodies (MEDEF, ONISEP .....

A reflection is currently being led to reinforce these actions finding new approaches, new tools and better articulating national communication campaigns with proximity actions at local level.

### **What can be done jointly at European level on this issue?**

- Joint communication actions
- A reflection on the presentation of jobs
- An exchange of experiences which have proven to be efficient
- Lobbying vis-à-vis European institutions to encourage Member States to develop information and guidance initiatives which allow us to valorise our industrial jobs and the training pathways linked to those jobs.

## **Trade union**

### **Boosting the attractiveness of training that leads to jobs in industry**

As part of efforts aimed at developing links between schools and companies and, on a broader scale, relations between the educational system and economic actors, various actions and mechanisms have helped to boost the status of technological training and career options. For example, two actions have turned out to be runaway successes in this respect, among others, in connection with industrial occupations.

#### **1/ THE WORK EXPERIENCE OPERATION *VIVRE L'ENTREPRISE***

#### **2/ THE *LYCEE DES METIERS* LABEL**

Partnerships between schools and companies can only be developed in a climate of confidence that can be created by mediators who not only come from the business sphere but are at the same time sufficiently involved with education. Two national measures, suitably adapted at the regional level in France, are enabling this need to be met.

#### **3/ THE IPE 'ENGINEERS FOR SCHOOLS' MECHANISM**

#### **4/ AFDET, THE FRENCH ASSOCIATION FOR THE DEVELOPMENT OF TECHNICAL EDUCATION**

## **B / DESCRIPTION OF ACTIONS AND MECHANISMS**

### **1/ THE WORK EXPERIENCE OPERATION *VIVRE L'ENTREPRISE***

At the initiative of the French Youth and Business Association (AJE) and subsequently relayed by other professional associations, the academy in Rennes gave teachers an opportunity to participate in an operation designed to forge closer links between schools and businesses by conducting a mission lasting one school year inside a company. This type of mission prompted a very marked improvement in mutual understanding between educational and business circles, enabling two objectives to be met:

- Allowing volunteer teachers(1) to gain actual professional experience inside a company and become more familiar with the professions needed in industry, and then use that newly acquired knowledge to develop their teaching methods and, among other things, advise their pupils about potential career options
- Forging durable links between schools and local businesses, taking part in their development and thus facilitating young people's integration into professional life.

(1) The involvement of college professors was a tremendous success, among other things with respect to acquiring knowledge and 'demystifying' industrial occupations, especially since in many cases guidance towards a career path often takes the form of 'guidance by default', especially where young girls are concerned who all too often hesitate to embark on technological occupations or jobs in industry.

### **2/ THE *LYCEE DES METIERS* LABEL**

The *lycée des métiers* label is awarded for the high-quality approach taken by certain establishments (vocational and/or technical colleges) that offer a wide range of training and services, primarily thanks to their active partnership with both businesses and the respective regional authorities.

The *lycée des métiers* label flags up the comprehensive content of a training course, the consideration of its participants' expectations and the fact that it is geared to meet employers' requirements. It is a label of excellence for paths of learning leading towards technological or other vocational occupations.

The criteria that enable colleges to obtain this label are key elements for facilitating young people's integration into the world of work. The procedure for gaining the label entails a series of audits involving professionals representing the occupations relevant to the training courses in question.

### **3/ THE IPE 'ENGINEERS FOR SCHOOLS' MECHANISM**

The IPE mechanism entails temporarily posting engineers and executives from companies to academies, so that the education system can benefit from their professional experience. The aim of this exercise is to enable the school and business to form closer links and to increase the chances of young people gaining employment.

This mechanism was introduced in three academies back in 1995. Today, around 100 IPEs are spread throughout France. The companies actively involved with this mechanism include Air-France, EDF, EADS, France Télécom, Schneider Electric and Thales.

### **4/ AFDET, THE FRENCH ASSOCIATION FOR THE DEVELOPMENT OF TECHNICAL EDUCATION**

In **1902**, AFDET was set up to serve the technical education sector. It is a recognised association of public interest and is also a UN-accredited NGO.

Registered with the French Ministry of Education, with which it has signed an agreement, AFDET is active nationwide, backed by its affiliates, natural and legal persons, voluntary members from the worlds of business and training.

AFDET endeavours to enhance technical education so that any youngster who chooses that path can be guaranteed effective training and a successful start in working life. The commitments made to develop technical and vocational education and the numerous associated actions play an active role in enabling schools and businesses to forge closer links, making the most of industry's technical sectors and occupations, among others.

AFDET's objectives, in a nutshell, are to:

- \* Enhance technological and vocational education
- \* Facilitate positive guidance
- \* Push training courses to adapt to changes in the economy and adopt a European and international outlook
- \* Promote a genuine partnership between schools and businesses
- \* Foster a culture of technology in the context of general training
- \* Encourage lifelong training and draw attention to the approach involving the recognition of prior learning (RPL).

## Trade union

### **The attractiveness of training is hampered by:**

- *Quality and the bad image of industry (constant restructuring, precarious jobs, working conditions, working time and stress at work, career management and wages).*
- *The lack or weakness of a consistent national industrial policy. National governments gave company executives and shareholders a free hand when they started (and then continued) relocating to countries where social security costs were lower.*
- *The guidelines issued by the European Commission's DG Employment, which advocated and are still encouraging the development of services to the detriment of manufacturing industries!*
- *Insufficient preparatory training curriculum after vocational training courses.*

### **Which initiatives worked well and why**

- There are at least 5 actors: the Ministry of Education, the Ministry of Industry, regional authorities, the unions and employers.
- Active participation in Board meetings of public and private entities, former CNAM, social partners upstream of certification and in working groups drawing up reference documents
- Exchanges between those prescribing training and CGT on individual support, based on our experience of vocational re-education centres (CRPs).
- Careers guidance forum for schoolchildren hosted by people presenting their profession.
- Talks by employees from our companies in training given in schools (Thales).

### **What did *not* work well, and why**

- The five actors rarely work together.
- High-quality vocational training comes at a price! Providing individual, modular training with set curricula takes time and requires teaching resources that those prescribing training only get in pilot experiments!
- Vocational training courses lack clarity.
- **For years now "les grandes écoles" have been offering options on finance that are of interest to banks and the best students have gone off to them and disappeared!**

### **Has the situation improved or worsened?**

The solvency of public training establishments is under threat!

### **Current involvement in initiatives**

CNAM-Ecole Vaucanson- FTM plan for young people in apprenticeships

### **What can be done at European level**

- Change the guidelines issued by the European Commission's DG Employment which has advocated and encouraged the further development of services to the detriment of manufacturing industries!
- Accelerate the merger of the Bologna and Copenhagen processes.
- Work to enhance the transparency of certification (not suggesting any wrong 'good ideas', like European certification).

## Trade union

### **Thème : Encourager l'attractivité dans les filières de formation qui conduisent à l'industrie**

#### Les éléments de contexte

Permettre l'augmentation de l'attractivité concerne les jeunes et adultes qui peuvent intégrer des entreprises et des métiers de l'industrie, et concerne également les salariés en activité dans l'industrie (jeunes et adultes). Le renouvellement des générations est donc un enjeu important, ainsi que l'adaptation des salariés aux évolutions techniques, organisationnelles, sociétales.

Les effets sur l'emploi impactent aussi les formateurs et les personnels dans les centres de formation publics et privés formant aux métiers de l'industrie : des postes d'enseignant technique de l'Education Nationale ne sont plus mis au concours de l'éducation nationale, avec des risques de mettre fin à des filières de formation initiale.

La question de l'image de l'industrie est posée ainsi que la représentation de celle-ci tant pour les salariés qui y travaillent, que pour attirer les salariés à entrer dans les filières de formation.

Images dégradées de pollution, d'atteinte à la santé, d'insécurité de l'emploi, de faible progression de carrières, de non durabilité, notamment du fait des restructurations nombreuses qui se multiplient et du sentiment d'exclusion ressenti à cette occasion.

La problématique est donc le recrutement de nouvelles compétences mais aussi la capacité à conserver les salariés dans l'entreprise ou de les faire revenir dans l'industrie une fois qu'elles en sont sorties. Il s'agit de conserver les compétences, notamment pour qu'elles se transmettent aux recrutés et aux salariés dans le cadre d'une sécurisation de leurs parcours professionnels.

#### **1. Initiatives relatives à ce thème dans lesquelles vous avez été impliqués au cours des dix dernières années :**

- a) Quelles initiatives ont bien fonctionné et pourquoi (pourquoi était-ce un succès/comment les effets ont-ils été mesurés)?

Actions : Dans les CFAI, des orientations de la branche métallurgie ont été définies en 2007 pour diversifier les publics :

- Féminiser les recrutements d'apprenties (qui se limitent à quelques pour cent, sauf pour les formations de techniciens ou d'ingénieurs).
- Accueillir des jeunes de minorités visibles et des jeunes handicapés
- Raccourcir des parcours pour s'adapter aux profils de jeunes en réorientation.
- Aider au choix des jeunes et développer un accompagnement pendant la formation (pour guider les choix de certification et éviter les abandons en cours de parcours)

Résultats : Les résultats sont limités quantitativement et l'évaluation qualitative est difficile à apprécier d'autant que le changement de pratique pédagogique demande du temps. L'outil IFTI (Ilot de Formation Technique Individualisée) s'est développé en parallèle, il contribue à l'individualisation des formations et des parcours, en répondant mieux à l'attente d'une formation individualisée adaptée. .

Actions : Le socle de compétences minimales industrielles a été créé en juillet 2009 suite à l'Accord National Interprofessionnel de janvier 2009. Ce socle constitue une première marche pour certains salariés vers une qualification reconnue dans la branche tel les CQPM de catégorie A.

Résultats : Plus de 2000 salariés ont suivi des parcours de formation pour obtenir ce certificat de branche et valider ainsi des acquis par une reconnaissance. D'autres socles de compétences sont en projet.

- b) Qu'est-ce qui n'a pas bien fonctionné et pourquoi ?

Action : Des actions de communication bénéficient d'un financement de la branche : portes ouvertes pour les lycéens et familles, publicité dans les journaux et sur des panneaux d'affichage publics. Ces manifestations organisées par les directions des centres de formation (CFAI et AFPI) visent des jeunes sortants du cursus scolaire des établissements de l'Education Nationale et leurs familles.

Résultats : Ces manifestations ciblent peu les salariés ce qui pourrait leur montrer une autre vision de la formation et leur donner une appétence. Les organisations syndicales dans les entreprises ne sont pas impliquées par ces présentations et ne peuvent communiquer sur ces portes ouvertes auprès des salariés en activités en entreprises.

Action : La rénovation des certifications de la branche métallurgie est en cours depuis 2006 afin de créer des référentiels d'évaluation permettant une inscription dans le RNCP français (Répertoire National de la Certification Professionnelle) et l'obtention du CQPM (Certificat de Qualification Paritaire de la Métallurgie) par la VAE. Les résultats des travaux de l'Observatoire OPAMQ de branche créé suite l'accord de 2004 n'ont pas été pris en compte par le patronat en vue de réviser et créer des CQPM et des moyens pédagogiques adaptés.

Résultats : Le nombre de rénovation de CQPM est limité à une dizaine par an ainsi que le nombre de nouveaux CQPM. L'objectif d'une rénovation complète demandera plusieurs années. Finalement, quatre études ont été lancées en fin 2009 pour mettre à plat une centaine de CQPM s'intégrant dans les filières de métiers correspondantes. L'obtention des CQPM par la VAE n'est pas encore acquise par la partie patronale nationale.

Action : Plusieurs études de l'observatoire de la branche ont été diligentées. Confiées de manière paritaire à des cabinets choisis, sur la base d'un cahier des charges adopté paritairement, ces études permettent de saisir les évolutions à l'œuvre sur des métiers, des secteurs industriels, Elles produisent des recommandations. Résultats : Mais, faute de déclinaisons opérationnelles, ces recommandations n'éclairent pas les industriels, ni les salariés par manque de moyens dédiés en leur direction.

## **2. Pensez-vous que la situation s'est améliorée /empirée et le débat a-t-il progressé ?**

Un dialogue social plus ouvert, depuis deux ans, sur des améliorations à apporter aux dispositifs des filières de formation conduisant à l'industrie tant pour l'apprentissage que pour la formation continue des salariés a conduit à négocier des accords plus ambitieux : Les séniors, la GPEC, la formation professionnelle, qui doivent être mise en œuvre désormais.

Pour faire face à la crise impactant l'emploi et les qualifications, un accord spécifique, et un avenant sur des mesures d'urgence ont été prises pour « former plutôt que chômer » (pendant les périodes de chômage partiel, ou en dehors), de même que pour conserver le nombre de jeunes en formation professionnelle en alternance. Un désir commun de faire face à la situation s'est exprimé en allouant des moyens financiers importants. Bien que modestes, ces résultats d'actions ont permis de maintenir des emplois et des compétences dans les entreprises l'ayant bien géré.

La seconde phase de la négociation de branche sur la formation professionnelle a été préparée par plusieurs réunions au premier semestre 2010 devrait permettre d'espérer des adaptations conséquentes de l'accord de branche sur la formation professionnelle.

## **3. Etes-vous actuellement impliqués dans une initiative?**

La partie patronale a promu l'idée de mettre en avant la personnalisation et l'individualisation à une plus grande échelle dans les centres de formation de la branche par un développement de l'outil que sont les IFTI, déjà mis en œuvre depuis une dizaine d'années. Ce changement passe par un suivi individualisé et une validation des acquis au cours de la formation permettant d'ajuster la suite du parcours. Un état des acquis et des compétences doit donc être réalisé au fur et à mesure.

Cette démarche va se concrétiser par des investissements matériels, pédagogiques mais aussi humains car les intervenants, formateurs et administratifs, vont devoir faire évoluer leurs compétences pour accompagner et suivre des individus dans leur parcours. Notre implication dans cette évolution est limitée à ce jour.



#### **4. Qu'est-ce qui peut être fait à l'échelon européen sur ce thème?**

Le Passeport Formation avait été créé par l'ANI du 5 décembre 2003 en son article 1-2 et a été repris dans l'Accord National Interprofessionnel général du 5 octobre 2009 en article 4 et 5. La loi du 24 novembre 2009 a repris ce dispositif sous l'appellation de « Passeport Orientation Formation ».

Ce passeport a été mis en place dans certaines entreprises françaises mais son développement reste limité. De ce fait, les salariés ne possèdent pas un état de leur parcours professionnel avec les compétences mises en œuvre et les formations suivies. Les salariés sont donc « handicapés » et mal outillés pour envisager et construire leur parcours professionnel, notamment lors de mobilités contraintes et de restructurations.

Ne sachant pas quelles sont leurs compétences acquises dans l'industrie, certains de ceux qui en sont sortis ne croient pas à leur retour dans celle-ci, ni pour une mobilité professionnelle vers d'autres pays européens.

Outre ce développement de ce Passeport Orientation Formation au niveau européen, un travail sur la reconnaissance des certifications de branche entre pays semble nécessaire au regard du CEC (Cadre Européen de Certification).

## **Employers' organisation**

### **Initiatives on attracting people to VET and the industry that we have been involved in over the past decade:**

Based on my experience, in Italy there have been many initiatives made by local industrial associations. Such initiatives have to do with guidelines mainly for students to help them to choose their higher studies to match the demand available in the market.

Some of these initiatives began several years ago but have since then been improved to include new communication tools available.

For example in the past program such as "Open Days" were held by companies, now there are web sites and DVDs specialised in offering concrete information regarding the job field in various sectors. Hereby some examples:

- shortly after the national scholastic reform, in Lombardy Region a portal ([www.teknicamente.it](http://www.teknicamente.it)) was created to help orient students and their families in choosing most suitable upper school for their individual needs;
- in the Veneto Region a technical guide called "La Bussola" was created on line. In addition there is a DVD available on line which features a virtual experience of fictional situation based on real company working environments. With these tools students can gain an insight of what can happen on company structures;
- in Piemonte facebook is used as a tool to reach students.

At national level since 1996 Confindustria has organised each year an event called "Orientagiovani". This is held in all cities on the same day in autumn with participation of local companies, schools and political institutions.

The target of students has changed over the years from high school students needing to choose university to middle school needing to choose high technical school.

It is not possible to say what initiatives have been more effective and why. In fact the number of enrolments to technical schools and to scientific faculties increases or decreases notwithstanding each year the same initiatives are realised.

This obviously means that the enrolments do not depend only on guidance initiatives. But it also could mean that the initiatives realised are still insufficient because they do not reach an audience sufficiently extensive.

There is a cultural aspect that is crucial, the choice of the school is mainly made by families on the basis of the social reputation of the educational path and technical studies have not a good image.

### **Has the situation has improved or worsened?**

I think the situation is improving. The debate progressed: these items are on newspapers weekly and education and training are included among the strategic lines in the industrial relations. In each conference on industrial relations and economies items like competences, skills, flexibility/adaptability are debated as strategic leverages as a tool for development.

### **What can be done jointly at European level on this issue**

A promotional campaign. Everything that can affect on cultural changes.

## **Employers' organisation**

**Initiatives on attracting people to VET and the industry that we have been involved in over the past decade:**

1. Secondary education
  - <http://www.jetnet.nl>
  - private in initiative of some large companies
  - expanding network with medium-sized enterprises.
2. Primary education
  - <http://www.VTB.nl> - due to public private collaboration
3. VET
  - <http://www.euroskills.com> - awards competition fits the European scale and culture (creativity and collaboration)
4. Social Partners
  - [www.techniektalent.nu](http://www.techniektalent.nu) - strategic intersectoral collaboration.
5. Government taskforce
  - [www.ttoa.nl](http://www.ttoa.nl) - regional and local strategy and plan / integration of local activities using (national) programs or labels
6. Platform Beta Techniek
  - [www.platformbetatechniek.nl](http://www.platformbetatechniek.nl) - 10 years of public investment from the Ministry of Education and Economic Affairs.
7. Higher education
  - building illustrations engineers professions - under construction together with Techniek Talent.Nu

### **What has *not* worked well and why?**

- attracting women to industry and technology
- structural collaboration with professionals/ teachers in secondary school in the area of guidance counselling of students.

### **Has the situation has improved or worsened?**

- situation has improved in the (strategic) institutional cooperation
- operationally the effects are still poor

### **What can be done jointly at European level on this issue?**

JetNet has ambition to develop a label on EU level.

## **Employers' organisation**

### **Initiatives on attracting people to VET and the industry that we have been involved in over the past decade:**

Mainly through the Foundation for the Metal Sector on Training, Qualification and Employment (FMF), formed by Confemetal and the main Trade Unions, our organization has been involved in the last years in **diverse initiatives related, directly or indirectly**, to the topic of the attractiveness of VET as a key factor of competitiveness for industry and the economy as a whole.

**The main initiative** undertaken (in terms of time and resources devoted) and still ongoing at present has been the **Project "METALÍZATE"**, designed and implemented as a result of a fruitful social dialogue between the Spanish sectoral **social partners**.

Since 2008, this Project is being developed in **agreement with the Ministry of Education**, with the financial support of the **European Social Fund**, thus allowing: a further dissemination of the Metal Sector activities and jobs among youngsters; and the establishment of both, new educational tools for VET teachers and the promotion of quality courses for improving their qualification.

This Programme not only **targets** youngsters, but also the close "environment" of young pupils (parents, tutors, teachers etc) who often become a key factor when choosing an educational/professional path, as well as all those people involved or interested in the Metal Sector.

Among the **activities** carried out under this Initiative, we can highlight the following:

- Courses addressed to VET teachers;
- Creation of a website (<http://www.metalizate.com>) addressed to youngsters with information about the different educational and professional paths and the metal industry and its history;
- Development of training simulators as an educational supportive tool in VET classrooms, which have been translated into many other languages;
- Etc.

The **assessment** of this Initiative is not fully clear, as there has not been any formal evaluation whatsoever up to date. Besides, the monitoring can only be limited, since it is not simply possible to establish a link between youngsters choosing the VET path as a result of visiting the Project's website or any other activity under its framework.

On the one hand, according to personal testimonies and a general opinion, the Project has been overall welcomed very positively. It is considered to be of interest and the website and related videos on the web "youtube" has been visited almost 7,000 times. On the other hand, there is a feeling that it could have a broader impact. The website was changed last year and is now largely more young-user-friendly and appealing. New videos were also put on the web, and the so-called "viral marketing" has become a central part of the Project.

### **Has the situation has improved or worsened?**

Confemetal is firmly convinced that the situation has improved, though this topic has a huge margin for further improvement and the debate is high at present on how to continue working on this purpose. An example of what remains to be urgently improved in making VET more attractive for young people is the issue of "anticipation", i.e. acting at an earlier stage.

### **What can be done jointly at European level**

Exchange of views and best practices is of major importance. The Project "Metalízate" is a good example to illustrate this assertion, as it was conceived as a result of similar pilot initiatives developed in France and Switzerland.

Besides, information and dissemination from the EU in national countries of the role and importance of VET and Industry is crucial, also including finance support to undertake further initiatives.

## **Employers' organisation**

### **Teknikföretagen believes that...**

- In order to attract young people to industry-relevant education their interest in technology and science must be stimulated, starting at an early age and supported throughout the school years.
- In order to get the right young people to opt for a carrier in the engineering industry they, and their family and friends, have to acquire a positive attitude towards work in engineering companies and the educations that lead to these jobs.

### **Success factors**

- Long-sightedness
- Holistic view
- Dare to challenge the expectations
- Be where the target group is
- Distinct packaging
- Measurability
- Clear mandate from the board of directors

### **Core message in all communication**

- Engineering companies are innovative companies that are meaningful for both myself and for society
- An education in engineering gives you a wide scope of possibilities for professions of the future

### **Current initiatives we are involved in:**

#### **Teknikspanarna** (Technology scouts) - *Target group: Children and teachers in intermediary school*

- Aimed at children and teachers in intermediary school nationwide.
- Started 2004. To date over 400 000 participating children in about 16 000 workshops, and over 15 000 teachers in about 600 teacher conferences.
- Develops and stimulates the children's interest in technology and product development and raise the teachers' education in technology
- Uses real life workshops with young role models from the industry, inspirational web site, news letters, interactive teaching materials etc
- Establishes long term relations.

#### **Fokus Framtid** (Focus on the future) - *Target group: High school students and study and vocational advisers*

- Aimed at students in high school and at study and vocational advisers nationwide.
- Started 2008. To date over 25 000 participating students in about 1000 workshops, and over 1000 study and vocational advisers in about 50 workshops.
- Establishes young engineers as role models and generate motivation. Strengthening engineering companies as meaningful employers.
- Uses real life workshops with young role models from the industry or engineering schools, informative web site, inspirational magazines, etc

#### **Felix stör en ingenjör** (Felix bugs an engineer) - *Target group: 15-19 year olds and the general public*

- Aimed at 15-19 year olds and at the people influencing them.
- Started 2010 in order to improve the public's general attitude towards engineering and increase the annual enrollment in engineering education.
- The project includes:
- The tv-series "Felix stör en ingenjör". In eight, hour-long episodes comedian Felix hangs out with different young Swedish engineers all over the world.
- A web site with over 150 portraits of young engineers. Also information on education and jobs.
- A fun and provocative educational material for senior high school math.
- A viral campaign called "The smart and the curious".

**Årets Teknikutbildning** (Technology Education of the Year) - *Target group: Teachers, principals, school managers*

- The jury of this award are representatives from engineering companies
- An award aimed at elementary school, science educations in high school and engineering education at universities.
- Started 2004 and will be completed 2013, during this project SEK 50 million will be awarded.
- To date 135 prize winners from all over Sweden.
- The award honors and encourages notable technology teaching and educations in technology or science

**MaTeNa** - *Target group: Teachers in elementary school*

- Aimed at teachers in elementary school
- Started 2009. To date over 160 participating teachers and 50 involves engineering companies.
- Further training for teachers, focusing on maths (Ma), technology (Te) and natural science (Na) using engineering companies.
- Includes study visits and practice at engineering companies as well as lectures and workshops.
- Develops and raises the teaching in science and technology.

**Teknikcollege** - *Target group: Municipality, principals, teachers, engineering companies*

- Through Teknikcollege a new form of cooperation on a regional level is established between municipalities, schools, social partners and the industry.
- Started 2004. To date 32 active TC-regions.
- About 100 approved schools in the active regions in Sweden.
- Over 1600 companies involved.
- The purpose of establishing Teknikcollege is to improve quality and efficiency in vocational and educational training by involving the industry in the education system.

## **Employers' organisation**

### **Initiatives on attracting people to VET and the industry that we have been involved in over the past decade and what has worked or not worked well:**

The current Swissmem 'Tecmania' initiative seems to work well ([www.tecmania.ch](http://www.tecmania.ch)), although the success cannot be measured yet.

We maintained a website for female engineers (BSc, MSc, PhD) over some years with very little response. In Switzerland so far we largely failed to attract girls to technical professions.

### **Has the situation has improved or worsened?**

There is no visible improvement of the situation (after the economic crisis). Our main problem is the number of youngsters choosing the gymnasium and not a VET education and training (although in Switzerland only about 20 % of a cohorte go to gymnasium).

### **What can be done jointly at European level on this issue?**

Probably not much, since the situation and the culture in the various countries is so much different (in comparison: there used to be a European Science Night; did it change anything?). A European campaign would probably not elicit much. One would have to persuade national authorities to do something.

## Trade union

### Adult Apprenticeships in the UK

The UK Government in 2004 announced that development work would commence on a new adult apprenticeship, for those aged over 25.

An initial £1 million of funding allowed 7 regions to participate in pilot programmes, which commenced in January 2005 working with three Sector Skills Councils – SEMTA, CITB Construction Skills and Skills for Health.

The initial cohorts amounted to 450 learners.

Funding was due to end in 2006 although many of the first cohort were not expected to complete their frameworks until 2007. However, because of the success of the programme, a further £16.7 million was allocated for 2006\7.

The Learning and Skills Council (LSC) which was abolished this year, prioritised four groups of learners:

- Those without employment who wish to develop the skills needed for a new career (including adults on incapacity benefits)
- Those in employment who have existing skills but lack formal qualifications.
- Members of ethnic minority groups (who are currently under-represented in apprenticeships)
- Women seeking to re-enter the workforce after the age of 25.

A further eligible group were to be those who have completed a National Vocational Qualification (NVQ) 2 or NVQ3 under the Train to Gain initiative and expressed an interest in gaining an apprenticeship.

What the trials showed was that adults can complete all the required elements of the apprenticeship programme, often in a shorter time than young people if they are given the correct level of support that recognises their existing skills.

The LSC confirmed that there would be a budget of £25 million for apprenticeships for those aged 25 or over in 2007\8, rising to £30 million from 2008\9. Funding would be prioritised to local and regional skills shortage areas, helping learners from under-represented groups to access apprenticeships. In addition, employees who successfully completed an NVQ through Train to Gain would be funded to go on to achieve a full apprenticeship.

However, since then, funding for adult apprenticeships has been scaled back because of pressure on government resources. What funding was available was aimed at a much smaller “priority” group which includes women returners, the disabled and those with no other level 2 qualification. Whilst funding would still be available for adult apprenticeships it would only be given once apprentices in the priority group received funding.

Adult apprenticeships were, in effect, the victims of their own success. They simply became too popular and unaffordable. In the 2006\7 academic year, a total of 100 over 25s started apprenticeships. In 2007\8, the number was 14,600. In 2008\9 the LSC’s projected total for new apprentices was passed after less than six months.

At the time of writing it is not clear what the UK Coalition Government has in mind for funding apprenticeships, both traditional and adult. Although they have stated their belief in the need to increase the number of apprentices, particularly in the manufacturing sectors. The Comprehensive Spending Review (CSR) on October 20<sup>th</sup> will go some way to clarifying that.