

INDUSTRIALS AND UNIVERSITIES PARTNERSHIP FOR TRAINING

**Anne CREQUIS (FORMASUP),
Nathalie LEROY (ESC Lille),
Walter NUNINGER (Polytech'Lille/IESP),
Jean-Pierre PAUWELS (ICAM), Christophe VIEREN (ICAM),**

FORMASUP, 7 bis Avenue de la Créativité
Parc des Moulins, F59650 Villeneuve d'Ascq, France
Tel : +33(0) 328.337.520 - Fax: +33(0)328.337.521
Anne.crequis@formasup-npc.org

Abstract

The goal of this paper is to present how the partnership between universities and companies contributes to the success of educational curriculum for apprenticeship; a mean that improve employability of the graduates (degrees are from under graduate to master degree). The French national and regional context for work based learning make it possible for the main actors (schools, universities, companies, political and social regional partners) to collaborate. Benefit of such an educational system is to allow people to obtain an acknowledged degree thanks to both academic education and skills acquired within professional experience. Industrials take part to the training, the evaluation and also to the development of the educational curriculum ; that allows university to take into account the professional needs quickly. Due to the international development of companies, mobility is nowadays included in the curriculum within the constraint that programs are composed by times in the firms and academic period in school. The industrial link with the university is reinforced by dual tutorials (both from the school and the company) to achieve high skill level; competencies also learned in the firm. In addition, work experience allows students to be employed quickly after passing their degree. Pedagogy relies on project based learning and inductive pedagogy. Financial resources are provided by the firm (student salary), Regional Council dedicated to firm and school, taxes and funds from some lines of business focussed on each available degree. Financial possibilities are administrated by FORMASUP of Nord Pas de Calais considering pedagogical aspects. Our conclusion will stress on the international mobility, specific tutoring for innovation projects and the constraint due to both economic evolution and firms necessities.

Keywords : work based learning, professional skills, educational system, tutorial, inductive pedagogy, apprenticeship, sandwich course

Industrials and Universities Partnership For Training



CREQUIS A.



LEROY N.



NUNINGER W.



VIEREN Ch.
PAUWELS J-P.

Eracon 2009, Nicosia (Chypre)
April 29th – May 3rd

Plan

- FORMASUP
 - in France, a center for apprenticeship
- Organisation of apprenticeship in France
 - Legal aspects, Actors, Financing and links
- Industrial partnership with universities
 - Sandwich course
 - Dual tutoring
 - Inductive pedagogy
- Feedback and perspectives
 - Mobility, innovations
- Conclusion



Apprenticeship in France

- French law in 1980
 - Makes apprenticeship a form of **vocational training** to the same degree as secondary or higher training
- Recent legislatives in 1993 and 2002
 - developed apprenticeship and consolidates the Region role and reformed the apprenticeship

Apprenticeship

- Apprenticeship in France
 - is an additional way to pass diploma
 - adding skills acquisition
 - within work contract between student and company
 - provides a professional qualification
 - confers a further educational degree

Advantages

- For the students
 - To obtain
 - an acknowledged degree,
 - a complete hands-on professional experience
 - a real knowledge of the everyday life of a company.
 - To benefit from tailor-made training particularly thanks to a company mentor in charge of the apprentice's on-site training.
 - To get a salary during their training period

Advantages

- For the companies
 - To hand on their know-how.
 - To possibly carry-out a “pre-recruitment” process.
 - To benefit from financial assistance
- For the schools
 - Be aware of economic and industrial framework
 - Be an efficient vector of employability
 - Improve pedagogical aspect introducing cases study
 - Take benefit of students feedback

FORMASUP

- FORMASUP
 - created in 1992 in the region of Nord Pas de Calais (France)
 - regional center for apprenticeship
- representing 25 institutions
(high schools, trade schools, engineer schools and universities)
- Giving access to 63 educational degrees
- Concerning 3 levels of training levels
 - level 1 standing for Master's degree (5 years)
 - level 2 for Bachelor's degree (3 years)
 - level 3 for technician certificate (2 years)
- With more than 2600 enrolled apprentices (higher education)

FORMASUP

- FORMASUP's purposes
 - Main role : being a support service
 - that provides solutions for work based learning students
 - that makes the connection between actors
 - learners,
 - firms, schools,
 - regional administrations,
 - field organizations
 - helping the brainstorming upon pedagogical aspects
 - developing work based learning
 - helping and supervising financing

Financing

- The actors of Formasup
 - Companies,
 - Schools
 - Regional services
- Formasup (CFA) budget
 - is 20M€
 - The financing of CFA or the training section can be ensured by:
 - The tax of apprenticeship (paid by firms)
 - The Regional council subvention
 - Parafiscal taxes of some line of business
 - A part of the tax coming from the further education for adults
 - A part coming from the schools...

Industrial partnership

- Apprenticeship is structured around:
 - Sandwich courses
 - Academic training (school) :
 - knowledge acquisition with respect to the diploma syllabus (sciences, technical fields, human resources...).
 - Professional periods (company)
 - Apprentice Mission within the framework of the projects in the firm with a progressive situation
 - provides experience transfer, tutoring, skill evaluation and result validation

acquisition of abilities

Increase of knowledge and competencies

Favored Employability

Industrial partnership

- Pedagogical aspects of apprenticeship
 - Dual tutoring
 - Apprenticeship is based on a “winning trio”
 - The school tutor (guide) ,
 - The firm tutor (guide),
 - The apprentice (actor of his training)
 - Inductive pedagogy
 - problem based learning and project management (PBL)
observation ability (real situation) that requires analysis in order to bring out the theory and solve the problems

Industrial partnership

- Success relies on :
 - Both apprentice's involvement and environments
(firm and training center)
 - Feedback by apprentices
Based on their professional experiences
 - Permanent questioning of teachers in direct contact with professional environment
 - arises and urges continuous adaptation
 - Updates pedagogical practices

Feedback

- After 20 years of practices, the system
 - improves employment
 - helps social classes to have access to high degrees, thanks to
 - a real partnership between actors :
School – Companies – Regional Council - FORMASUP
 - the french policy
 - a real demand of industrials
 - Leads to more development of our practices
 - For apprentice mobility
 - Our partners have international activities (english required)
 - For innovation
 - Our partners need to develop their activities to reach new economic challenges (learners should be able to detect innovation project)

Mobility

- To develop mobility, we need to
 - find new partners abroad
 - both with companies and universities...
 - propose our diplomas to foreigners that could work and study in France
 - legally students with work contract passing a French degree.
 - send our learners for some specific schedules abroad
 - combine academic periods in France and industrial periods in European countries
 - work based learning cost (transport, housing...) might increase due to location abroad

Innovation

- Innovation is considered as
 - research and development projects for big industries
 - technology transfer for small companies
 - Apprentices is a vector for firm development and success thanks to new and original methods.
 - Work based learning is a way to help small companies to detect, develop and implement new methods for optimisation of products or production processes to allow higher performance, quality and security

Innovation

- To develop sensitivity of apprentices to innovation projects, we need to
 - specific tutoring
 - to afford more precise qualification with respect to the field of application
 - additive academic or conference program
 - modification of schedule to get quicker knowledge
 - Specific training of school tutors
 - tutoring by expert,
 - Find the right partners
 - firms and supports services and financing, legal
 - Make benchmarking of learners during academic period
 - will be of interest for our groups of apprentices and the competency of our tutors.

Conclusion

- Apprenticeship
 - Allows acquisition of abilities
 - Increases knowledge and competencies
 - Favors employability
- Improvement axes for Formasup
 - To support international mobility
 - To develop the company creation
 - To make easier the access diploma for « atypical public »
 - like disabled persons, women ...

Contacts

- Formasup

Anne CREQUIS (Directrice Adjointe)
7 bis Avenue de la Créativité, Parc des Moulins, F59650 Villeneuve d'Ascq, France
Tel : +33(0) 328.337.520 - Fax: +33(0)328.337.521
Email : Anne.crequis@formasup-npc.org URL :
- ESC Lille

Nathalie LEROY (Responsable Apprentissage Alternance)
Groupe ESC Lille Avenue Willy Brandt - 59777 – Euralille - FRANCE
Tél. : +33 (0)3 20 21 59 90 - Fax : +33 (0)3 20 21 59 91
Email : n.leroy@esc-lille.fr – URL : www.esc-lille.fr
- Polytech'Lille

Département IESP, Walter NUNINGER (Directeur Dépt. IESP)
Avenue Paul Langevin, F 59655 Villeneuve d'Ascq Cedex, France
Tel +33(0) 328.767.382 – Fax +33(0) 320.417.521
Email : walter.nuninger@polytech-lille.fr – URL : www.polytech-lille.fr/iesp