

Professionalisation in higher education



Training Engineering :
Efficient training
For skilled graduates

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Objectives



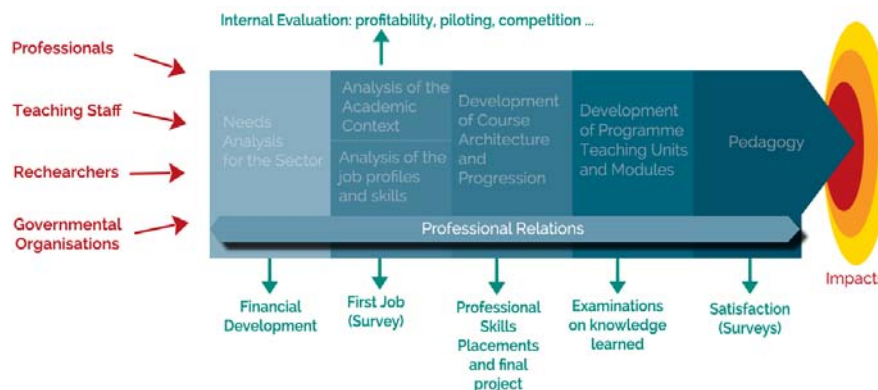
When you have finished this sequence you will be able to :

- Explain why the analysis of the existing relationship universities have with professionals from a defined sector is relevant from the outset, before the course project is defined
- Give examples of types of partnerships that can be established with professionals from a defined sector of activity

What should be taken into consideration?

- The extent and strength of the partnerships existing between your establishment and professionals
- Concretely, how often do you interact? and in what way? meetings, discussion, networking, visits, workshops, consultancy, tutoring, events, projects, life long learning etc.

Introduction



The diagram above shows that relations with professionals and are located at all stages of the process and are continuous in time.

Before starting this sequence, ask yourself the following questions:

When you were a student....

- Did you choose your training in order to practice a specific trade?
- During your training:
 - Were certain events or meetings decisive for your professional orientation?
 - What is your most professionalizing memory (= who brought you directly useful skills for your professional activity)?
 - Was the professional world associated with your training? How?

Today as a teacher....

- What does "vocational training" mean to you?
- How are professionals involved in your institution and its training?
- How do professionals perceive the university? What do they expect?
- How do "academics" perceive the professional world? What do they expect?
- What do you think are the most effective exchange or collaboration practices with the professional world?

Building a Shared Vision



VIDEO

Speech:

The training offer satisfies demands from **3 key-standpoints** :

- **A financial /professional standpoint involving** employers, employees, entrepreneurs, former graduate students who have found their place in the professional world
- **A social standpoint** involving students, families and civil society
- **An institutional standpoint, firstly** involving universities to address academic requirement issues , at the request of teaching staff and **secondly a political standpoint** involving national, regional, legal and regulatory environments

The issue is how to build this common vision when the course is being reassessed, firstly, in the framework of a reform, secondly to update or thirdly, to create a new course.

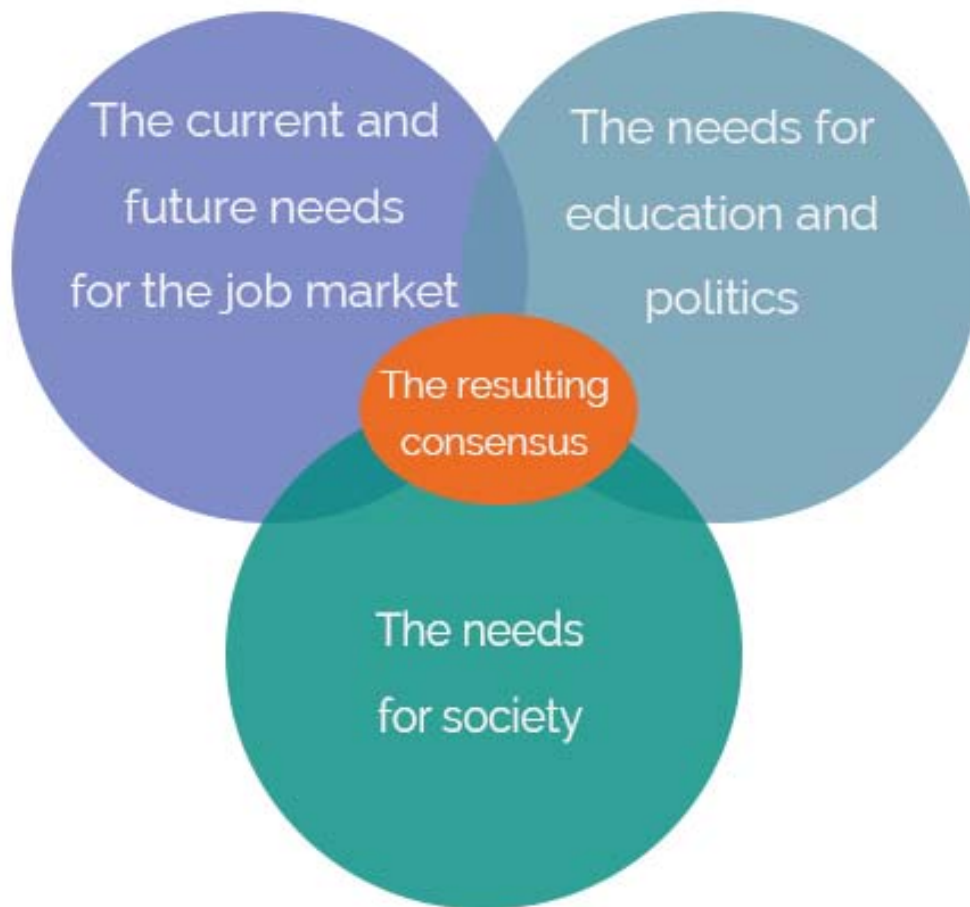
Should we consider a sampling which embraces the existing diversity (qualitative) or try to have a real statistical representativity?

Among the different options this step may be considered to include a phase of design, of carrying out a survey, data processing or a prospective study. The experience shows that the time allotted to develop this diagnostic is in general short. The same often applies to the financial resources and human resources allocated to this activity. It is therefore preferable to streamline the scale of this intervention by optimizing the individual and collective human resource factor of the targeted group carrying out such a diagnosis.

Regarding the stakes, it is also important to identify who is capable of this diagnosis: Should we ask external experts, academic staff and educational engineers, or should we ask the students? Indeed the choice of the right people to undertake this diagnosis is important and will influence the outcome. For example, with students doing surveys, relevant from an educational point of view, it introduces a bias to the relationship investigator/ respondents and therefore to the results obtained at the end. The professor's implication in this process appears to be a good way to strengthen the relationships between the university teaching staff and the professionals

Three angles could be considered to have an influence on the content of a course:

- The job market - economic and professional needs
- Society - individual, family and community needs
- Education and politics - the hope and need for a better level of learning, regional and national strategic needs



How can we work towards this shared vision? When re-modelling a course, through a reform, by updating or by creating a new course. What means should we employ? Should we think globally in order to address all the issues or should we use statistics to define the importance of each issue in order to reflect that degree of importance in the course content?

It is a given fact that time spent on this diagnostic phase is short. Funding and human resources are minimal, too. This leads us to decide on a rational increase in the size of the team identified as being efficient in diagnostics.

This means defining 'efficiency in diagnostics'. The success of the course is at stake. Should professionals be engaged to do the task? or a team of professors, educational engineers and students?

Students are available for carrying out surveys and it is good experience for them. However, people could be influenced into giving biased answers because of the students.

The implication of the teaching staff could be an efficient way to strengthen links between academics and professionals.

Education and Professionalisation



VIDEO

Speech:

Nowadays 'professionalisation' is a very fashionable term in the occupational and training environment brought to the table by National and European policies.

So what does this polysemous term 'professionalisation' mean?

We could sum up professionalisation as: providing the context which allows the deepening of **knowledge and acquisition of skills**, whilst learning to use **flexibility in the workplace**, and therefore achieve maximum efficiency.

It should be mentioned, however, that the social background of the student weighs heavily on their career prospects, and this is true for any professionalising course attended.

So why promote the professionalisation of course content?

A **political and social challenge** is being addressed to align learning with professional life; at stake we have the fight against unemployment through training people to fulfil the requirements of a work situation.

It is therefore a key strategy in educational systems **to position the training course engineering** around the social and economic value of the course.

Globally, **the development of strong links between educational and professional** establishments can have a major impact on the success of professionalisation.

So what conditions must be met for a course to be identified as professionalising?

We could most probably expect to find:

- Beforehand, an exhaustive **analysis to identify the skills needed** to be developed during the course (with clear goals announced, endorsed by the professional partner)
- **Course design as a means to focus on the ultimate objectives** and not solely to explore an academic discipline
- **Diversification of teaching methods**, as skills cannot be taught; they are acquired through hands on experience

E-references :

Richard Wittorski, 'Professionnaliser la formation : enjeux, modalités, difficultés', Formation emploi, mis en ligne le 31 mars 2010[1]

Publisher: La documentation française

On-line Document: <http://formationemploi.revues.org/1115>

Dossier Formation Emploi: 'Enseignement supérieur. Les défis de la professionnalisation'. N°117. Janvier-Mars 2012[2]

Publisher: La documentation française



Complement : E-references

- Richard Wittorski, « Professionnaliser la formation : enjeux, modalités, difficultés », Formation emploi [En ligne], 101 | janvier-mars 2008, mis en ligne le 31 mars 2010, consulté le 16 mars 2016.(see) URL : <http://formationemploi.revues.org/1115>¹
- Dossier Formation Emploi : Enseignement supérieur. Les défis de la professionnalisation. N°117. Janvier/Mars 2012. Éditeur : La documentation française. <http://www.cereq.fr/publications/Formation-emploi/Enseignement-superieur-les-defis-de-la-professionnalisation>²

Professionalisation is very much appreciated these days, both by employers and by educators. Furthermore, professionalisation schemes are being encouraged at both national and European levels.

What can be classed under the polysemous term 'professionalisation'?

We could say: teaching knowledge, skills and knowhow, promoting adaptation to professional environments and finally, consolidating efficient professional competence.

It is important to think about the social background of the student as this has been seen to influence the professional options open to them, no matter which course they enroll on.

Why should we further promote professionalisation?

The political and social stakes are to align education with employment. We are fighting a battle against unemployment by making sure that more people have been taught how to fit into a work environment.

More globally, all educational establishments are being obliged to highlight their legitimacy, underlining the social and economic reasoning behind their courses.

So what are the prerequisites necessary to label a course 'professionalising'?

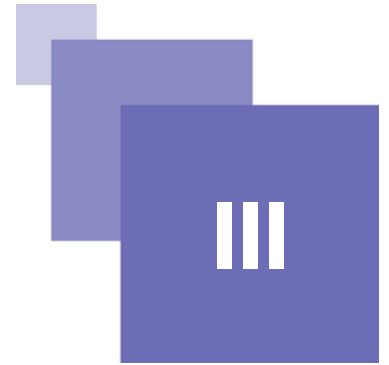
If we must find prerequisites, they could be:

- A list of identified skills to be developed during the course. (skills covered and competencies validated by the professional sector)
- A course structure built around practical knowledge as well as theory
- A list of 'hands on' experiences and consolidation tasks as well as diversified teaching methods.

1 - <http://formationemploi.revues.org/1115>

2 - <http://www.cereq.fr/publications/Formation-emploi/Enseignement-superieur-les-defis-de-la-professionnalisation>

What does Employability Mean?



The professionalization of training aims to build and strengthen the employability of graduates

The French Minister for Employment says " *the capacity to negotiate your way around and through the job market, autonomously adapting your full potential to the situation. Employability is built on acquisition of knowledge, qualifications and professional attitude, it is the way we use our skills and demonstrate our ability to a potential employer.*"

The OIT International Organisation for Employment says " *the aptitude of each one of us to find and keep a job, to climb the professional ladder and adapt to changes all through our professional life*"

Mantz Yorke, Professor of Educational Science and author of 'Employability in Higher Education' says " *a range of skills, know-how, understanding and personal characteristics which make graduates more successful in their search for employment in their field of work, bringing benefits to that sector, society and the economy.*"

What is your definition of 'employability'?



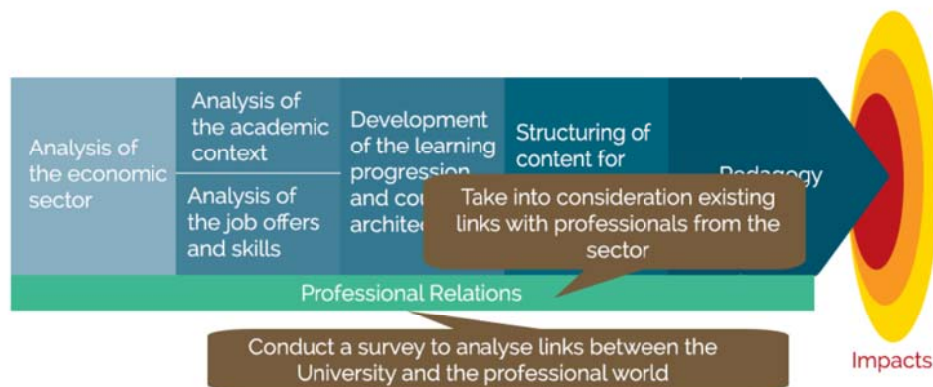
Complement : For more information:

- "Employability in Higher Education: what it is - what it is not(see)", Higher Education Academy/ESEC de Mantz Yorke (2004)

The Link Between University and The Professional World

IV

The relationship between universities and the professional sector is cross-cutting and can be seen at different phases of course design. For instance, this involvement could include carrying out surveys to confirm the relevance of, or re-define course content for each specific job profile. The main aim being the adaptation of the graduate's skills to the needs of the sector they will be working in.



EXERCISE

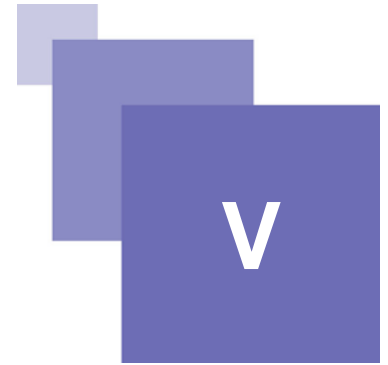
Written Work

Write an essay answering the following question

Question :

Now analyse your own context. What links exist between your University and the professional world?

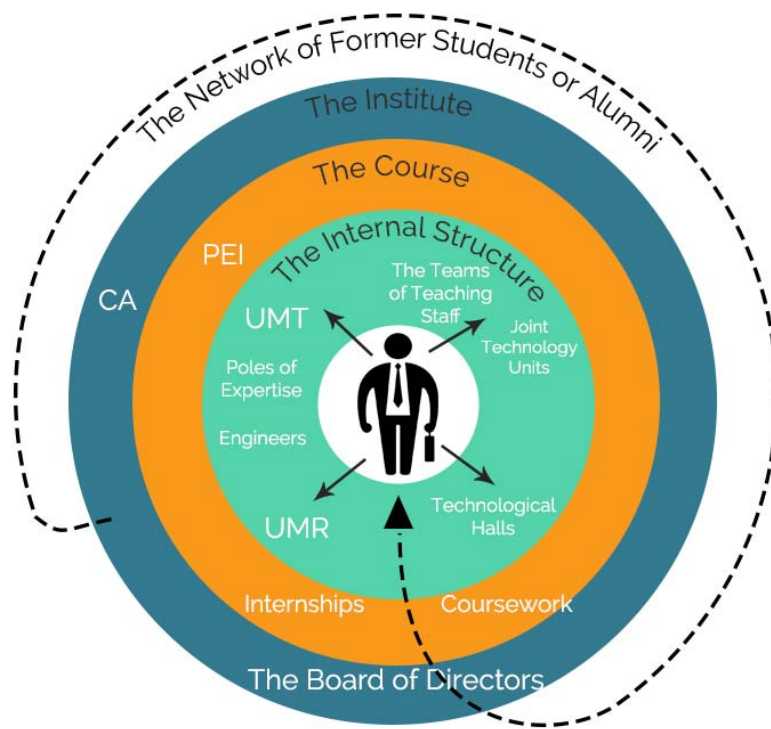
How do Professionals Currently Interact in Your University's Courses?



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Here, we use The National Institute of Higher Education in Agricultural Sciences, Montpellier SupAgro, France as an example. Some means of interaction do not figure in this model as there are so many interactions possible.

By participating in this course you will be enriching the content available to future users.



This diagram aims to show that the integration of professionals can be done at different levels, and for different types of action, which will be detailed below:

- The blue outer circle represents the governance bodies;
- The orange intermediate circle shows the "training" level where professionals can be integrated during courses, for internships or through projects linking their company and students;
- The green circle shows that these relationships are also very present on an individual basis, between teachers or other University staff and professionals;
- Finally, the outer circle and its "return" to the centre illustrates the very strong importance of the alumni network, who are very often the closest professionals with whom it is possible to remain in contact and to involve in the life of the Institution, after their graduation.

A. In the Governing Boards

The Board of Director's Responsibilities:

- Define and validate strategies
- Implement the action to be taken to achieve the pre-defined strategic goals

- Firmly position the Institute inside the national and international higher education networks

Professionals are involved at every level in all Higher Education establishments and are often present at Board meetings.



Example : Montpellier SupAgro Board Meetings

Mr. Jean-Pierre Renaud, General Delegate of Livelihoods Venture, is the Chairman of the Board which has 26 members. 30% of the Board is made up of professionals. Their task is to set the objectives for the school and consider the educational, managerial and financial aspects of the Institute. Example:

- Define the future General Project for the Institute and organise the contracts with the State to implement it
- Establish the rules and regulations for the school
- Define the organisation methods for the staff
- Update Teaching Policy
- Make a full census of the research projects and define a strategy to share and benefit from the results
- Re-define financial strategy
- Review the Budget and re-organise allocations
- Set annual school fees
- Make a full census of contracts, conventions and markets
- Mobilise and rationalise the Human Ressources

Professionals account for about 30% of the board

B. The Courses

Many interactions with professionals are possible for the courses, from teaching to accepting placement contracts for the students, in their company.



Example : Example of Student-Engineer Projects (SEP or PEI in French) in Montpellier SupAgro

VIDEO

Speech:

At Montpellier SupAgro, we have over 180 students in Engineering Training. During their curriculum, students are asked to carry out a project sponsored by a Montpellier SupAgro partner. The so-called Engineering Student project or PEI. The project takes over 10 months beginning in the 1st year (Year 3 of BSc level) and ending in the 2nd year (Year 1 of MSc level).

It is a learning activity based on the concept of education through project work which aims at:

- **Giving meaning to the knowledge** acquired during the courses
- Allowing the students to learn, **by and in the action**, to respond to a real project from a sponsor in adopting a professional posture
- Developing new skills in project management

Throughout the duration of their project, the students will go beyond their initial mission to generate ideas , **set goals**, put in place an **organization to overcome** issues and explore **the cross-cutting areas of knowledge** in order to provide

the expected response to the Sponsor.

The project teams have to be **imaginative, critical, curious** in order to propose **innovative solutions**.

The students work in groups of 4 or 5 and each student plays a part in the team project: project leader, communication manager, treasurer, planning manager, and one student is in charge of the meeting proceedings. And so they learn how to work in a group in the long term, efficiently and autonomously, they also develop their own skills.

The students are helped throughout their project.

Each team is supervised by a **teacher or tutor connected to the theme** of the study. This teacher keeps an eye on the work in progress, helps the students to keep the scope of the project in mind and in carrying out their bibliographic research and in stimulating their creativity.

A teacher is associated with the student engineer project, making available additional scientific expertise to the sponsor.

As the coordinator of these student engineering projects, I have to find adapted projects. This step requires contacting **partner's networks** and to having a lot of exchanges with the possible sponsors to be sure that the proposed subjects have the right focus and are achievable within the framework of student engineer project.

The projects correspond generally to feasibility studies, implementation of surveys or proposed-projects. A preliminary work allows to clarify the sponsor's requirements about the evolution of his working structure.

Then I have to find a teacher/tutor for each group, provide the students with the various topics and check the good progress of student engineer project.

The student engineer project includes two major steps. The first major step is the **Supervising Committee meeting** which is 2 to 3 months after the beginning of the project. The students present the specifications of the project to the sponsor, to their tutor and to everyone involved in the project. The second major step is **the project presentation** which takes place at the end of the project. The students present their response to the command and the deliverables.

This activity of learning through project work is a much appreciated exercise by professionals as by students engineers. This year, **92% of the students are satisfied** with this first professional experience that enables them to develop transversal skills essential to their future engineering career; and **100% of the sponsors are satisfied with the work provided by the students and their response to the initial order**.

The sponsors also appreciate the links created with the tutors who enrich their network and who will be part of future engineer training courses.

We are clearly in **a win-win context** for our partners and our students.

The different training modalities

The Three Educational Profiles:

- The Standard Educational Cycle
- Life-Long Learning Schemes
- Alternating Apprenticeship and Study

Alternating Apprenticeship and Study

This system allows students to discover a work environment at the same time as learning about the job. They can sign apprenticeship contracts with public or private establishments and can be enrolled at a High School, Training Centre, Local Educational Organisation, Agricultural College, a Rural Training Establishment, an

Engineering School or a University.

The students will have a personal mentor in the company and can build a solid relationship between **their professional environment and their Academic environment**.

C. Creating a Specific Course

Professionals can be involved in two areas:

- In the definition of a current specific need in order to design a course for people who will receive training to fit new job profiles, with new skills. This is done through meetings with the Board of Directors and the Careers Guidance Board.
- In setting-up life-long learning plans to train the company's employees using the educational expertise of the Institute.

In the following excerpt you will see that professionals can directly contact teaching establishments in order to develop their own training course for their employees to obtain higher qualifications or for life-long learning.



Example : The farming license in Montpellier SupAgro

Training engineering in the creation of the license

VIDEO

Speech:

The Course Design phase of the project was divided **into several steps**:

The first step was to analyse the statutory texts to make sure that the framework could be adapted to the life-long learning context.

Then, several Agricultural services were contacted to help define needs. We contacted: Fédération du Négoce Agricole, Chambre Régionale d'Agriculture, Association Terra Vitis, for example.

The next step was to make a list of all the skills required and to build a programme around them.

The scientific and technical curriculum in Agricultural Sciences, previously used for Agrosud, provided the basic BSc course architecture

Acting on advice from professionals, Law, environment, quality and traceability classes were added, to give participants both technical and legal skills.

Cross-cutting subjects like English, Communication and a long tutored project were added to meet requirements for a BSc level qualification.

An Agricultural School and a University then signed a partnership contract with Montpellier SupAgro.

The request for authorization was sent off.

So in 2001, with the official authorization, **the first Sustainable Integrated Farming BSc diplomas were awarded.**

The launching of the vocational BSc respected the imperatives set by the 17th November 1999 ministerial order.

That is to say: the tutored project must take one quarter of the time allotted. 25% of the teaching must be done by professionals from the sector and the work placement must be 12 weeks, minimum.

For the Agrosud vocational BSc : **ECTS credits and grades should be awarded** after an examination at the end of each teaching unit and should be used for

calculating the final grades.

In 2002 validation of academic credits due to professional experience was organized under the VAE framework

For the participants in the BSc course coming from Agrosud, the validation of academic credits due to professional experience allowed them to be accepted on the course without a two year higher education qualification and also to be exempted from some of the lessons.

The jury examining each case is made up of a professor from Montpellier SupAgro, a professor from the Partner University and Professionals from the sector.

The jury has to decide if the candidate could be exempted from the tutored project, the communication classes or the work placement.

The jury also has to decide if the BSc should be awarded to the candidate, by reviewing the validated teaching units, by taking into consideration Agrosud needs and the educational team's requirements on acquisition of knowledge and level of analysis reached.

Finally, the evaluation of the quality of the dissertation and the oral defense presentation are the final factors contributing to **the successful awarding of the vocational BSc.**

D. Teaching

Teaching and administrative staff are in direct contact with professionals in their day to day work routines, research projects and consultancy services. Every member of the teaching staff belongs to a professional network.



Example : AgroTIC Services

AgroTIC Services is involved in education and consultancy work in digital solutions for issues in agriculture and the environment. Businesses and AgroTIC 3rd year courses for Agricultural Engineers are drawn together for project work commissioned by professionals.

> > ³Find out more on our website⁴

Europe's point of view about the 'triangle of knowledge'

Higher Education contributes to employment, growth and international visibility. The three cornerstones of the 'triangle of knowledge' are: education, research and innovation.

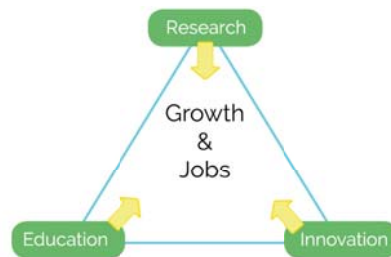
As 'Open innovation' becomes more frequent, we can see an increase in the transfer and sharing of knowledge between higher education establishments, research institutes and businesses.

3 - https://www.supagro.fr/web/en/pages/?page=&id_page=&all=actualites&id=1062

4 - https://www.supagro.fr/web/en/pages/?page=&id_page=&all=actualites&id=1062



Note : What is this triangle of knowledge, exactly?



The strategy of Lisbon in March 2000, sets the target for the EU to become the strongest, most dynamic and competitive knowledge economy worldwide. The growth of this sustainable knowledge economy walks hand in hand with an improvement in the quality and the number of jobs available, plus social cohesion. The

'triangle of knowledge' created by the European institutions, represents this.



Example : At Montpellier SupAgro

Professionals are invited to get in contact.

See the following extract from the Montpellier SupAgro website:



Experts at your Service:

Montpellier SupAgro is a source of skills, know-how and equipment that enables outstanding scientific collaboration with business and research sectors, promoting development and expertise within the framework of its themes, agronomy, agri-food, environment, vine and wine science to name just a few.

Depending on your needs, timeframe and budget you can set up projects with professionals, experts, researchers, professors, agricultural engineers or students for your study, survey or consultation.

Find the right expert for your field of business.

Find more : <https://www.supagro.fr/web/en/pages/?idl=19&page=1521>⁵

E. Taking Advantage of University Services

Professionals can use the university infrastructure to gain access to materials and knowhow. Research & Development professionals can use the technological halls, for example.



Example : An Example of the Use of Technological Halls by Professionals.



PFT Innovalim 'Culinary and Food Innovations': State of the Art Technology for food industry businesses and catering services.

3 PARTICIPATING ESTABLISHMENTS:	THE PARTNERS:
<ul style="list-style-type: none"> • ENIL de Besançon-Mamirolle • ENILBIO de Poligny • Lycée Polyvalent et Lycée des Métiers de l'Hôtellerie et de la Restauration Friant de Poligny. 	<ul style="list-style-type: none"> • Délégation Régionale à la Recherche et à la Technologie (DRRT) • Conseil Régional Franche-Comté • Direction Régionale de l'Alimentation de l'Agriculture et de la Forêt (DRAAF) • Université de Franche-Comté • Association Régionale de l'Industrie Agroalimentaire et de Transfert de Technologies

3 PARTICIPATING ESTABLISHMENTS:	THE PARTNERS:
	<ul style="list-style-type: none"> • ACTILAIT • VITAGORA® • INRA-URTAL Poligny • Rectorat de Besançon • GRETA de Dole Revermont

The Culinary and Food Innovations Theme



Services Proposed:

- Experiments, research & development, consultancy, technical frameworks, training

In more detail:

- Functional & culinary properties of ingredients (intermediate food products)
- New product and procedure

development

- Optimisation of procedures
- Micro-biological, chemical, nutritional, rheological, organoleptic quality management. For processed and unprocessed foods
- Sensory analysis and culinary strategies

Fields of Application



- dairy milk products
- fermented drinks
- ready meals
- preserved meats
- egg products
- all food products

THE PFT LABEL (PLATE-FORME TECHNOLOGIQUE)



This Ministry of Education and Research label is a means to connect different establishments in order to give support for innovation and help develop business ventures. Mainly through conducting experiments and providing training.

Quality and precision are guaranteed: **PFT Innovalim** is recognised all over France by professionals for the efficiency of its service.

Conducting Experiments

Experiments are most often carried out within the field of work corresponding to the professional sector of the commissioning company but can be extended to other themes for specific projects.

This partnership between scientists and professionals can lead to greater advances in the sectors concerned.



Example : Creation of an automatic livestock sorting machine based on electronic identification tags

Context:

Livestock marked with a microchip can lead to more efficient animal husbandry systems.

One of the issues in the ruminants sector is the sorting of animals into groups. To improve extensive precision animal husbandry methods for large flocks of sheep and goats, the Joint Research Unit SELMET with the technicians from the Domaine du Merle, students from Arles Technical High School and the company 'Wallace' has created this tool.

Results:

The originality revolves around the fact that the animals do not have to be immobile. As the herd progresses through a channel, only the animals who are identified as belonging to a new group will be slowed down and directed through a different gate.

Thanks to the speedy detection of the microchips the herd can be separated into several groups rapidly. One person can operate the system according to information from an electronic weighbridge or a list.

Sharing:

The company 'Wallace' is manufacturing and marketing this device. It can be seen in action at Domaine du Merle before ordering yours.

F. Recruiting New Graduates

Links between the professional world and educational establishments is maintained thanks to the recruiting of new graduates. The educational establishment can help identify the recruits with an appropriate profile and put them in touch. The former students can keep in touch to provide data on career profile and prospects.

Alumni associations play an important part in recruitment.



Example : SupAgro Alumni Association

All former students from all courses can find and/or formulate job offers on the alumni website.

Contact SupAgro Alumni for further information: <http://www.supagro-alumni.fr/>

G. The Careers Forum

This event brings together the current students, former students, new graduates, teaching staff and professionals from the agriculture and research sectors.

Professionals are able to select new recruits from the new graduates, according to profile and can offer placements to current students.

Students can discover a concrete range of job profiles and placement projects.

E-forums, Group discussions and one to one talks around posters and stands lead to a clearer view of the possibilities for cooperation.



Example : SupAgro Careers Forum

Contact SupAgro Careers Forum for further details(see)

H. Entrepreneurs

Junior Enterprise

A Junior Enterprise is an economically and educationally oriented association, fully managed by the students. Students gain practical experience to supplement the knowledge acquired through study. Surveys can be carried out in the student's field of study, for a range of clients. The French 'Confédération des Juniors-Entreprises' works actively towards establishing links between educational and professional establishments.



Example : Montpellier SupAgro Junior Enterprise

Montpellier SupAgro Junior Enterprise - JEMA (Junior Etude de Montpellier SupAgro) is a professional association which carries out surveys for the Agriculture and Agronomy sector.

The services provided by JEMA are commissioned by entrepreneurs, small and medium enterprise, large groups, associations, local government etc., who require help from highly trained future agricultural engineers. In return, the students gain experience while putting theory into practice.

For further information contact JEMA : la plaquette de la JEMA (see)ou *le site internet*⁷.

Student Entrepreneur Status (In French)

Further information : <http://www.enseignementsup-recherche.gouv.fr/cid79926/statut-national-etudiant-entrepreneur.htm>⁸

Sponsorship

A student with a plan for a new business can be sponsored by a professional. This relationship between future entrepreneur and professional benefits both partners.



Example : A qualification for student-entrepreneurs

A qualification can be given by a French educational establishment to a student-entrepreneur.

7 - <http://www.supagro.fr/jema/>

8 - <http://www.enseignementsup-recherche.gouv.fr/cid79926/statut-national-etudiant-entrepreneur.htm>

Prerequisites:

Registration as a student-entrepreneur after examination of the business plan and approval by Pôle Etudiants Pour l'Innovation, le Transfert et l'Entrepreneuriat (PEPITE).

Enrollment on a D2E course is mandatory for recent graduates; and highly recommended for all students.

Programme:

Apprenticeship, online coursework and tutoring by a teacher and a professional.

Advantages of the D2E course:

- validation of the business plan
- training adapted to needs
- a recognised D2E qualification

Business 'Incubators'

This is a structure which helps set up the framework for the initial company. Office space can be provided, along with professional advice and financial backing.

Some Business Incubators are closely linked with educational establishments. ESSEC Ventures is an example which was first set-up inside a school in 2000.

The students, recent graduates and former students can benefit from specific help in their sector of activity.

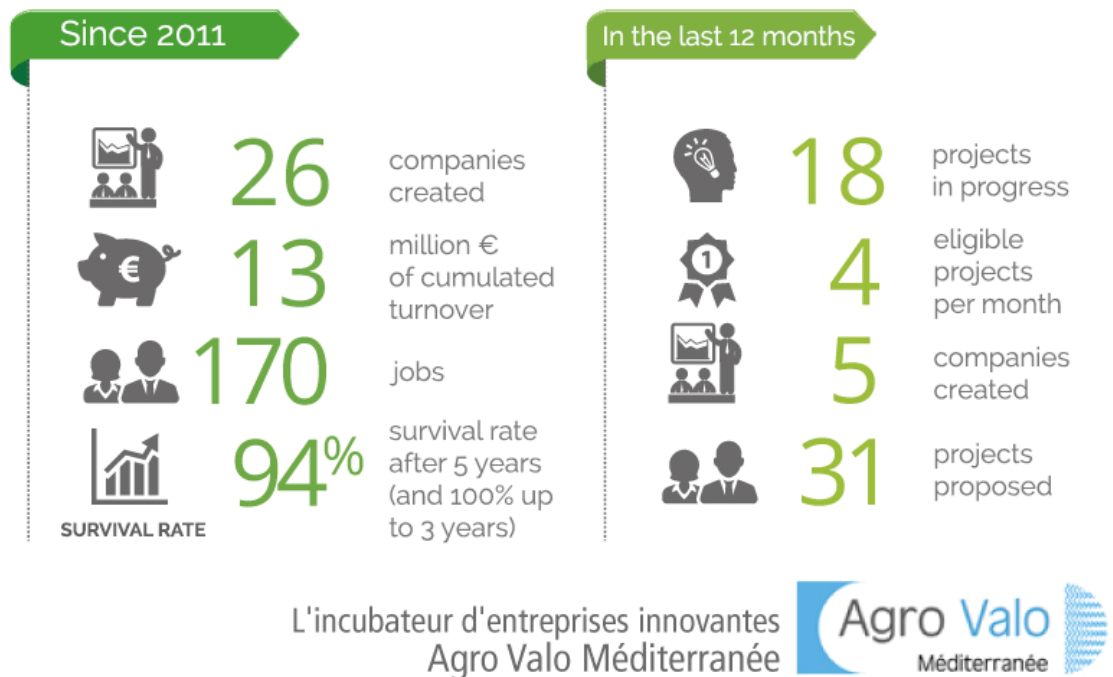
As well as premises, Internet connections, telephone lines and a printing service is available. The university professors and researchers can help and networking with private and state partners can help find funding.

In France there is an established system with former students, providing a guiding framework with training if necessary. Access to many financial help plans can also be negotiated more easily through this system.



Example : Agro-Valo Méditerranée, Innovating Business Incubator

Dedicated to development of innovation projects in the Agriculture, Food Industry and Environment sectors.



The support of the incubator:

- A specific method adapted to emerging projects and development of innovating businesses.
- Technological and scientific guidance from the teams of professionals in the laboratories in the Montpellier Pole of Expertise.
- Diagnostics, advice and coaching from the Agro-Valo team.
- Co-incubation with a partner from the Synersud Organisation for expertise, services, training and financial backing during the incubation phase of development.

I. Sponsorship

University Foundations

What does the university foundation do?

This foundation gives funding to projects of general interest which respect the specifications set out for Higher Education missions.



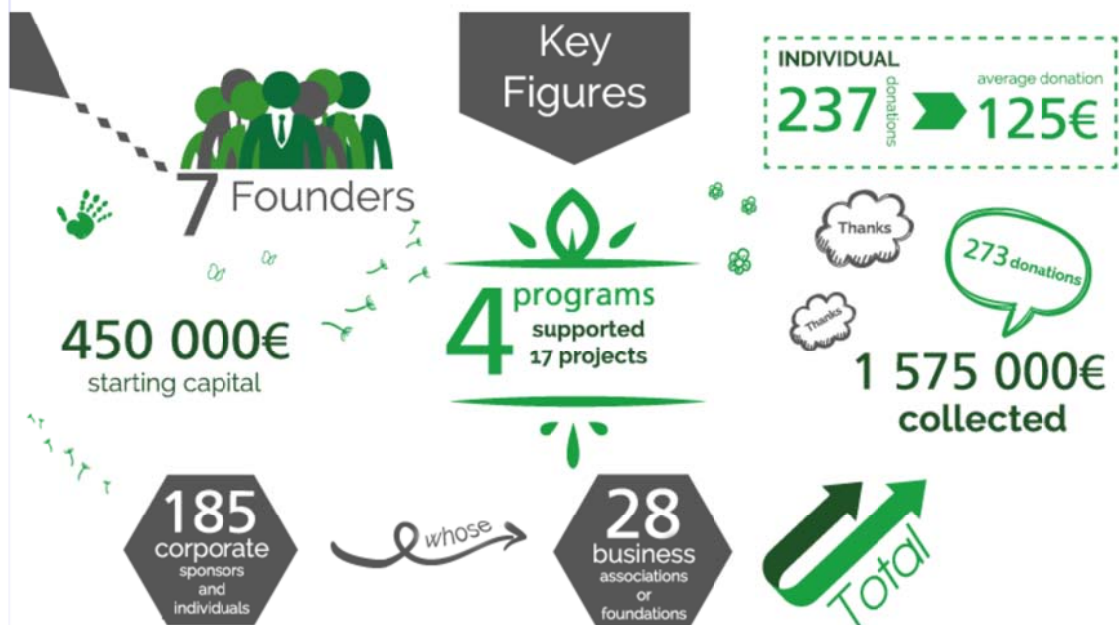
Example : SupAgro Foundation, founded in 2009, is the University Foundation of Montpellier SupAgro

Their role is to unite businesses, partner institutes, current students and former students in a movement to progress together towards developing responses to agricultural issues while finding opportunities of employment for students and promoting pedagogical innovation, scientific innovation and technical innovation. For Example:

- Skills and knowhow are highlighted through the Agricultural Engineering for Sustainable Agrosystems' Chair 'AgroSYS'
- Solidarity between generations and with the south are enhanced by

international grants 'bourses internationales d'excellence' and the social action fund, 'FAS'.

- Innovation, knowledge sharing, and innovative business creation projects are helped through the 'Graines d'Agro' Competition awards
- Prospecting, developing, negotiating, a public & private scientific watch, with the think tank 'Semences, Vigne & Vin'



For further information: <http://www.supagro.fr/fondation/>⁹

Business Chairs

A business can sign a 3 to 6 year engagement to donate a substantial amount in order to support development and research activities and teaching in a specific sector which interests the donator (1 -3 million € per chair in Centrale Paris, for example).



Example : AgroSYS Chair

AgroSYS is made up of five business partners with the same level of sponsorship: 90,000 € for 3 years. The businesses are of different size and work in different fields of activity.

The framework for AgroSYS and the running of the Chair are the responsibility of Montpellier SupAgro. The goal is to work for and with the agro-ecology students to reinforce professional skills. Life long learning courses are created for the business employees and/or students.

For further information: <http://www.supagro.fr/fondation/chaireagrosys.html>¹⁰

9 - <http://www.supagro.fr/fondation/>

10 - <http://www.supagro.fr/fondation/chaireagrosys.html>

Questions To Ask Yourself (and how to find an answer)



VI

Why should you ask questions?

Why do you need to know about the current interactions between your university and professionals?

- Because you need to know how these interactions are perceived, are they positive or negative. The extent of future implication of professionals can be assessed in this way.
- To find out if the academic world and research is judged as too distant from reality.
- To find out if the professors and researchers have considered the practical uses of their work.
- Because professors and researchers are only assessed on their research.

What questions need to be asked?

Questions about university/professional relations need to be formulated carefully to obtain full answers.

- What are the factors favouring or interfering with the initiation of a partnership between the university and the professional?
- At what levels could a professional interact with the university when working from beginning to end of a project?

The Manual for Sequence 4

VII

Conclusion

In this teaching unit, we have seen that 'professionalisation' of a university course can be achieved in many ways. Quality, intensity and frequency of interactions between professionals and universities must be inherent in the plan.

This relationship, in some cases, can be stable and reliable, in some cases very well developed; the degree of involvement often reflects local politics and socio-economic conditions. In some cases the process of professionalisation can be long and arduous as the two worlds adapt their visions to accommodate the other.

Alternating apprenticeship and study, for example, is not as common in France as in Switzerland. This system, from a teaching standpoint, is defined by the distribution of skills learned and consolidated during the periods of study and of apprenticeship, enhanced by the concrete interactions between the educational establishment and the professional.

It is clear that understanding new contexts and adapting solutions to the issues are essential skills for the professional world today.

Professionalisation can be seen as a progression, following on from learning techniques, building a professional profile and socialisation.

Source : La professionnalisation dans l'enseignement universitaire : un processus dialogique /Muriel Henry et Maryse Bournel Bosson. 2004. RIPES. Revue Internationale de Pédagogie de l'Enseignement Supérieur.

As a reminder, the objectives of the sequence were to allow you :

- To explain why the analysis of the existing relations between university and professional world (of the targeted sector) is important and from the beginning of the training project;
- Give examples of possible types of relationships with professionals in the sector.

Now you can go back to the homepage:

> *Homepage of the Training Course Engineering Module*¹¹

Continue your training by discovering Sequence 5 :

> *Sequence 5: Analyze the jobs and skills required*¹²

11 - http://www.supagro.fr/ress-tice/asifood/index_en.html

12 - https://www.supagro.fr/ress-tice/asifood/IF_Eng/Sequence5/co/Sequence5_AsiFood_Angl.html