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OEII - “Open Educational Innovation and Incubation"

OPEN EDUCATIONAL
INNOVATION & INCUBATION

Open Educational Innovation and Incubation

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Workpackage No.	**WP2**
Workpackage Title	**Cross-comparison of university interfacing models and assessment of market receptiveness**
Activity description	**Compendium of practices**
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Executive Summary

This document is a compendium of selected practices in Europe, concerning how universities deal with educational innovation, stakeholder and market receptiveness. Out of 15 different cases 3 practices were selected as reference models. To give a general overview of different possible solutions also other cases from different European countries (Belgium, Estonia, Greece, Italy, Poland, UK) are added for comparison (annexes).

General findings of the report may be applied by universities on strategic, tactical and operational levels.

This document collects 15 case studies gathered from the following institutions: Politecnico Torino, Italy; University of Naples, Italy; University of Rome 3, Italy; Uninettuno, Italy; University of London, UK; Faculty of Engineering, KU Leuven, Belgium; Continuing Education Unit, Campus Kortrijk of KU Leuven, Belgium; QUADRI, Limburg Catholic University College, (Katholieke Hogeschool Limburg), Belgium; Hellenic Open University, Greece; National Technical University of Athens, Greece; National and Kapodistrian University of Athens, Greece; Maria Curie-Sklodowska University, Poland; Lublin University of Technology, Poland; Tallinn University, Estonia; Open Media Unit at The Open University, UK.

Analysis of different cases and different aspects that influence organizational interface between educational institutions and business allow to draw a kind of reference model, which is defined by:

1. Quality of education.
2. Strong link between education and research.
3. Strong link with the labour market.
4. International relationship.
5. Very good brand.

Out of 15 different cases 3 cases were selected as reference models:

1. University of London, UK
2. Politecnico Torino, Italy
3. Faculty of Engineering, KU Leuven, Belgium.

List of abbreviations

Abbreviation	Definition
EFQM	European Foundation of Quality Management
HE	Higher Education
HOU	Hellenic Open University
ICT	Information and Communication Technology
KHLim	Katholieke Hogeschool Limburg
KM	Knowledge Management
KPI	Key Performance Indicator
Kulak	Continuing Education Unit at KU Leuven
LUT	Lublin University of Technology
MCSU	Maria Curie-Sklodowska University
NTUA	National Technical University of Athens
OEII	Open Educational Innovation&Incubation
OER	Open Educational Resources
P&O	Problem solving & Design
PT	Politecnico Torino
QA	Quality Assurance

QUADRI	Limburg Catholic University College
R&D	Research & Development
TU	Tallinn University
UoA	National and Kapodistrian University of Athens
UTIU	Università Telematica Internazionale UNINETTUNO
VET	Vocational Education and Training
VTC	Vocational Training Centre
WP	Work Package

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1. Introduction

The aim of Open Educational Innovation & Incubation (OEII) is to conceptualise the design of a sustainable organisational interface which supports improved university-market receptiveness and improves (internal) university incubation and innovation. OEII intends to systematically involve university management, change agents, internal & external stakeholders, multipliers and accelerators, to promote the knowledge exchange process between different parties. It intends to seek solutions to optimise the educational innovation and incubation process, and identify any organisational structures and opportunities that can be taken advantage of. Recommendations to improve organisational interfaces are formulated, and appropriate motivation and reward mechanisms for academics and accelerators are provided.

To accumulate knowledge, OEII performs a cross-comparison of university interfacing, and deduces flexible interfacing for improving support to the (pre)incubation of new educational initiatives. It seeks more empirical insight into the process of incubation by assessing the actual strengths and weaknesses of emerging, running, and small-scale experimental pilots, which actually go through the process of (pre)incubation.

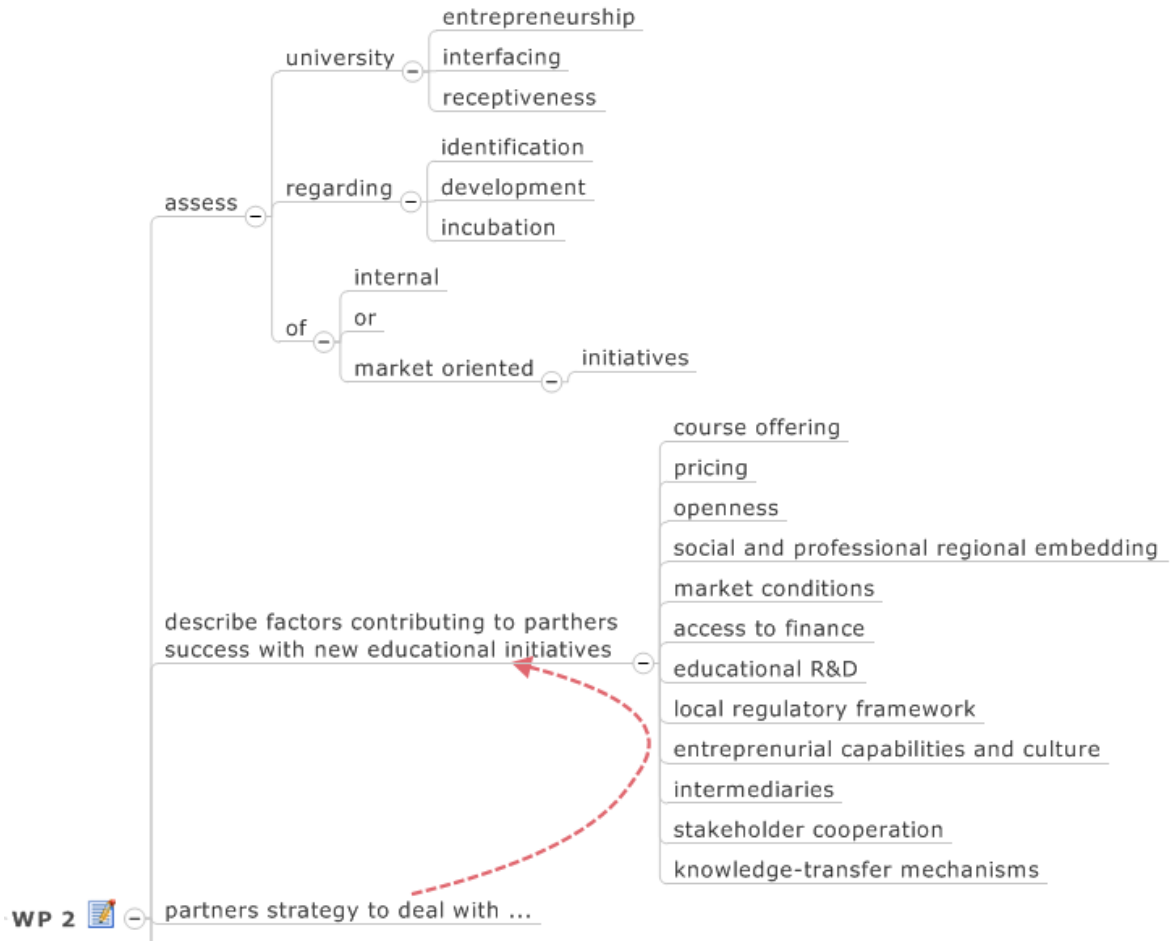
The primary objective of OEII is to formulate recommendations on the organisation of a (more) transparently organised, and sustainable, university-market interface, which is receptive to inside and outside developments, and the valorisation of educational innovation powered by commercial & Open Educational Resources (OER). Secondary objectives include: (a) driving the employability-dialogue with external stakeholders on curriculum innovation & student skills and competences, (b) enhancing educational attainment by establishing connective (post-academic) HE learning paths, (c) acting as a provider towards more inclusion of the population, and (d) improving the possibilities of social mobility for disadvantaged groups.

WP2: Cross-comparison of university interfacing models and assessment of market receptiveness

In WP2, university entrepreneurship, university interfacing, and university receptiveness, as regards the identification, development and incubation of internal or market-oriented educational initiatives, are assessed. Many factors contribute to universities being successful with new educational initiatives: course offering, pricing, openness, social and professional regional embedding, market conditions, access to finance, educational R&D, constellation of the local regulatory framework, entrepreneurial capabilities and culture, intermediaries, stakeholder cooperation, and knowledge-transfer mechanisms. In charting the different practices, partners perform literature study, expert interviews, and convene (the first run) of local workshop sessions with stakeholders. The whole exercise cumulates up to individual country reports, in relation to country literature and the country stakeholders/experts. All the individual country reports are then successively compared in a European perspective,

and assessed on strengths, weaknesses, opportunities and threats. A compendium with extracted best practice of interfacing will result. Each university successively reviews the European best practice model(s) and identifies-back, local opportunities for the implementation of models which accelerate market requirements' infusion, the identification of new (internal or external) educational initiatives, and the associated process of university incubation.

Figure 1: Workpackage structure



2. Methodology

The primary objective of OEII is to formulate recommendations on the organisation of a (more) transparently organised, and sustainable, university-market interface, which is receptive to inside and outside developments, and the valorisation of *open* educational innovation. *The recommendations will* include *the following aspects*:

1. driving the employability-dialogue with external stakeholders on curriculum innovation & student skills and competences,
2. enhancing educational attainment by establishing connective (post-academic) HE learning paths,
3. acting as a provider towards more inclusion of the population, and
4. improving the possibilities of social mobility for disadvantaged groups.

The aim of the research performed in WP2 is to analyse different university interfacing with external stakeholders. Main **aspects** which should be taken into account by universities for **improving relations with external world** and support new educational initiatives were identified.

WP2 collects **general** practices of different university interfacing activities. This reflects only the general interfacing activities and do not focus preliminary on best practices. This inventory is aimed to determine the present situation at a university level and to determine the general success factors and challenges in that respect. It is limited to **common** (and some leading) practices **at partners institutions only.**

WP 2 outcomes will be applied in WP 4 (assessment of the advanced cases) and WP 5 (the overall syntheses out of WP2, WP3 and WP4: lessons and recommendations on sustainable interfaces for open educational innovation.

A general methodology of the research on interfacing was divided into two stages:

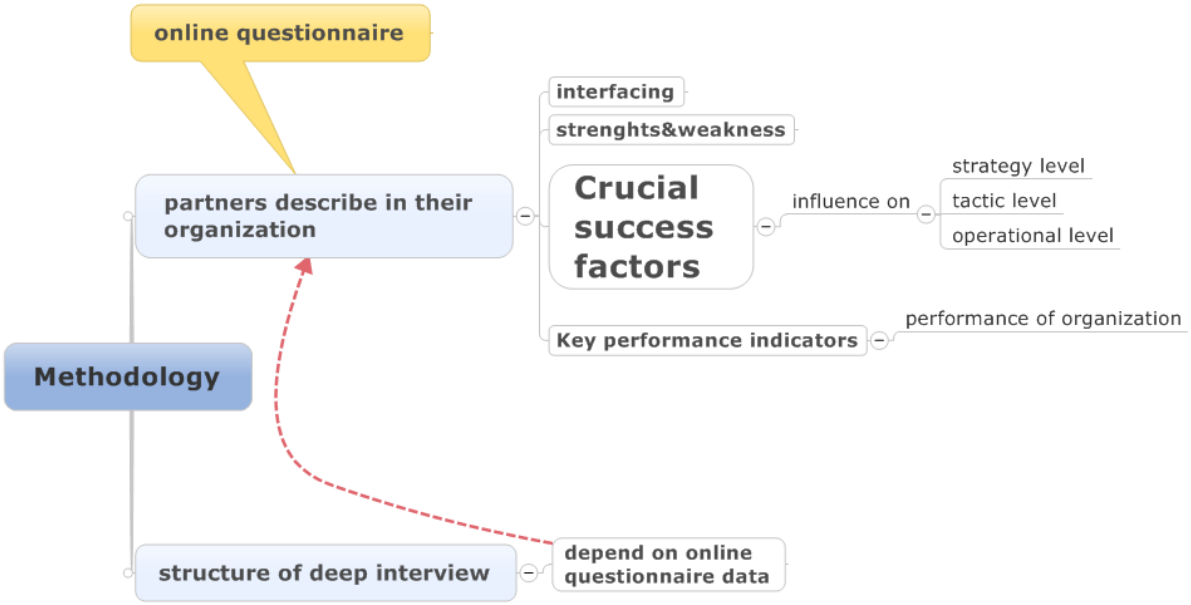
1. Firstly, online questionnaire was prepared and each partner was supposed to fill it in (see Annex 1). The aim of this online questionnaire (both close and open, wider questions) was to collect first information about organizational interfacing in partner institutions and check the form and content of the questionnaire. Following fields were represented in this form:
   - Executive summary (half page).
   - Basic info about organization (name; type; web page; address; number of eployees; specialization; number of: active bussiness partners, different trainings offered, patetnts and licences issued per year).
   - The interfacing (internal and external actors; interface process: responsiveness and need analysis processes, product planning and designing processes, product go-to-market and delivery processes, QA and CC, relationship management, Motivation and incentive mechanisms).
   - Strengths and weaknesses.
   - Crucial success factors (eg. course offering, openness, social and professional regional embedding, market condition, access to finance, educational research

and development, local regulatory framework, entrepreneurial capabilities and culture, intermediaries, stakeholder cooperation, knowledge-transfer mechanisms).
- References (literature, reports, meeting notes).

2. After collecting these data and analysis of the cases sent by partners structure for depth interviews was elaborated. Each partner were supposed to find 3 institutions in its region/country and conduct interviews with them. The interviews were supposed to have a face-to-face form as more personal contact would give an opportunity to collect more deeper information. Structure for the interviews is presented below:

- Basic information (general information about the institution, its structure, programs, educational offer etc.)
- Course/programme needs analysis and improvement processes (academic and courses, research, consulting, role of ICT)
- Quality Assurance processes and organizational interfaces
- Most important success factors and measures of success
- Challenges and areas for improvement

Figure 2: General methodology



Due to limited time and resources the research team couldn't access all the persons and projects crucial for interfacing. That is why results of interviews and questionnaires do not necessarily represent a complete picture of the situation at a given institution.
Based on questionnaire's responses and interviews a report in form of: *Notable country practices on interfaces models* (Deliverable 7) and *Compendium of practices* (this document).

Notable country practices on interfaces models contains cross-comparison of university interfacing and more general overview on the main aspects which should be taken into

account by universities for improving relations with external word and support new educational initiatives. All collected country reports (case studies) are attached to this general description.

In *Compendium of practices* 3 cases from all collected country reports (case studies) were selected as representative case studies. The selection was done based of analysis of the most important success factors which construct the most effective model and all 3 selected cases seems to be the closest to it. All collected country reports (case studies) are attached to the document (annexes).

3. Selection of good practices

Analysis of different cases and different aspects that influence organizational interface between educational institutions and business show the most important aspects that influence on institution success.

The most important for the overall success seems to be the **quality of didactics and research**. These factors influence on the institution **brand**, what on the other hand can be a critical factor in times of demographic depression and financial crises. Also **adequacy of education** and **adjustment of universities offering to market needs** is really important, but still needs to be improved**.**

What was strongly underline modern university should have **wide didactic offer** and **flexible study programmes** which take into account market needs. Within such a university new, **modern infrastructure** should be available and students should have **access to laboratories** and newest materials. There should be also **knowledge management system** to help to utilize existing knowledge and experience for internal purposes and external promotion. University and its researchers, tutors and students should participate in **international programmes** (common research, practices exchange, students exchange programmes) and **collaborate with companies and region authorities** (in field of research, students practices and internships, study program designing).

When we look at above description the following factors seems to be the most important:

1. Quality of education
2. Strong link between education and research
3. Strong link with the labour market
4. International relationship
5. Very good brand

Based on analysis of all 14 cases collected from partner countries we identified 3 which seems to be the closest to the above description. They can be can be treat good practice and recommended models for other educational institution. What is important these cases represent different kind of educational units (university, polytechnic, faculty). They are also all from 3 different countries (UK, Italy, Belgium).

Of course, application of any of this model will depend on specific regional situation and possibilities. However, they can be treat as reference model.

Below we present 3 representative case studies of university-external world organizational interfaces from the following institutions:

- University of London, **UK**
- Politecnico Torino (PT), **Italy**
- Faculty of Engineering, KU Leuven, **Belgium**

Case 1: University of London

1.1. Basic facts, context

Structure

The University of London is unlike many other universities. It consists of 19 self-governing Colleges and 10 other smaller specialist research Institutes. In many ways the Colleges are considered universities in their own right: they set their own entrance criteria for their courses and they offer their own services to students. Some now also have their own degree awarding powers. All students from all the Colleges and Institutes are also University of London students, making them part of a community of over 120,000 students and giving them access to many services in London.

In fact it is not even essential to be in London to study for a University of London degree. We currently have over 50,000 students studying in 180 different countries with the University of London International Programmes directly taken from http://www.london.ac.uk/aboutus.html

Colleges

There are 19 autonomous colleges (from which the best known are University College of London, Kings College and London School of Economics) and 10 other smaller research Institutes within UoL. They can decide upon their:

1. Quality assurance
2. Research
3. Legal entity
4. Funding
5. Brand management.

International Programmes (IP)

1. IP are provided by collaborative endeavour of the Colleges and UOL International Academy
2. Campus-based programmes provided by Colleges:
    - strategic goal: attract students to a college campus
    - value added for students:
        - reputation
        - relations
        - knowledge
    - are more expensive
    - higher entry requirements
    - diploma: college award (if not UOL award)
3. International Programmes provided by UOL:

- strategic goal: make UOL accessible to students worldwide
- value added for students: good, worldwide recognized diploma
- cheaper and cost effective for students
- lower entry requirements
- wider market (180 countries)
- teaching process:
  - programme: the same like in a partner college
  - teachers:
    - from a partner college teachers
    - or from partner, local (affiliated) organizations
  - exams:
    - traditional, in local examination centres
    - strict procedures, especially anti-plagiarism
    - all exam papers written by UOL academics
    - exams sent to UOL in London, assessed and marked in London
  - diploma: UOL award

Strategic challenges

1. Government financing cuts on education and research:
   - Forces market orientation
   - International Programs are not in a bad situation: market works as a shield
   - Business Case Analysis required for almost all existing and new educational projects
2. Brand management:
   - Internally (UK)
   - Internationally: how to position colleges vs UoL brands on different markets?
     - On some (eg Far East) UoL is better recognized
     - On some (eg US): Colleges brands are better recognized
3. University added value to society and industry:
   - Difficult choice: convince and defend market-independent position of the university OR listen and change relatively to market needs?
   - Identified value – added to business sector:
     i. Direct values:
        - Qualified employees
        - Consulting
        - Blue-sky research
     ii. Indirect values:
        - Trust – the best colleges recruit the best students, and thus serve as HR depts.
        - Networking: places, where the best ideas are generated by the best people.
4. Real-life application of research results:
   - Colleges and research Institutes realize a lot of very interesting and modern research projects

- Challenge: application of results of these projects in real UoL courses and programmes ("change idea into action")

1.2. Course/programme needs analysis and improvement processes

Market needs analysis (market intelligence): be close

1. teacher trainers travel all around the globe:
    - listen to local teachers
    - listen to students
    - listen to a market
    - listen to government institutions (strong relations with public sector and industry)
2. feedback gathered and analysed by both quality assurance team and a special market intelligence unit
3. market research sometimes outsourced to research companies:
    - hypothesis: we assume to recruit that number of students for that programme with that price...
    - … verified by the research
4. results:
    - identification of trends and niches,
    - suggestions of new programs
    - suggestions of improvements.

Course and programme development decision process

1. Business Case Analysis (BCA):
    - BCA prepared:
        - market analysis
        - financial analysis
        - operational analysis
    - an idea for a new educational program evaluated:
        i. internally:
            - strategic perspective: do we want to do this?
            - financial perspective: is it worth to do this?
            - operational perspective: will we manage?

        ii. externally (experts, research companies)
2. GO/NO GO DECISION - a dedicated decision board
3. Development

1.3. Quality assurance processes and organization interfaces

1. Main goal: improve courses
2. For a given program: 3 levels of assessment:
    - Level 1: during the course. Students asses a lecturer
    - Level 2: just after the course.
        - Students report to Quality Assurance (QA) unit
        - QA unit sends a summary to a lecturer
    - Level 3: after the end of a semester:
        - QA unit interviews students representatives
            - Form: questionnaires
            - Scope: all the courses
        - QA prepares reports for decision makers and lecturers.

1.4. Key success factors

1. Staying close (listening) to the market
2. Quality assurance, especially strict exams procedures
3. Specific for quality assurance:
    - QA culture: strict rules are followed by people, especially professors
    - Daily QA routines

1.5. Areas for improvement

1. More active learning:
    a. switching from static knowledge transfer (teaching) model...
    b. … to active learning model:
        - active:
            - interactions: with course content, other students and teachers
            - less contact hours, more project work
            - instant feedback system:
                - where am I on my learning path?
                - what are my strengths?
                - what should I improve?
                - how can I do this?
        - learning:
            - learn by yourself and with your classmates...
            - … rather than from your teacher.
2. Flexible and combined subject degrees and the ability/agility to develop and launch new programmes quickly in response to demand.
3. Better internal knowledge management (Tim Neumann)
    - Better internal communication: who knows what? Who is the expert in a given topic/field?

- Better utilization of existing knowledge, for internal and external purposes.

1.6. Role of ICT and e-learning

1. There is a new e-learning unit dedicated to teachers support in ICT application in didactics
2. Challenge: teachers resistance ("we don't need IT"). But: growing pressure, especially from students
3. E-learning evolution towards learning on demand and active learning
4. Content: research concentrates on Open Educational Resources and Reusable Learning Objects.

1.7. Expectation from OEII

We can all learn from lesson drawing in relation to the experiences of other universities.

Case 2: Politecnico Torino

1.1. Basic information, context

The Politecnico di Torino's has been founded 150 years ago and its long-standing tradition has been the basis for the reputation it enjoys today as one of the leading technical universities in Italy and throughout the world. In fact according to Jiao Tong University's league table, the Politecnico di Torino is in 7th place in Europe for engineering studies, and come first in Italy for internationalization and for technical studies according to league tables compiled by Vision and Censis.

The success is confirmed by the high number of students that apply every year to the Politecnico di Torino from all over Italy and from abroad (33% of their students come from regions other than Piedmont, and 12% come from foreign countries - the largest number in Italy). Students choose the Politecnico di Torino because of its serious approach, selectivity, and also because it is challenging and rewards students for merit, providing the basis for a successful career. A high percentage - 80% - of their graduates find employment within one year from the graduation, compared with a national average of 62%.

The Politecnico di Torino offers a multicultural study environment and has a close relationship to businesses, this shares the premises and work on many projects giving students the opportunity to gain work experience during their years at university. The new campus area is where research, teaching, and training go hand in hand with student services as well as financial and cultural activities. The Business Research Center inside the campus produces cutting-edge research for international corporations while the Venture Capital Section gives research the backing it needs to develop. Over the last ten years more than

100 business start-ups have been launched with the support of the I3P Incubator, which is also in the campus area.

1.2. Course/program needs analysis and improvement processes

Academic Programs and Courses

The most important actors and their roles:

1. Ministry. Provides ideas for new programs, approves new programs developed by PT
2. Senate. Defines general rules for departments
3. Departments. Generate new curriculum ideas for programs. Evaluate and approve ideas proposed by professors
4. Change leader. In most cases professor responsible for the course. The most active player in the process. Propose new ideas for program (development, improvement)

Decision making process:

1. Phase 1: gather change requests and initiatives from professors and/or departments (and even Ministry)
2. Phase 2: detailed project description
3. Phase 3: GO or NO GO decision at ministry level with Senate consultation

Master Courses, Vocational Trainings

Master courses and vocational trainings are realized by internal partner (COREP – Consortium, non-profit organization) who coordinate external offering.

University has its own model of e-learning. This year experiments with asynchronous webcasts (as combination of slides and professors lectures) recorder during F2F lectures in the lecture rooms specially equipped. There is no post-production. Students pay extra for this service.

Consulting

1. Full-time professors – they realize all the consulting via the Politecnico, with no extra money
2. Part-time professors – they need permission from decision makers and participate in the profits
3. Spin-off/out – consulting via non-profit incubator (I3P, Incubatore di Imprese Innovative).

1.3. Quality Assurance processes and organizational interfaces

Academic courses

Anonymous questionnaires are distributed among students after each course (on paper and starting from this academic year by mans of an on-line form), gathered by dedicated unit (CPD – Comitato Paritetico per la Didattica). The results (summaries) are transferred to professors and a dean and made public available through the PoliTo's Web server. When something goes wrong the meeting dean + professor is arranged.

Responds rates are highest when the questionnaires are sent to students in the middle of a second part of the course (60-70% responds rate)

Public/gov

Only quality of the research is taken into account.

Rankings

Realized by external companies.

Alumni

The "Associazione Ingegneri e Architetti ex Allievi del Politecnico di Torino" association helps graduated students to be visible to firms (www.alumnipolito.it). 80% of them find the job during 1-st year (national average: 62%.

Internships

Compulsory internship during 3-rd year, with students initiative and consulted with students assistance office.

Research request from companies

Graduated students are fund means of the alumni association, more often they provide their curricula to interested firms.

1.4. Key success factors

1. Reach course offering.
2. Ability to interact with region (local reality) – good relation.
3. International success factors:
    - very good brand (both research and education)
    - strong policy (motivation: rankings encouraging internationalization)
    - strong leadership (rector activities such as travelling and forming international relations)

- forming strong relations (e.g.: reference points in China with professors as advisors)
- foreign students offices.

1.5. Areas for improvement

Improvement of courses quality.

1.6. Expectations from OEII

Best practices and tips on how to improve teaching methods:

- how to improve students engagement, how to push students to be more active
- the best practices.

Case 3: Katholieke Universiteit Leuven - The Faculty of Engineering

1.1. Basic information – Context

The 'Katholieke Universiteit Leuven'

The 'Katholieke Universiteit Leuven' was founded in 1425. It is a traditional university offering approximately 60 bachelor's programmes and more than 125 master's programmes. In addition, it organises preparatory and bridging programmes, teacher training courses and various forms of lifelong learning programmes on an academic level. Various programmes are organised in the context of international university co-operation projects, such as Erasmus Mundus. Besides education, the university is largely involved in high-quality academic research, also in an international environment.

At present, KU Leuven caters to more than 31.000 students, around 12 % of whom are international students from more than 120 nations. In terms of its personnel, there are 5.287 academic staff, 2.730 administrative and technical staff.

The academic structure of the university consists of 3 groups of faculties: Human Sciences (8 faculties), Bio-Medical Sciences (3 faculties) and Science and Technology (3 faculties).

Since 2002 the KU Leuven is part of the 'KU Leuven Association', a co-operation between the university KU Leuven and 12 Higher Education Institutions located across Flanders. Over 80.000 students are enrolled at the association's various partner institutions.

For more information: http://www.kuleuven.be/english/

The Faculty of Engineering

In the Flanders Region, three universities offer the master's programme of engineering: the share of KU Leuven in this offer is about 42 %. In 2010-2011, the total number of students in the Faculty of Engineering is about 4.400 (PhD-students included); of this total, 548 students registered in KU Leuven for the first time. Within the Faculty, more than 500 research projects are run by a total number of about 800 researchers.

The Faculty deals with 7 departments (Civil – Materials – Chemical – Electrical - Mechanical engineering - Architecture - Computer Science): the involvement in research is situated on this level. Because it concerns mainly applied research, there is a strong collaboration between teachers, researchers and industry. Related to these networks of collaboration, teaching personnel is also regularly involved in in-house seminars and courses in the industry.

Strategic challenges of the Faculty of Engineering

- To belong to the top 20 of the educational institutions for academic engineers in Europe.
- To guarantee the differentiation between the master's programme for engineering sciences (conceptual engineer) and engineering technology (application oriented engineer) in view of the integration of both programmes within the Association KU Leuven.
- International: offering education that leads to international experiences for our students, that stimulates to set up an international academic staff, that attracts good international students from famous universities and that leads to a growing number of international researchers.

1.2. Course/programme needs analysis and improvement processes

1. **Formal procedure for acknowledgement of new bachelor's and master's programmes, on internal (KU Leuven) and external (Flemish Government) level**
   In this procedure, the relevance of the programme for the labour market must be motivated.
2. **Visitations of bachelor and master programmes by the Flemish government**
   - Evaluation (obliged by the Flemish government) of every university programme, by an official commission, every 8 years.
   - Based on a "self-evaluation report" written by the university faculty, in which the adjustment of the programme on the needs of the working field is described and motivated.
   - Members of the commission are, among others, representatives of industry.
3. **Informal consultation of professional associations by the Faculty of Engineering**

- Consultation of federations of employers in the chemical industry, technological industry: members are representatives of companies, industry.
- Informal discussions about educational topics between employers and the Board of the Faculty and the Presidents of the Faculty Departments.

4. **"Senate of the Faculty"**
   - Advisory board, consisting of about 20 high level representatives (CEO, CTO,HR manager, …) from industry, meeting 2 / year.
   - Membership based on individual expertise. No academics are member of the Senate.
   - Informal discussions on questions, raised by the university or by the members of the Senate, related to education, on a general level for the whole Faculty of Engineering.
5. **"Industrial Advisory Councils" of the Departments**
   - Specialised advisory structure consisting of members who are specialists in the specific domain of the Departments of the Faculty.
   - Active in a few Departments and in development in other Departments.

1.3. Quality Assurance processes and organisational interfaces

1. **Permanent Education Commission (POC)**
   - formal internal structure of KU Leuven for quality assessment of bachelor's en master's programmes, with limited attention for and participation of the labour market
   - indirect contact between POC and labour market via the personal networks of the POC-members who represent the teaching staff.

2. **Evaluations by students and alumni, organised by central supporting service of the university**
   - every two year students are invited to evaluate the courses of the bachelor and master programmes
   - every two year alumni are invited to evaluate the programme they have studied.

3. **Visitations of bachelor and master programmes: see above in point 2.**

4. **Quality Assurance and innovation of education by means of participation in national and international networks:**
   - international benchmarking via membership in networks of high quality education institutions for engineering
   - participation in CLUSTER, a network of 12 European universities with high quality education programmes for engineering.
   - active member of SEFI (European Society for Engineering Education) and CESAER (Conference of European Schools for Advanced Engineering Education and Research).

5. **Quality Assurance and innovation of education by means of participation in innovative projects aiming at the needs of the labour market:**
   - development, in strong collaboration with the labour market, of a new course "P&O" (Problem solving and design) aiming at the integration of the design process in the bachelor programme
   - growing importance of e-learning via Erasmus Mundus and because of the growing demand for international project work for our Belgian students.

1.4. Key success factors

1. **Quality of education**
   - high quality of our education and of our graduated students, appreciated on all levels (Flanders, Europe, World)
   - appreciation by the labour market of the multidisciplinary employability of our students
2. **Strong link between education and research,** because our teachers are operating in the frontline of research and engineering
3. **Strong link with the labour market,** because of our interfacing on different levels. The development and further growth of this model, is a priority within the Faculty.

1.5. Areas for improvement

1. To attract more students for the university master of engineering, in consultation with all Flemish universities.
2. To fill the gap between the need for engineers on the labour market versus the lack of graduated students.
3. Further development of our interface with the labour market:
   - the contacts with industry can be a stronger interface than it is now;
   - the network of alumni is not enough utilized.

1.6. Expectations from OEII

The use and functioning of interfacings is based on ideas and presumptions. A systematic analysis of the models is necessary to understand and develop our ideas on a more solid ground.
This can only be useful if the results of the project will be disseminated.

4. Conclusions

Analysis of different cases and different aspects that influence organizational interface between educational institutions and business allow to draw a kind of **ideal model**, which is defined by:

6. Quality of education
7. Strong link between education and research
8. Strong link with the labour market
9. International relationship
10. Very good brand

Presented in this document 3 good practices are very close to this effective model.

At the **University of London** quality assurance culture and daily routines are crucial for the quality of teaching in general, and course content in particular. Strict rules followed by people (especially professors) and precise exams procedures help to maintain high level of education. Listening to the market is also extremely important.

One of the most important success factors at **Politecnico Torino** is forming strong international relations. Very important role in that process plays the rector. His activities in external markets (travelling, contacts) has resulted eg. in setting up reference points with professors as advisors in China. Also, very good brand and strong policy help to obtain a high ranking, which results in further internationalization. That is why, there are foreign students offices. Except for international there are also other success factors at Politecnico, such as rich course offerings and good relations with the region.

KU Leuven Engineering also underline high quality of education and strong link between education and research and underline strong link with the labour market as one of the most important success factors. Its good brand guarantee good reputation.

All these 3 cases may be treat as reference model. Application of any of them will depend on specific regional situation and possibilities. It is obvious that success of the institution is built in a long process which requires collaboration of different people on different levels and providing long-term care for the quality of education and brand building.

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Annex 1: Case study - UNINETTUNO

Basic information, context

Università Telematica Internazionale Uninettuno actually has 6 Faculties (Communication Science, Economics, Engineering, Law, Literature, Psychology) offering 8 degree courses, several Masters and vocational training courses in Italian, English, French and Arabic.

Course/program needs analysis and improvement processes

Academic Programs and Courses

Academic Programs and Courses are mainly financed by students' fees, and since 2011 lightly co-financed by the government.

The typical improvement types are:

1. Modification of existing courses/programs
2. Proposition of new courses/programs

The most important actors and their roles:

1. Evaluation board. Meets 2-3 times a year for programs review. Responsible for strategic evaluation and decisions.
2. Ministry of HE and Research. Occasional, external evaluation required by law.
3. External (including international) partners. Provide feedback, take care about local legal regulations compliance.
4. Change leader. In most cases professor responsible for the course. The most active player in the process.
5. Students. Evaluate courses, provide feedback, suggest improvements.

Decision making process:

1. Phase 1: gather change requests and initiatives from teachers and students.
2. Phase 2: detailed project description (optional)
3. Phase 3: GO or NO GO decision at committee level.

Master Courses, Vocational Trainings

Master courses and vocational trainings are funded by:

1. Students fees
2. Companies.

Needs are analyzed by market research and/or companies requests.

Decision on new course/program development is made by a dedicated committee basing on financial and organizational feasibility study.

E-learning is a basic form of course delivery.

The entire delivery process, that is teaching and learning, takes place through on Internet in the didactic cyberspace of the web-portal of UTIU. The Internet-based learning environment transfers directly to the student's desk: indexed video lessons, multimedia products, exercises, evaluation and self-evaluation systems, online tutoring, forums, chats, thematic wikis and the videoconferencing system. Each digitised video lesson is divided into issues, each of them linked, in an hypertextual and multimedia way to essays, books, exercises, virtual laboratories, selected bibliographical references, lists of websites.

The delivery process is completed by the online tutoring, that realize an interaction between the student and the tutor during the learning process. In this way tutors and professors guide the students' learning processes through audio/video chat-rooms and videoconferencing systems. Online tutoring is organized in classes of 20 or 30 students, with an advanced system of Agenda that is able to acknowledge the single user and customize the training activity. An advanced system of qualitative and quantitative tracking makes it possible to continuously monitor the learning process of each single student.

Quality Assurance processes and organizational interfaces

At Faculty level, a periodical analysis is performed to analyze if the existing educational offer satisfies the students' expectations and how it could be improved and/or enlarged.

Further feedbacks are periodically obtained by the Evaluation Centre, an independent institution that periodically monitors and evaluate the quality of the University and its didactic products.

UTIU adopts a system of assessment of administrative management, teaching and research and interventions aimed to support the right to education. The evaluation functions are performed by the Evaluation Team composed by expert of evaluation of the academic systems.

The UTIU Evaluation Team periodically evaluate the quality of the didactic, of the professors and of the administration. The evaluation is performed analyzing the data of the evolution of the academic system and submitting questionnaires to the students.

What are the most important success factors?

1. Psycho-pedagogical and didactic model, which is the result of many years of international research and experimental results in distance learning.
2. E-learning platform, proprietary and compatible with the international standards on e-learning, which implements the psycho-pedagogical model.
3. The key role of R&D in the ICT.
4. The international network of competencies.
5. The capability to quickly move at international level.

What would make you more competitive?

A bit more of formalization and maturity (Uninettuno is still young – 5 years old). More formal project management would be useful.

The possibility to benefit from state grant.

Expectations from OEII

The analysis of several international models can help UTIU to fast develop a more efficient organization of the knowledge-transfer process.

Based on the results of the project, UTIU can create a specific structure oriented to interact with external partners (companies, business world) in order to improve the external cooperation and opportunities

Annex 2: Case study - University of Naples

Basic information, context

The University of Naples Federico II was established in 1224 through an Imperial Charter of Frederick II Hohenstaufen, King of Sicily and Holy Roman Emperor. It was the first publicly funded university in Europe.

Nowadays the university offers courses in essentially all academic disciplines, leading to one hundred fifty five graduate level degrees. Research facilities provide support to all these courses. Students are given the opportunity to pursue intellectual development as well as the acquisition of professional skills. Current student enrollment nears 97,000 and the academic personnel, at this time, is about 2700.

The university is made up of three divisions (Poli), which operate as semi-independent bodies for the teaching and research management of thirteen schools and eighty two departments grouped, within each division, according to academic and research profiles. Thus, the Division of Science and Technology includes: the School of Sciences (which, in turn, includes the Schools of Mathematics, Physics and Natural Sciences), the School of Engineering, and the School of Architecture. The Division of Life Sciences includes: the School of Medicine and Surgery, the School of Pharmacy, the School of Veterinary Medicine, the School of Agricultural Sciences and the recently established School of Biotechnological Sciences. The Division of Social and Human Sciences includes: the School of Economics, The School of Law, the School of Liberal Arts, the School of Political Sciences and the School of Sociology. Many more organisations also form part of the Federico II University.

The University Federico II is striving to become a world university and, to this end, places the highest priority in nurturing relationships, both within Italy and internationally. Our students are relentlessly encouraged in the pursuit of excellence, at home and abroad. Our staff and students take part in a variety of exchange programmes, within Europe, the Americas and Asia. While promoting cooperation with the more scientifically advanced research institutions of the affluent world, we are making every effort to help the less fortunate. Citizens of Northern Uganda have one doctor out of each 40,000 people: ‘Gulunap’ is the interuniversity cooperative project undertaken by the University of Naples Federico II and the School of Medicine of the city of Gulu in Northern Uganda.

Course/programme needs analysis and improvement processes

Academic Programs and Courses

Academic Programs and Courses are financed by the government.

The typical improvement types are:

1. Modification of existing courses/programs
2. Proposition of new courses/programs

The most important actors and their roles:

3. Committee at a faculty level. Meets 2-3 times a year for programs review. Responsible for strategic evaluation and decisions.
4. Committee at a degree program level. Evaluates the specific course/program, takes care about Quality Assurance processes, approves course/programs changes. The most active player in the process.
5. Students. Evaluate courses, provide feedback, suggest improvements.

Decision making process:

1. Phase 1: gather change requests and initiatives from teachers and students.
2. Phase 2: detailed project description (optional)
3. Phase 3: GO or NO GO decision at committee level.

Master Courses, Vocational Trainings

Master courses and vocational trainings are funded by:

- Students fees, also international
- Companies.

Needs are analysed by:

- market research, including recruitment trends
- companies requests
- companies feedback.

An ordinary analysis is also performed by specific didactic committees, by single or group of professors, by University centres.

Decision on new course/program development is made by a dedicated committee basing on financial and organizational feasibility study.

Quality Assurance processes and organizational interfaces

UNINA has an Evaluation Team composed by professors and administrative staff, charged to perform the periodical monitoring of the didactic activities and to perform the quality assessment. The members of the Evaluation Team are periodically changed and are declared on the UNINA website.

The Evaluation Team takes care of all the internal didactic activities and of some external didactic activities. Results the monitoring activities are yearly published on the UNINA website.

Some external didactic activities are not monitored by the Evaluation Team, the didactic program organizers have to take care of the quality assurance.

What are the most important success factors?

1. Quality of didactics: university has a good reputation among companies and thus attracts the best students (closed loop)
2. Quality of the research
3. Wide course offering (150 programs, 13 faculties)
4. Being flexible and able to efficiently prepare new program on demand
5. Good labs and research centers. Good value for students (practical skills, active learning, learning by doing).
6. Social and professional regional embedding.
7. Knowledge-transfer mechanism

What would make you more competitive?

Naples as a city:

1. Companies around are underdeveloped (need for knowledge clusters)
2. Lack of efficient interfaces industry-university.
3. the “regionalization”, that is to say the low capability to attract students and partners from other part of Italy

Expectations from OEII

Get a comparison of knowledge-transfer models of other national and international Universities, to understand how to improve its how model.

Get ideas to better organize a centre that can create in a structured way connections between the single faculties and departments and external business partners.

Annex 3: Case study – University of Rome 3

Basic information, context

Founded in 1992, Roma Tre University has gained a significant reputation in the academic world thanks to its quality teaching and research programs. Roma Tre offers degree courses, including Master's Degrees and PhD programs, in Architecture, Economics, Education Sciences, Engineering, Law, Humanities and Liberal Arts, Political Science, Mathematics, Physics and Natural Sciences. It carries out important research activities organized in 31 Departments in various scientific branches.

Roma Tre is an urban university and its main campuses are located in the Piramide/Ostiense area in the central/southern part of Rome; all locations are all easily reachable by subway. Roma Tre's Palladium Theatre hosts qualified international theatrical seasons, a variety of plays and experimental performances. Roma Tre offers its students many services, including sports facilities, university teams in various sporting disciplines including football, sailing and ping-pong, a stadium, an orchestra and a choir. The University's Internet Access Point - Piazza Telematica - is the first university computer laboratory to be organized along the lines of a wireless public internet point, offering a wide range of services and applications in 198 workstations including hardware and software for users with disabilities. Roma Tre University issues the Certification of Italian as a Foreign Language, which is officially recognized by the Italian State through Italian Ministry of Foreign Affairs. Though the University Language Centre Roma Tre organizes many language courses, including intensive Italian for foreigners.

Course/programme needs analysis and improvement processes

Academic Programs and Courses

Academic Programs and Courses are financed by the government.

The typical improvement types are:

1. Modification of existing courses/programs
2. Proposition of new courses/programs

The most important actors and their roles:

1. Committee at a faculty level. Meets 2-3 times a year for programs review. Responsible for strategic evaluation and decisions.
2. Committee at a department level. Approves course/programs changes
3. Committee at a program level. Approves course/programs changes
4. Change leader. In most cases professor responsible for the course. The most active player in the process.
5. Students. Evaluate courses, provide feedback, suggest improvements.

Decision making process:

1. Phase 1: gather change requests and initiatives from teachers and students.
2. Phase 2: detailed project description (optional)
3. Phase 3: GO or NO GO decision at committee level.

Master Courses, Vocational Trainings

Master courses and vocational trainings are funded by:

1. Students fees, also international
2. Companies.

Needs are analyzed by:

1. market research, including recruitment trends
2. companies requests
3. companies feedback.

Decision on new courses development is made by a dedicated committee basing on financial and organizational feasibility study.

Decision on programs is entrusted by the group (professors, researchers) and is informally preceded by a brief phase of coordination among the group participants, to avoid possible overlaps of topics and to plan links among the courses on the main topics.

Research

Use of the budget depends on professor's needs.

Research topics are also influenced by companies feedback and students internships feedback evaluation.

Quality Assurance processes and organizational interfaces

All courses in Roma Tre University end with the compilation of a questionnaire by the students. In the questionnaire students report on their opinion about several aspects such as the teaching, class organization, exercise utility, integration didactic material.

At the end of the academic year, in the most part of departments seminaries are organized by PhD students in order to expose the main research topics and results and to explain individual training path.

Moreover, the University promotes an integrated project for a Research Database System, with the aim of providing a tool for documentation and monitoring of research and knowledge-transfer activities of the results of the University Roma Tre.

Finally, Roma Tre has an Evaluation Team charged to periodically perform the quality assurance of most of the University didactic activities.

When students collaborate with companies, for instances for a stage or the redaction of a thesis, their performance are evaluated by a responsible in the company and communicated to the related responsible in the University.

What are the most important success factors?

1. Listen to: adapt your course to students needs
2. Be close: close students-professor relationships
3. Be flexible: adaptation of program to market demand
4. Form relations: participation in EU projects, collaboration with companies.

What would make you more competitive?

Better equipped, more modern laboratories.

Expectations from OEII

OEII project offers a useful scenario of the international situation about knowledge transfer acted by the Universities. Such scenario constitutes a good starting point for comparison with other Universities and institutions. Roma Tre University could capture new ideas above all by the foreign Universities to improve its performance and to be more competitive both for national and international market.

Annex 4: Case study – Limburg Catholic University College

Basic information – Context

The 'Katholieke Hogeschool Limburg' (KHLim)

The 'Katholieke Hogeschool Limburg' (KHLim), or Limburg Catholic University College, is a university college. The KHLim was founded in 1994 as a merger of 9 regional university colleges. It offers 30 bachelor's and 11 master's programmes. In addition, it organises 6 bachelor after bachelor programmes, 25 postgraduate programmes and various other forms of lifelong learning programmes. Besides education, the university college is involved in research, also in an international environment, and places its expertise at the disposal of society. The KHLim is a member of the KU Leuven Association, an institutional partnership between KU Leuven and twelve Flemish university colleges to set going the Bologna Process.

At present, KHLim caters to 6750 students and counts 800 staff members.

KHLim QUADRI

Since 1988, companies in the region started to ask the different university colleges in the province of Limburg about the possibilities to work together. At the time, the only official task of a higher education institution in Flanders was the education of their students. Nevertheless, one of the schools, that later merged into KHLim, started to build a network or interface between the university colleges, the secondary schools and the companies in the region. The network was called "VIA". A few years later, the Belgian government expanded the mission of higher education institutions to applied research and service to society. VIA was relaunched within the newly founded KHLim, a merger of the 9 regional university colleges, and changed its name into QUADRI in 2006. QUADRI stands for 'QUAlity DRIven' and clusters all research, local network and lifelong learning activities of KHLim. QUADRI offers annually 150 educational programmes: bachelor after bachelor programmes, postgraduate programmes, an open offer of various other forms of lifelong learning programmes (workshops, seminars, …) and tailor-made training programmes for companies. QUADRI also coordinates the activities of 20 research groups offering their services to companies in the region.

Innovation of KHLim's educational offer is mostly initiated by specific research and educational activities for companies, listening to their specific needs, answering their questions and elaborating tailor-made training programmes.

Strategic challenges of KHLim QUADRI

- Exchanging knowledge with companies through research projects and training programmes: a win-win situation for companies and KHLim education.
- Using the knowledge and experience from research projects to improve education and research within the KHLim.
- Making QUADRI a well-known brand for regional companies.
- Maintaining contact with companies in the region by creating sustainable contacts between educational staff and companies.

- Building a good reputation within the region (province of Limburg) in order to attract more students.
- Creating a different mind-set among educational staff, arriving at a full integration of QUADRI services and KHLim education (as opposed to 'education only' or 'research only' jobs).
- Arriving at 20% of KHLim turnover with QUADRI activities (2010: 12%)

Course / programme needs analysis and improvement processes

Interface with external partners

- Educational staff are experts in their fields, but a separate departmental research coordinator does the organisation and evaluation of the research projects and educational activities for companies.
- QUADRI is demand-driven and has a decentral organisation in 6 buildings situated in 3 different cities. Contacts with the labour market are widespread and difficult to measure, but a central service treats and channels all incoming questions and demands and has built up a central database of 15000 regional contacts.
- All contacts receive a digital newsletter with information about projects and events.
- In total, about 200 KHLim staff members are working for QUADRI and therefore participate indirectly to the process of educational innovation.
- Steering committees with delegates of the different KHLim departments (sometimes including students) meet on a regular basis and invite companies to discuss the needs of the labour market, as well as the opportunities for KHLim education and QUADRI services to adapt to the changing market.
- Contact with alumni through particular projects and systematic alumni surveys about their work experience and developments in the labour market.
- Network meetings with alumni and companies.
- Advertisements in local media lead to an increased visibility within the region but the most valuable contacts are made through alumni networks and contacts with local companies. Long-term contacts with alumni often lead to new contacts, as they regularly switch employer.

Internal processes

- Monthly meetings among departmental QUADRI coordinators and managers.
- Meetings among QUADRI coordinators and educational staff.
- QUADRI research and services lead to the creation of new courses.
- Research is centralised in a central project office, which coordinates research efforts and has an overview of research project grant applications to avoid internal competition in this field.

Quality Assurance processes and organisational interfaces

- KHLim asks its educational staff to constantly question their education based on signals they receive from the 'field'/market.
- Departments are also measured and compared with each other on the basis of their QUADRI engagement. This triggers them to work on their weaknesses by learning from other departments.
- Quality assurance starts on the moment the first contact with the customer is made. Intakes are of extreme importance for the further development of the project in question.
- Formative evaluation is more important than summative evaluations, at the end of a project, as formative evaluations have an immediate effect on the project. In the beginning of a project or collaboration with a company,
- External quality assurance according to the Qfor method (Qfor.org): every three years an external Qfor recognised organisation performs an audit.
- Quality assurance of internal processes is based on the EFQM model.
- Next year, the HR policy will be restructured. HR will investigate deeper the link between KHLim's formal educational offer and the QUADRI activities of the university college. In what ways can teachers be involved in QUADRI activities? (financially, knowledge, personal development, etc.)
- At KHLim there is a steering committee for quality assurance with a delegate from every department (different person than QUADRI-coordinator).

Key success factors

1. The Qfor external audit is an important success factor.
2. To be a well-known brand and preferred partner in different sectors within the province of Limburg.
3. To reach a turnover of 20% of the total KHLIM's turnover.

Areas for improvement

4. Interdepartmental collaboration: sharing knowledge and experiences
5. Close collaboration with the local companies
6. Internal and external quality assurance

How can KHLim QUADRI benefit from the OEII-project?

It is interesting to know examples of interfacing (especially from Scandinavian countries) and to compare different models to be able to exchange and to learn from each other.

Annex 5: Case study – Campus Kortrijk of KU Leuven – Continuing Education Unit (Kulak)

Basic information – Context

The 'Katholieke Universiteit Leuven'

The 'Katholieke Universiteit Leuven' was founded in 1425. It is a traditional university offering approximately 60 bachelor's programmes and more than 125 master's programmes. In addition, it organises preparatory and bridging programmes, teacher training courses and various forms of lifelong learning programmes on an academic level. Various programmes are organised in the context of international university co-operation projects, such as Erasmus Mundus. Besides education, the university is largely involved in high-quality academic research, also in an international environment.

At present, KU Leuven caters to more than 31.000 students, around 12 % of whom are international students from more than 120 nations. In terms of its personnel, there are 5.287 academic staff, and 2.730 administrative and technical staff.

The academic structure of the university consists of 3 groups of faculties: Human Sciences (8 faculties), Bio-Medical Sciences (3 faculties) and Science and Technology (3 faculties).

Since 2002 the KU Leuven is part of the 'KU Leuven Association', a co-operation between the university KU Leuven and 12 Higher Education Institutions located across Flanders. Over 80.000 students are enrolled at the association's various partner institutions.

For more information: http://www.kuleuven.be/english/

Campus Kortijk of KU Leuven – Continuing Education Unit (Kulak)

Kulak is a separate Campus of KU Leuven, situated in Kortrijk. On the Campus, only bachelor programmes are offered. After having finished a bachelor in Kulak, students can without any problem continue their studies at the university in Leuven.

As part of the Kulak, the Continuing Education Unit is responsible for the organisation and management of the activities and programmes in all kinds of disciplines. The primary interest of the Unit is education, no research activities. Every year, the Unit organises about 120 continuing education activities, for about 8000 students. The offer is mainly developed as an answer to the needs of the nearby region of Kortrijk and the province of West-Flanders. Because of the position within KU Leuven, the unit also develops an offer of activities for other regions in Flanders. The growing use of video-conferencing makes it possible to organise distance-learning programmes. In the region, the Unit has a close collaboration with several Higher Education Institutes, mostly within the Association KU Leuven.

Strategic challenges of the Continuing Education Unit

- Growing collaboration on continuing education within the Association KU Leuven.
- Continuing education must be self-supporting. This demands: vigilance for the good balance between the market driven aspect of the offer and its quality; development of activities taking into account the specific characteristics of each sector.

- Integration of multimedia in continuing education.

Course / programme needs analysis and improvement processes

Interface with external partners

- Consultation of the labour market through 6 steering committees: cultural sciences, economics, behavioural sciences, medicine, law, science and technology.
- Members are representatives of industry, federations of employers, professional associations, provinces, … Participation is on voluntary basis.
- 2 à 3 meetings / year with the aim of: brainstorming on existing offer, needs, …; on new topics for continuing education; on first ideas for development of new programmes.
- Meetings result in:
    - new, one-off activities, developed by the team of the Unit;
    - new long-term programmes, that can be repeated each year: for these activities a separate working group is created to develop the programme in detail.

Internal processes

- the internal academic network and co-ordinators of existing activities or programmes report on new needs for continuing education
- the feasibility of new ideas is questioned in the steering committees and among the alumni of the university

Quality Assurance processes and organisational interfaces

- No official regulations for quality assurance of continuing education activities.
- All continuing education is evaluated by the student by means of a standardized form.
- Results are always discussed: within the Unit; in detail with the teachers; in global with the Steering Committees.
- All long term or repeated programmes are evaluated in-depth (in global and in detail) with the Steering Committee or in separate working groups.
- Feedback of the labour market is not systematically collected but is given via the members of the Steering Committees.
- Official procedure for reporting on continuing education: DPAV-council (advisory board on continuing education of Kulak) reports towards the Board of the Campus, that reports towards the Board of KU Leuven.

Key success factors

1. * continuing education offer that is demand driven,
   * link with the market,
   * involvement of external partners;
2. position as a unit of KU Leuven is a guarantee for a good reputation, high quality, academic level of education, mixture of academics and industry in the team of teachers;
3. strong culture of entrepreneurship.

Areas for improvement

1. Membership of the steering committees: it is a continuous effort to find members on a voluntary basis and to keep up the motivation of the committees.
2. Further development of our network, not on a formal level but informal as it functions now.
3. To control the growth of the Unit against the background of continuous uncertainty about financial means.

How can Kulak benefit from the OEII-project?

- It is interesting to know examples of interfacing and to compare different models to be able to exchange and to learn from each other.
- It is important to keep these models practical and ‘down-to-earth’.

Annex 6: Case study – Hellenic Open University

Basic information, context

Hellenic Open University (HOU) is the sole Greek State University that provides distance education in both undergraduate and postgraduate levels. It consists of four Schools: Sciences and Technology, Humanities, Social Sciences, and Applied Arts and currently offers 6 undergraduate and 26 postgraduate programmes of study comprised of 184 Teaching Units. As a tertiary educational institution with a student body of about 17.500 undergraduate and 11.000 postgraduate students, HOU's mission is largely identical to that of the other tertiary institutions of the country. However, its uniqueness lies in that it offers opportunities for undergraduate and postgraduate study to wider social groups of the population, thereby making continuous education and lifelong learning possible for all. The promotion of scientific knowledge is made possible by means of distance learning methodology (DL) which is facilitated through the maximal exploitation of Information and Communication Technologies and the production of appropriately developed materials. HOU pioneers new educational methods which are completely based on the principles of distance education and offers innovative programmes of study.

Course/programme needs analysis and improvement processes: main actors and their roles

Academic Programs and Courses

Before the launch of a new course (either undergraduate or postgraduate), a targeted market survey is conducted: This survey includes collaboration with various policy makers such as the Athens Chamber of Commerce and Industry, the Greek Chamber of Technical Issues and the e-Business forum. These bodies provide a clear depiction of market status and business needs and the Hellenic Open University designs the courses accordingly. It is in the intention of HOU to provide innovative curricula that are not in conflict with these ones that are provided by the conventional Greek universities. Academic Programs and Courses in HOU, are financed by the students.

Typical improvements needed are:

1. HOU needs to react on market and business needs with more flexibility and rapidness, even on annual basis.
2. There is lack of openness towards Greek of Diaspora (Greek citizens that live abroad).

Most important actors and their roles:

1. The President, the Vice President, the Board of Directors and the Senate, those are responsible for the final decision making regarding administrative, financial and educational issues.
2. **HOU Educational Content and Methodology Research Laboratory:** The HOU Educational Content, Methodology and Technology Laboratory (e-CoMeT Lab) has been founded and operates as an independent unit of the Hellenic Open University (HOU), according to the 2552/1997 law. The Laboratory supports HOU. in applying educational, methodological and technological innovation in distance

learning and educational content development. Aims of the e-CoMeT Lab is to promote the scientific research for developing innovation in the methodology of distance learning, and to apply the advanced technologies in the development of innovative teaching material and instrumentation for distance learning.

3. **HOU Evaluation and Educational Unit:** The HOU Evaluation and Educational Unit has been founded and operates as another independent unit of the Hellenic Open University, according to the 2552/1997 law. The main objectives or the Evaluation Unit are to assist the continuous improvement of quality of education provided by HOU and to contribute to the evaluation of teaching and material of the Course Modules and of all administrative services provided by HOU to students. It also aims to assist the integration of HOU graduates to the labour market in cooperation with the HOU Carrier Office. HOU Evaluation and Educational Unit is also responsible of the continuous training of tutors and the academic staff.
4. **Career and Employment Structure:** This structure was established with the decision of the Board of the Hellenic Open University on 01-04-2009 and began its operation in 2011, is a new Unit within the framework of the Operational Program "Education and Lifelong Learning" of the "National Strategic Reference Framework (NSRF) 2007 -2013". Its role is to formulate the strategy, vision and policies of the University regarding labour market liaising and the professional careers of its graduates. Within this context, the Career and Employment Structure coordinates the Units under its supervision and their activities, implements joint publicity and sensitization activities, provides access on information related to employment, entrepreneurship and career development, and is responsible for the evaluation and quality control of all activities undertaken by the Structure and its affiliated Units.

The Career and Employment Structure coordinates the following Units:

- **The Career Office:** The Career Office of the Hellenic Open University was established in 2003. It has been funded by the European Union and the Greek Ministry of Education, Lifelong Learning and Religious Affairs through the 3rd Community Support Framework and the framework of the Operational Program "Education and Lifelong Learning" of the "National Strategic Reference Framework (NSRF) 2007 - 2013". The Career Office serves as a link to the academic institutions and the job market in Greece aiming at assisting students and graduates of the Hellenic Open University in successful career planning and placement. . It also creates linkages between students and graduates and, on the other side, businesses, government agencies and private sector partners who are looking for candidates. The organizational structure is based primarily on distance service to its users. In order to accomplice these goals the Career Office offers a series of integrated services of specialized information, support consulting and guidance in areas of employment promotion and career development, such as advice on career orientation, information about companies and available employment opportunities, postgraduate courses in Greece and abroad, scholarships.
- **The Innovation and Entrepreneurship Unit:** The Innovation and Entrepreneurship Unit (IEU) of the Hellenic Open University was established in 2009 and began its

operation in 2011. The IEU aims at educating students and graduates of the Hellenic Open University about starting and growing a business, developing entrepreneurial skills and fostering entrepreneurial understanding, among students, faculty and the community at large. To this end the I.E.U. implements a number of activities adopting innovative learning strategies, such as business games and entrepreneurship competitions, academic courses on entrepreneurship and development of educational material, e-mentoring sessions and networking forum discussions with entrepreneurial communities and the business sector, development of web site and productive use of the internet for access on information, seminars, open discussions, meetings and other events.

Master courses, vocational trainings: HOU offers numerous master courses that are financed by the students. These courses have been designed after taking into consideration market needs through interaction with investment sectors and commercial chambers. Applicants to a master degree at the HOU must possess an undergraduate degree in a relevant field from a Greek Public University, Technical Educational Institute or an equivalent degree. Individual detailed course requirements apply for each course. The Senate determines the number of students accepted and the prerequisites per course. (Basic functional unit is the Course Module that covers a specific subject on an undergraduate or postgraduate level. Each Course Module is equivalent to three semesters in a Greek University.)

Research: HOU is involved in 35 on-going or completed international R&D projects funded by the European Commission, maintaining and enhancing a significant research profile, while gaining expertise from the most recent research results and findings. Furthermore, HOU participates or has participated in 20 actions funded by the European Commission, in the context of Programs such as the Operational Program for Education and Initial Vocational Training, the National Strategic Reference Framework, and the Information Society Program.

Role of ICT and e-learning: Since HOU is the sole Open University in Greece, the role of ICT is very significant. It is in HOU‘s nature to provide courses and support through e-learning solutions addressing thus, the needs of open and distance learning in the ICT era.

Quality Assurance processes and organizational interfaces

The current evaluation focuses on the following axes: the tutors, the organisation of the course modules, the educational material that is published by HOU, and the administrative services. The largest and more important part of the evaluation takes place through internet and beyond that, all collected data are imported to a predefined algorithm that calculated the average level of each axe. The outcome results become the basis for further statistical and qualitative analysis with further goal the extraction of useful information regarding the educational procedure from the class level in a course module to the entire assessment of a Course, the Faculty Committee and the entire HOU.

Most important success factors

Granted that HOU, the first Greek Open University, is a relatively new university in the Greek territory, found in 1992, the main strength of the HOU system is proved by its potential and its social acceptance:

During the academic year 2010-2011:

- Number of undergraduate students: 15.445
- Number of postgraduate students: 10.855
- Number of PhD students: 67
- Number of applications submitted for attendance during the academic year 2011-2012: 58.049

The major factor that made HOU so widely accepted into the Greek community, is that promotes life-long learning, offering courses that address educational needs of working people. With its open nature, it permits them to join under- or postgraduate studies while they are active employees. But it is not limited to this, since the high-end open and distance concept it follows, offers learning opportunities to the Greek territory, abolishing geographical or time barriers.

- Up-to-date curricula that address learners' needs.
- High-end infrastructure
- Well-designed courses that provides support to students that is not limited to the official procedures. Additional educational material is provided along with individual communication teacher-learner, if needed.
- Motivated and skilled personnel that strongly believes that HOU is a key-player in Greek academic education.
- The HOU learner feels the pervasive support of the University, ensuring that the communication with it is more active than in a conventional university.

What would you make you more competitive/better?

HOU would be more competitive if it increases the responsiveness towards the market and business needs. Furthermore, openness towards Greek of Diaspora would contribute to the exchange of experiences and ideas in an international level. Furthermore, additional effort in staff or in responsiveness regarding the updating of the official material would contribute to an optimal quality of the offering services. Contact with business factors and policy makers in a tactic base, can contribute to the enhancement of the updating of the curricula, according the market needs and trends.

How do you measure your success?

HOU has invested to success measurement through the Evaluation Unit; As aforementioned, the main objectives or the Evaluation Unit are to assist the continuous improvement of quality of education provided by HOU and to contribute to the evaluation of teaching and material of the Course Modules and of all administrative services provided by HOU to

students. It also aims to assist the integration of HOU graduates to the labour market in cooperation with the HOU Carrier Office. HOU Evaluation Unit is also responsible of the continuous training of tutors and the academic staff.

One of the major performance measurement is based on the internal evaluation procedures: The internal evaluation aims to monitor the quality level of all the key-players of the educational service that is provided. The permanent goal is the assistance of the continuous qualitative upgrade of the services provided by HOU.

Expectations from OEII

HOU would gain from OEII by adopting best practices from other European open universities with similar profile and by exchanging experiences and know-how with them. Practices that have successfully tested and adopted by open or conventional universities and are presented as cases in OEII, can accelerate all processes that contribute to the achievement of an even better quality of the education.

Annex 7: Case study - National Technical University of Athens

Basic information, context

The National Technical University of Athens (NTUA) is the oldest and most prestigious educational institution of Greece in the field of technology, and has contributed unceasingly to the country's scientific, technical and economic development since its foundation in 1836. NTUA is divided into nine academic Schools, eight being for the engineering sciences, including architecture, and one for the general sciences. The personnel of the nine Faculties include more than 700 people as academic staff, 140 scientific assistants and 260 administrative and technical staff. The total number of NTUA employees is about 1.350. The total number of undergraduate students is about 8.500 and the graduate students 1.500.

Course/programme needs analysis and improvement processes: main actors and their roles

Academic Programs and Courses

Academic Programs and Courses are financed by the government. Typical improvements needed are:

1. Need of increase of responsiveness regarding curricula updating.
2. Existing students should be encouraged to adapt changes of curricula.
3. Need of resources in terms of labs and buildings that could facilitate the large number of students supporting higher quality of studies.

Most important actors and their roles:

The Senate: The Senate supervises the overall Institution's function in compliance with the state laws as the Institution's internal regulations. It forms the Institution's educational and research policy, its strategic planning development, and reports on its regular activities. Moreover, it is in close cooperation with various Greek and foreign Universities, as well as other scientific and cultural institutions.

The Rectorial Council: The Rectorial Council, consisting of 5 members, deals with the everyday affairs of N.T.U.A and is also responsible for the implementation of the Senate's decisions.

Senate: The following nine Senatorial Committees support the Senate in its duties and co-ordinate the various activities of the Institution:

1. The Undergraduate Studies Committee
2. The Postgraduate Studies Committee
3. The Continuing Education Committee
4. The Committee of the University Premises And Facilities
5. The Library Committee
6. Computers and Network Committee
7. The Committee of Internal Bylaws and Guidelines
8. The Committee of the Technological Park Of Lavrio

9. The Committee of the University Publications

Research Committee: Scientific research in NTUA is funded by both the public and private sectors, as well as by European Union sources. The Research Committee manages and controls the budget of research activities, withholding a 15% percentage from the budget of each research program. This percentage is allocated to a variety of activities, among which the support of undergraduate and postgraduate studies or the award of scholarships to both graduate and postgraduate students.

Master courses, vocational trainings: There are currently 19 Departmental or Inter-Departmental Postgraduate Courses, coordinated by N.T.U.A. Departments and financed by the Greek government, leading to the respective "Post Graduate Specialization Diploma", with a minimum duration of 17 months. Moreover, N.T.U.A participates in 9 Post-graduate Programs coordinated by other Greek Universities. After the acquisition of the "Post Graduate Specialization Diploma", the student can proceed towards submitting a Doctorate Thesis. These courses have been designed after taking into consideration market needs through interaction with investment sectors and commercial chambers. Master courses come to cover effectively the gap that occurs since new postgraduate departments need long procedures to establish.

Research: NTUA has a very competitive presence and a strong reputation in research activities in both national and international level with valuable findings and outcomes. Scientific research in NTUA is funded by both the public and private sectors, as well as by European Union sources. Cooperation and memoranda of understanding with academic institutions abroad contribute to the exchange of know-how and expertise. The scientific staff in the Schools, together with post-graduate researchers, apart from their teaching and related educational activities, conduct research work assisted by post-graduate students and a considerable number of external collaborators; the amount and the high standards of this research are proved by the numerous publications in International Scientific Journals and Proceedings of International Conferences as well as by the prominent place of NTUA among all Europeans Universities, due to the increasing number of research projects financed by the EU and other Greek and foreign organizations of the public and the private sector. NTUA operates many of its Laboratories also as "service laboratories", which provide expert advice, tests and measurements and all specialized services in general, within the framework of its technological competence, which can be useful for the development of the country. In regards to research, NTUA has also founded the Institute of Communication and Computer Systems (ICCS http://www.iccs.gr/); ICCS is a non-profit Academic Research Body established in 1989 by the Ministry of Education in order to carry research and development activities in the fields of all diverse aspects of telecommunications, computer systems and techniques and their application in a variety of areas such as transceivers, radar and generally electromagnetic sensors, satellite and wireless communications, electromagnetic phenomena modelling, neural networks, systems, software and hardware engineering, Telematics and multimedia applications, Transport applications, Control systems, Robotics, Biomedical engineering, Electric power Renewable Energy Sources and Distributed Generation and management systems.

Role of ICT and e-learning: The Multimedia Technology Laboratory (MTL) of NTUA, exploiting its long experience on production of ground breaking technological advances, monitors all latest developments in Internet technologies and multimedia processing that allow the opportunity for skilled players to develop and offer high-quality education in space and time chosen by the worker. The Laboratory promotes academic and industrial research and development programs in the area of multimedia technologies and communication sciences. The uniqueness of the Laboratory is based on a collaborative effort providing training, support, new lessons and services for the academic community in general. Its activities are focused in the digital character of stand-alone and networked multimedia productions. In this context, MTL provides 7 individual seminars in specific technical fields such as PHP&MySQL and Java. The mail goal of these seminars is to help the employees to continuously assimilate new knowledge, to acquire new skills and to maintain a highly competitive profile. An additional goal of these seminars is to support to conventional NTUA students, providing additional educational material in a self-paced context.

Liaison Office: The NTUA Liaison Office has been founded aiming to support graduates and postgraduate and undergraduate students with systematic information, guidance and consultancy regarding academic or vocational issues. This is achieved with carrier consultants, new business consultants and postgraduate studies consultants.

Quality Assurance processes and organizational interfaces

Quality assurance is a very significant factor for the university success. It is depicted in a yearly base with the following procedure: An Evaluation Committee is set by the academic responsible of each postgraduate department or master course. Each tutor is evaluated by his/her students by the end of every academic year. The students complete, anonymously, an evaluation questionnaire that they submit to the academic responsible who gathers and submits all completed questionnaires to the Evaluation Committee. The Committee sends to each tutor a sealed envelope with the aggregate results. For the time being, this procedure is not considered to be fully objective since a small number of students completes the questionnaire and the opinion of the rest of them is not depicted somehow. This mentality of the students should change since they would gain of this in term of the quality of services. Methods for the enhancement of this objectiveness are sought and discussed.

Most important success factors

The most important success factors are:

- **The depth of provisioned courses in terms of knowledge:** It is common that many NTUA students that follow postgraduate studies abroad, found the curriculum there easier than expected.
- **Robust infrastructure:** The assimilation rate of funding for infrastructure is very optimistic and a significant level of infrastructure needs has been covered. NTUA

owns perhaps the most high-end digital network in the national territory. Furthermore, this network supports initiatives regarding virtual laboratories and digital educational content creation.

What would you make you more competitive/better?

NTUA would be more competitive, when:

- It shows more responsiveness of adoption of new market trends and needs applying initiatives.
- The student body shows willingness and positive intention to dialogue regarding curriculum updating
- It disposes courses and programs in English or other language targeting to a wider student market, provoking thus the ideas transfer.
- It invests on the creation of effective interfaces with industry and market sectors.
- Quality evaluation method has to become more objective and students should be encouraged to participate to it.

Expectations from OEII

NTUA would gain from OEII by adopting best practices from other European universities with similar profile. The compilation of European cases can act with an advisory way aiming to the development of a more efficient and up-to-date academic role that eavesdrops the market and social needs.

Annex 8: Case study – National and Kapodistrian University of Athens

Basic information, context

The National and Kapodistrian University of Athens (UoA), inaugurated in 1837, is the largest state institution of higher learning in Greece. With a student body of about 80.000 undergraduate and postgraduate students, over 2.000 members of academic staff and approximately 1.300 administrative and secretarial staff and specialised personnel, the University of Athens aims at excellence in both teaching and research in a significantly varied range of disciplines.

Course/programme needs analysis and improvement processes: main actors and their roles

Academic Programs and Courses: Academic Programs and Courses are financed by the government. Typical improvements needed are:

1. Curricula need more disciplinary aspects.
2. Lack of responsiveness regarding curricula updates needs to be faced.
3. Increase of involvement to international actions and cooperation.
4. Deeper clarification regarding educational goals: “Why?” needs to be clarified rather than “How?”.

Most important actors and their roles:

Rector and Vice Rector: The highest administrative body of the University.

Rector’s Council: The Rector's Council is composed of the Rector, all three Vice rectors, one student-representative elected by the whole student body, and the Head of the Secretariat of the University as reporter.

Senate: The Senate consists of the Rector, all three Vice Rectors, the School Deans, the Department’s chairmen, a student-representative from each department, two representatives of graduate students, a representative of the Associate researchers, a representative of the Special TeachingStaff (Teaching Assistant), a representative of the Special Technical Laboratory Staff (STLS) and a representative of the administrative staff. The Senate also participate and twelve (12) representatives of professors, associate professors, assistant professors and lecturers.

Master courses, vocational trainings: UoA provides a number of master courses giving opportunities to the employees’ body to enhance their skills and expertise. These courses are funded by the students. However, collaboration with their employers/companies in order to cover the fees is feasible. For non-employees, fees exception is also feasible through work collaboration procedures.

Typical improvements needed are:

1. Overlapping issues with undergraduate courses need to be faced.
2. Lack of pluralism in the curricula design needs to be covered.

The Vocational Training Centre (VTC) is the agency through which the UoA acts in the field of Vocational Training. The VTC identifies that lifelong learning is crucial for both personal development and for overall economic growth. Therefore, in order to address the constantly changing and highly competitive job market, VCT provides additional training programs that link the theoretical and practical knowledge in developing mainly applied aspect of science in their respective professional fields. The ultimate goal of these innovative programs is to meet the educational needs and to provide essential supplies to people who want to specialise their knowledge and develop new skills and professional skills, improving their cognitive level and enhancing their competitiveness in the market work. So far, the VTC has received a total of about 28,200 requests to participate and have participated in programs about 11,700 people. http://elearn.elke.uoa.gr/elearn/. In addition to VCT, UoA provides vocational training programs in the field of accounting and informatics (http://kek.uoa.gr/faith/), enhancing thus, the lifelong learning profile of UoA.

Liaison Office: The Liaison Office of the National & Kapodistrian University of Athens (NKUA) was founded in 1996 under the auspices of the EPET II Program of the General Secretariat for Research and Technology. Its goal is to bring together research conducted at the University with the industrial sector. The Liaison Office was awarded funding from the General Secretariat of Research and Technology under Activity 4.2.3 of the 3rd European Community Support Framework Program for the Development of Technology Transfer Offices at Universities, Technological Education Institutes, and Research Centers, which enabled it to embark on an ambitious new program covering the period from 1/1/2004 to 31/12/2006.

The Liaison Office provides a vital service by building and fostering a close relationship between the University and the world of business. The Office promotes the utilization of research results and technology developed by the academic and research community, offering advice and support tailored to the needs of its clients. The Liaison Office is a formal part of the NKUA organizational structure, supporting the faculty, the research community, and the NKUA foundation itself. The Liaison Office has as its objectives the following:

- Promoting research and commercialization of research findings from the various research units and labs of the NKUA by businesses.
- Providing timely, valid and credible information regarding the University's activities and capabilities (on-going research, research outcomes and findings, services provided etc.) to all interested parties.
- Providing technological and other specialized services to interested parties from outside the University.
- Offering a variety of facilitation services to assist Greek businesses in identifying research of interest to them.
- Supporting the University's researchers with advice and consultation on how to fund, secure and commercialize their research activities, through services.

Research: UoA has a significant research activity with important outcomes. The management of funding is conducted through the Special Account Service. Scientific

research in UoA is funded by both the public and private sectors, as well as by European Union sources.

Role of ICT and e-learning: In addition to the Vocational Training Center e-learning activities, UoA adopts e-learning environments in order to support courses' conventional activities. The majority of UoA's departments adopt software such as Moodle, so. For the existing students, UoA runs an asynchronous e-learning platform, e-Class, which is a complete Course Management System that supports Asynchronous eLearning Services via a simple web browser. Its goal is the incorporation and constructive use of the Internet and web technologies in the teaching and learning process. It supports the electronic management, storage and presentation of teaching materials, independently of the spatial and time limiting factors of conventional teaching and creating the necessary conditions for a dynamic teaching environment.

Quality Assurance processes and organizational interfaces

In external level, quality assurance processes are applied and lead by the Hellenic Quality Assurance Agency for Higher Education (ADIP, www.adip.gr). In internal level, students fill an evaluation questionnaire per course in a yearly basis. Students' questionnaires are elaborated and analyzed by an internal evaluation committee. This committee prepares evaluation reports (incl. educational work, services, resources etc.) in a yearly basis which are available to ADIP.

the most important success factors

The most important success factors are:

1. The long history and background of this prestigious university
2. The skills and expertise of the academic personnel
3. The rules of ethics that are followed.
4. The high level of students that are accepted.

How do you measure your success?

The success is measured with metrics such as awards, publications, citations and statistics. Furthermore, for UoA, the international acknowledgement and the careers that the students follow after their graduation are also significant. The latter is tracked by the Career Office of UoA (http://career-office.uoa.gr/).

What would you make you more competitive/better?

UoA would be more competitive if:

1. the provisioned education had a more disciplinary nature.
2. UoA had more efficient interface with market and industry but with a controlled way, in order to ensure its educational nature and not to become a totally training center.

Expectations from OEII

UoA expects from OEII to benefit from other European academic foundations by exchanging experiences, practices and policies that have already been adopted and worked successfully.

Annex 9: Case study – Maria Curie-Sklodowska University

Basic information, context

Maria Curie-Sklodowska University is the largest university in eastern part of Poland. It was established in 1944. The university currently employs 428 professors and habilitated doctors as well as 1,286 faculty members with doctoral and master's degrees. The university enrolls over 34,000 undergraduate and master's level students as well as over 800 doctoral students.

Course/programme needs analysis and improvement processes: main actors and their roles

There was introduced Internal Quality Assurance System in 2009. University team for quality assurance consists of departments representatives, students government and university authorities. An important element of the Internal Quality Assurance System are conducted questionnaire studies. Participants of this survey are:

- Students
- Alums
- Teachers
- Support stuff

Teacher assessment is carried out at the end of program study. It is conducted not less than once a year.

Quality Assurance processes and organizational interfaces

Activities of Internal Quality Assurance System include the following:

1. Recruitment and training of students and PhD students;
2. learning process and its organization and operation, including the conditions for conducting classes;
3. assessment and verification of study programs and learning outcomes;
4. social and living conditions for students and PhD students;
5. mobility of students, PhD students and staff members;
6. quality administrative service for students and PhD students;
7. information on education and qualifications obtained;
8. career survey of graduates;
9. bonus system for outstanding teachers and staff that support the teaching process and students and doctoral students;
10. legal documents governing the process of training and recruitment, and social issues.

the most important success factors

1. Developing contacts with entrepreneurs and identifying local entrepreneurs needs.
2. Prepare appropriate proposals for research, services or grants.

What would you make you more competitive/better?

Improving the process of internal and external information. Checking what the university is done, who it performs, how it can be used in the labour market. Parallel to improve information flow on the outside (from the labour market for university), linking market needs with the capabilities of the university.

It seems very important way to enhance competitiveness would be to engage the cooperation of entrepreneurs in: creating new courses, developing of study programs as well as assessing the quality of education process.

Expectations from OEII

To share good practices.

Annex 10: Case Study – Lublin university of Technology

Basic information, context

Lublin University of Technology was established as Evening Engineering School in May 1953 on initiative of Lublin technical societies. In 1977, the Higher School of Engineering was renamed the Lublin University of Technology. There are 6 faculties, more than 10 000 students.

Course/programme needs analysis and improvement processes: main actors and their roles

In Poland there is a problem with an insufficient number of technical graduates. Therefore launched a ministerial project, "ordered fields of study". Under the program, students receive a scholarship, as well as additional courses in subjects that cause compensatory difficulty (it is mostly mathematics and physics). Ordered fields of study commissioned by the Ministry of Education are based on nationwide surveys of the labour market. Ordered fields of study are realized by most higher technical schools as well as by Lublin University of Technology. This solution is centralized, but it seems that it should bring in the next results in the form of graduates for the labour market.

Another way to conduct a needs analysis is the implementation of projects co-financed by the European Union. The analysis is carried out by local authorities and based on the results of needs analysis are funded projects that fill a gap in the labour market. In this way the projects are combining business with the scientific sector, in particular the technical universities. Lublin University of Technology has several such projects. The projects aim to create conditions for the organization for students internships, as well as the implementation of projects directly involving the companies in exploiting the potential of university research.

There are also organized regular meetings at the university with representatives of the university and the local business purpose of the joint implementation of projects or the analysis of labour market needs. A special role in realization of meetings played by informal contacts and alumni organizations. Informal need analysis are developed by Alumni Association of Lublin University of Technology. They are not formal advisors of decision makers but they acting by non-formal flow of information about regional market.

Lublin University of Technology has a rector advisory body it is: Lublin University of Technology Convention. Members of University of Technology Convention are alumni of the university. They are good basis for advisory body because alumni are entrepreneurs, members of the board of companies and they are in regional governance. Convention give recommendation for university authorities about needs of labour market.

Quality Assurance processes and organizational interfaces

Lublin University of Technology is implementing Quality Assurance Process by internal evaluation of university units. Areas of assessment include: scientific research and didactics.

Factors which are taken into account in scientific research are:

- number of publications, value of publication (measured by citation factor) and impact factor of scientific journal,
- number of patents, conferences, grants, implementation of inventions, participation in scientific boards and other activity.

Evaluation of didactics include:

- factor of teaching load (number of didactic hours, number of graduates and PhD candidates),
- new laboratories,
- didactic materials.

Assessment is realized every 4 years.

Most important success factors

- Well-equipped laboratories.
- Use of EU founds for projects implemented with cooperation with business partners.

How do you measure your success?

Number of successful projects make with cooperation with business partners and companies.

What would you make you more competitive/better?

More flexibility in spending money on infrastructure (equipment for research).

Better adjustment of study programmes to real needs of labour market/business and more possibilities for students for internships in companies.

Better cooperation with business (networking).

Expectations from OEII

To exchange experiences.

Annex 11: Case study – Tallinn University

Basic information, context

Tallinn University (TU) was established in March 2005 as the result of a merger of several universities and research institutes: Tallinn Pedagogical University (1919/52/92); The Academic Library of Estonia (1552/1946); Baltic Film and Media School (1992/97); Estonian Institute of Humanities (1988) and Institute of History (1946). Tallinn University is the third largest university in Estonia consisting of 19 institutes and 5 colleges. The following Institutes: Estonian Institute of Humanities, Institute of Communication, Institute of Ecology, Institute of Educational Sciences, Institute of Estonian Demography, Institute of Estonian Language and Culture, Institute of Fine Arts, Institute of Germanic and Romance Languages and Cultures, Institute of Health Sciences and Sports, Institute of History, Estonian Institute for Population Studies, Confucius Institute, Institute of Informatics, Institute of Information Studies, Institute of International and Social Studies, Institute of Mathematics and Natural Sciences, Institute of Political science and Public Administration, Institute of Psychology, Institute of Slavonic Languages and Cultures, Institute of Social Work and Colleges: Baltic Film and Media School, Haapsalu College, Rakvere College, Catherine´s College, Law School belong to TU.

At present, Tallinn University has more than 9500 students as well as more than 500 faculty members and research fellows, and is the fastest growing university in Estonia. Its main strengths lie in the fields of humanities and social sciences, and a strong and constantly growing component of natural and exact sciences, as well as a notable tradition of teacher training and educational research. TU has an extensive experience working with educational innovation and from 1994 it has been a centre of development and research in the field of modern ODL in Estonia. In the year 2011 Tallinn University has 40 research projects that are funded by the Estonian Science Foundation (incl. 5 postdoctoral grants) and 18 research projects that are funded by government. TU is also participating in many international R&D projects funded by the European Commission.

The University offers its services to all regions of Estonia, taking into consideration the peculiarities of Tallinn and northern Estonia and the needs of the public and economic structures that have concentrated in the capital city. One of the main aims of the university is large-scale internationalisation – with its 13 academic degree programmes including Erasmus Mundus MA programme in Digital Library Learning (DILL) and a number of shorter programmes and courses offered in the English language it is already the most international university in the Baltic area.

TU have 330 international students (3,8%) from 52 countries, 172 degree students and 158 exchange students. TU maintains 34 inter-university agreements with universities in Europe, USA, Japan, Russia and several other countries (16 countries). There are around 400 Erasmus exchange agreements with universities from all over the European Union. According to the ESN Survey Estonia was ranked 1st in 2010 regarding the average satisfaction level for stay in the hosting country institutions. ESN Survey is one of the biggest international student surveys in Europe and it received answers from more than 8400 students who had studied at least one semester abroad.

For more information: http://www.tlu.ee

Course/programme needs analysis and improvement processes: main actors and their roles

At national level the Estonian Higher Education Quality Agency (EHEQA), in co-operation with its partners, fosters the quality of Estonian higher education and promotes the best quality assurance practices and disseminates them. The EHEQA is a structural unit of the Archimedes Foundation carrying out independent tasks. Upon making quality assessment decisions, the Estonian Higher Education Quality Agency is independent and sovereign. The EHEQA operates pursuant to the legislation of the Republic of Estonia, the international legislation, including the Standards and Guidelines for Quality Assurance in the European Higher Education Area, the Estonian Standard of Higher Education, the Statutes of the Foundation, these Statutes, and other legislation and normative documents regulating quality assurance in higher education. The EHEQA continues the work of the Estonian Higher Education Accreditation Centre and the Higher Education Quality Assessment Council that operated from 1997 to 2008. With the approval of and in co-operation with other structural units of the Foundation, the activities of the EHEQA are performed according to the work schedules and operating objectives, and tasks given by the Supervisory Board and the Management Board of the Foundation.

The EHEQA is responsible for the institutional accreditation of higher education institutions and assessment of quality of their study programme groups. The agency carries out the expert analysis to evaluate the right of higher education institutions to provide instruction, to examine the applications submitted by higher education institutions to use services of other quality assessment agencies and to evaluate quality assessment in Estonian institutions of higher education conducted by other agencies; to administer databases concerning accreditation and quality assessment and make them available for public use; training activities and counseling related to evaluation of higher education and to quality in higher education; to make public the principles, regulatory documents, results, international standards and experience, and other relevant information related to evaluation of higher education; to participate in international co-operation related to the quality of higher education, including to represent Estonia in issues concerning the quality of higher education; to perform other functions specified by resolutions of the Ministry of Education and Research, the Supervisory Board of the Archimedes Foundation and EKKA Quality Assessment Council.

The EHEQA comprises: the Bureau of EHEQA that is managed by the Director of EKKA; EKKA Quality Assessment Council, the activities of which are co-ordinated by the chairman of the Council. EKKA Quality Assessment Council approves the composition of expert committees of quality assessment of higher education institutions; make decisions on institutional accreditation of higher education institutions and on quality assessment of their study programme groups; make proposals to grant educational institutions the right to provide instruction; approve an annual action plan of the Agency.

During 2009 to 2012, the Ministry of Education and Research implements the transition from former accreditation system, in which individual study programmes were accredited, to quality assessment of study programme groups. This period is called transitional evaluation. EKKA Quality Assessment Council has laid down the requirements for the transitional evaluation and the procedure for its implementation.

Quality Assurance processes and organizational interfaces

The quality assurance processes and course/programmes improvement processes are performed at internal (university) and external (national) level since 2008. Before 2008 international accreditation process was performed in Estonian higher education institutions.

At internal level there are 3 stages of assessment:

a. Diagnostic Analysis (DA) survey before the programme/course
b. During the programme: Students feedback after completing the course/module of the programme
c. After the programme: Students assess the whole programme (feedback questionnaires and group interviews).

The goal of the DA survey is to clarify the needs and expectations of the learners for the programme and courses/modules with regard to the content and delivery options (course content, learning and teaching process, technical support and skills, media preferences). It is expected that it would enable to tailor the courses and modules in the best way to suit students' requirements within the framework that had been set.

During the programme and after the programme evaluation focuses on the following aspects: (objectives and content, resources, assignments, assessment, learning process, tutor/teachers, pedagogical approach, learning environment including learning management system, technical support, management and organisation of the programme, relevance of topics).

To support the programme and course improvement there are curriculum councils where students and employers are involved and which meet regularly, there are regular meetings with employers and market analysis is regularly conducted.

The most important success factors

- Student-centered and needs oriented approach
- Large-scale internationalization
- Educational innovation (pedagogical and ICT innovation)
- Flexibility and openness
- Strong link between education and research, especially educational

What would you make you more competitive/better?

1. Collaboration between institutes and units within university: sharing knowledge, good practice and experiences. More focus on collaboration instead of competition in academic units.
2. Improvement of the internal motivation system to sustain innovation.
3. To attract more international students and scholars.
4. External quality assurance: quality assessment of study programme groups and abandoning international accreditation process seems questionable.

Expectations from OEII

OEII could share good practices and analysis of different models and practices can contribute to innovation processes in the participating universities. Dissemination of the project results could be useful for wider educational community.

Annex 12: Case study – Open Media Unit at The Open University

Basic information, context

The Open Media Unit at the Open University in the UK (openlearn.open.ac.uk) was created in August 2011 to bring together all open media activities. These include co-production of prime-time television programmes with the BBC, publishing on the iTunes U and YouTube platforms and the OU's own Open Educational Resources platform OpenLearn. The purpose of the unit is to manage all of the University's open content with a view to supporting its public (informal) education mission. In addition the unit promotes and supports learners making the transition from informal to formal learning.

The OU has a long-standing partnership with the BBC which used to involve creating programmes to support specific OU courses but now consists of prime-time programmes designed for public education. Additional free online resources are also created to support these programmes and every broadcast is followed by an announcement of the link to these resources. Around 25 series per year are produced with 100 to 200 million viewings in the UK and approximately 1 billion worldwide.

The OU's YouTube channel (youtube.com/user/TheOpenUniversity) contains approximately 400 hours of video and audio and attracts approximately 2.5 million visitors per annum.

iTunes (open.eu/iTunes) hosts around 400 hours of OU of content, drawn mainly from current OU courses, and has attracted over 40 million downloads. This makes it the most downloaded university in Europe. There are also over 300 eBooks and 5 educational apps on iTunes U.

OpenLearn is the OU's Open Educational Resources repository and publically-accessible Learning Environment. As well as holding around 11,000 hours of selected OU course content it also provides tools and facilities for authoring, remixing and teaching that anyone can use. Content is a mixture of text, image, audio, video and Flash animations. OpenLearn receives 5m visitors per year.

In addition to it is public education function the Open Media Unit is very effective at recruiting students for the University's fee-bearing courses. Approximately 3% of users of OpenLearn resources sign up to take the module from which the resource was derived. The cost of recruiting the number of students bought to the OU through Open Media by other means such as advertising would exceed the total cost of operating the Open Media Unit.

The Open Media Unit also provides support for the large number of projects in the OU that involve Open Educational Resources. Examples include Teacher Education in Sub-Saharan Africa (www.tessafrica.net) and Health Education And Training (www8.open.ac.uk/africa/heat).

Course/programme needs analysis and improvement processes: main actors and their roles

Identification of university needs is reviewed quarterly and planned up to 3 years in advanced. This informs the detailed commissioning process with internal and external supply followed by impact analysis informing future commissioning processes. Product is content on a range of channels – mixed economy but most of OpenLearn is Creative Commons licenced.

Internal actors and their roles:

- Director of unit – overall management and leadership
- Head of Broadcast Commissioning – leads on tv, radio and some other channel commissioning
- Head of Online Commissioning – leads commissioning of content for OpenLearn, YouTube and iTunes U
- Head of Business Unit – business information and finances
- Impact Manager – auditing uptake and usability testing
- Project Managers – have responsibility for delivery channels and various development projects
- Assistant Producers – production of some online materials

Internal partners:

- Each faculty (7) – provides academic content
- Knowledge Media Institute and Institute of Educational Technology – pedagogic and technical advice
- Learning and Teaching Solutions – undertakes content manufacture/adaptation
- Learning and Teaching Solutions – undertakes content manufacture/adaptation
- Business Development Unit – monetisation partner (but not much partnership activity in practice)

External partners:

- BBC – signed agreement for commissioning co-production and distribution of broadcast tv and radio
- Apple – distribution partner for content on iTunes U
- Google – OU channel on YouTube and use of Google apps

Quality Assurance processes and organizational interfaces

QA is covered in commissioning (involving academic approval) – production teams (e.g. course team or BBC) have devolved responsibility for meeting quality standards. Channel

project managers take final responsibility. Comments/rating/feedback is invited online – the Community Engagement Officer is responsible for responding.

Motivation and incentive mechanisms: Bonuses are not used, a clear set of Key Performance Indicators drive commissioning and developments are used to monitor overall unit performance (Note: KPIs are not made public).

The most important success factors

1. Course (content) offering: A strong flow of new high quality content is essential – staleness will cause long term degradation
2. Openness: is vital to engage audiences and achieve reach
3. Stakeholder cooperation: Coordinated activities with large public providers (e.g. BBC, Apple, Google) is essential to achieve reach, however equally important are trusting relationships with internal stakeholders (especially academics) for example relationships are strengthened by ensuring quota limits on content release (currently 5% of any module)
4. Strengths of the system:
5. Increasingly coordinated and focussed OER commissioning/production and distribution activity operating across a range of channels.
6. Platforms are harnessed to the University's mission (previously it was less coordinated and less focussed on agreed and understood goals)

What would you make you more competitive/better?

Main areas for improvement:

1. All is not yet fully implemented –newly established processes still need to be embedded (OMU is only 10 months old).
2. Better metrics for accounting for business and social mission impacts.
3. Increasing focus on "social layer" around content and exploiting the power of the crowd.
4. Plans for the future:
5. Managing Open Media on multiple platforms is now "business as usual"
6. The challenge for the future is to build business models that build on the open media

Annex 13: Role of persons who were interviewed

University of London

4 persons: Director, Learning and Development EISA; Research Officer in the Institute of Education; Associate Research Fellow at King's Learning Institute and Senior Lecturer Technology Enhanced Learning at University of London, International Programmes; Head of e-Learning in KLI (King's Learning Institute)

Uninettuno

2 persons: Assistant Professor of Electrical Engineering; ICT Director of International Telematic University UNINETTUNO

University of Naples

Researcher from Department of Electrical Engineering

University of Rome 3

Phd student

Politecnico Torino

Associate Professor

Faculty of Engineering, KU Leuven

3 persons: Dean Faculty of Engineering; Consultant of Lifelong Learning from Continuing Education Unit; Coordinator of Internal Research Project on Profiling Projects on Education in group of Faculties: Sciences and Technology

QUADRI, Limburg Catholic University College, (Katholieke Hogeschool Limburg - KHLim)

Manager of KHLim QUADRI– KHLim

Continuing Education Unit, KU Leuven – Kulak

Director of Continuing Education Unit

Hellenic Open University

Associate Professor, Director of the Internal Quality Assessment Unit, and Director of the Innovation and Incubation Unit

National Technical University of Athens

Assistant Professor

National and Kapodistrian University of Athens

Professor, Director of the Career Office

Maria Curie Sklodowska University

Manager of University Centre for Innovation and Commercialisation of Research

Lublin University of Technology

Manager of Office for Development and Cooperation,

Tallinn University

Top managers and academics

The Open University

Director, Support Centre for Open Resources in Education