“Making university-industry partnerships work: trials and lessons”

Marie-Odile OTT, PhD
Inspectrice générale
Common views concerning the mission of universities:

1. The dissemination of knowledge;
   • Training and performing research

2. Employability of the graduates,
   • to academic careers, engineering or business careers
   • training highly skilled workers to benefit national economies.

3. Develop resources and attractiveness,
   • university as a key player in local environment
University Industry partnership

Employability:

The need to further explore and improve knowledge and cooperation between universities and business is clear.

- Improve young graduates’ employability into the economical sector and industry
- Promoting employability, means also promoting elements of entrepreneurship.
  - Students need to understand what it means to be self-employed,

But University and Industry are two different worlds

- employers have very little knowledge of what to expect from graduates,
- higher education institutions have a similar low level of knowledge concerning employers’ needs.
University and Industry partnership

➢ University to Industry

  • Employability of graduates and doctorates
    - Train the trainers
    - Develop early internships, long term and industrial

  • Ressources, attractiveness: develop partnerships:
    - Patents, technology transfer
    - Develop contacts with local labour market forces
    - Technological platforms (research; initial or vocational formation; R&D)

➢ Industry to University

  - Involve industrial keyplayers, employers in the courses,
  - R&D contracts or collaborative research
  - Take part to comitology, teaching, internship programmes
University Industry partnership

-Employability:

  Improve training & relationships

  • Entrepreneurship education: FIE & FIE.DZ
  • CIFRE system.
University Industry partnership:

Training for entrepreneurship

Engineer entrepreneurship programme: (FIE) INSA Lyon through a real-life project & specific mentoring to the project team - students consider, assimilate and assume the risks that are inherent to business.

• 80% of the teaching staff are business professionals:
• Over 13 years, 320 students trained, 35 start-ups and two acquisitions

➢ Transfert of FIE to Algeria higher schools = FIE.DZ
Transfert FIE INSA Lyon to FIE.DZ
14 higher education schools

Training the trainers to train the students
3 MODULES PEDAGOGIQUES

**DES INTERVENANTS ET DES COACHS ENTREPRENEURIAUX**

**CRIER DE LA VALEUR**
- Marketing de l'innovation
- Marathon de l'innovation
- Outils de création de valeur
- Pilotage financier
- Recrutement 1er salarié

**ÊTRE ENTREPRENANT**
- Posture entrepreneuriale
- Décadrage par anticipation
- Prise de décision managériale
- Revues d’avancement projet
- Gestion d’équipe

**MAITRISER SON ENVIRONNEMENT**
- Intelligence Economique
- Gestion parties prenantes
- Propriété Industrielle
- Investisseur et Financement
- Négocier en affaires
- Relations publiques

**180h de cours**
**40h de coaching**
+ Une immersion dans le monde entrepreneurial
FIE creuset de pré-incubation : augmente le degré d’employabilité des étudiants grâce aux acquis de la formation et d’une double compétence

- diplômés ayant trouvé un emploi à l’issue de la formation FIE
- diplômés ayant créé leur emploi (entreprise ou activité)
- diplômés ayant préféré poursuivre leurs études
University Industry partnership: collaborative research & training

The CIFRE experience - Conventions Industrielles de Formation par la Recherche:
Design in 1981 to train future managers of R&D, able to drive projects in academic and business contexts:

- Doctorate in industry
  - a research collaboration between an academic lab and an entreprise
  - a student doing his/her thesis in industry in 3 years time

  = public help for the entreprise;
a grant for the student
  - 50% are employed by the company

www.anrt.asso.fr
University Industry partnership

Improve partnerships, collaborative research, technology transfer, innovation

- SATT : Technology Transfer Accelerator companies
- Carnot Institute network
Connectus Alsace's activities are focused around two axes:

- **Investment in intellectual property and the further development of innovations coming out of Alsatian public research laboratories.**
  - Funding for patents
  - Investment in further development, project management
  - Licensing

- **Management of partnership contracts for shareholders' research laboratories**
  - Identification of inventions coming out of the laboratories
  - Identification of the requirements of the market and potential partners
  - Management of Intellectual Property portfolios (patents, licences)
  - Support in the negotiation of research partnership contracts
  - Sensitisation and training of research staff on the subject of Intellectual Property
  - Mapping, promotion and monitoring actions
Technology transfer SATT: Conectus Alsace

- **Services to Businesses**
  - Well-defined research collaborations
  - Ready-to-use patents adapted to the market's requirements
  - Easy technology transfers
  - Accessible technology platforms to assist your with your analyses and evaluations

- **Services to researchers**
  - Identification of your innovations and their commercial potential
  - Sensitisation and training
  - Management of IP rights and commercialisation (researching partners, licensing)
  - Investment in further development
  - Skills mapping
  - Monitoring Contract management
  - Platform management

Website: [http://www.conectus.fr/en](http://www.conectus.fr/en)
University Industry partnership:
Carnot institut network: a research network dedicated to fostering enterprise innovation

A Carnot Institute is a research organization which places partnership research, i.e. research led with and for companies, at the heart of its strategy.

- Carnot institutes are recognized for their high scientific standards,
  - commitment to developing high quality partnership research.
  - proactive approach in favour of innovation in companies of all sizes by offering R&D support which takes into consideration the companies’ economic and market constraints.
University Industry partnership: Carnot institut network: a research network dedicated to fostering enterprise innovation

Institutes CARNOT: a proven commitment since 2006

- 15% of the French public laboratory workforces (27 000 research professionals with 8 000 PhD);
- More than 50% of the research directly financed by companies to French public laboratories;
- 51% growth of turnover generated by contractual research between 2010 and 2013, with a particular strength towards SMEs;
- 50 M€ of intellectual property incomes each year;
- Every day, more than 1.3 M€ received through research contracts funded by more than 2 000 companies.
University Industry partnership: successful relationship/partnership

How overcome the brakes:

- Create opportunities of meetings: mutual knowledge
- Include industry representatives in the university governance
- Watch the local environment and start interacting
- Try to know the expectation of the labor market,
- Anticipate on the co-construction of formations
- Associate professionals to some events or teaching
- Build on a small motivated team
University Industry partnership

Keys to overcome the brakes

➢ University leadership is vital
➢ Identify precisely needs, and constraints of each partner
➢ Associate the administration from beginning
➢ Keep in mind that long term partnership bring greater benefits than expected
University Industry partnership

Merci de votre attention

*If you want to go fast, go alone.*

*If you want to go far, go together.*

*(African proverb)*