



Guidelines for sustainable cooperation between universities and industry

2021

Co-funded by the
Erasmus+ Programme
of the European Union



This project has been funded with the support from the European Commission. The document reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

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LEO-NET is an international network of universities, higher education institutions, mobility consortia and related organisations.

LEO-NET facilitates cooperation among the members and builds bridges between the world of labour and the different stakeholders; this on a regional, national and transnational level.

Subject field: Cooperation in the area of student internships and other options of engaging students with company activities, where they can gain practical skills

Introduction

Cooperation in the area of student internships and other options of engaging students with company activities to gain practical skills may be perceived as a complex topic especially for those institutions and businesses that might not have implemented the idea before.

On the verge of major changes in society, influenced by the spread of COVID-19 and the necessity to concentrate on the new ways of interaction and functioning, many things need to be changed.

The cultural change should happen bottom – up, stemming from the need of a society for new knowledge, for new skills, mainly digital and entrepreneurial. At the same time, it should meet with the understanding of the Higher education institution that they inevitably have to prepare a different educational system for those young generations who in the light of the sought after digital and entrepreneurial skills may perceive the lack of the basic interpersonal skills for functional relationships.

Businesses feel the pressure by failing to find a mature and responsible employee just as quickly as it used to be in the past.

Many talented young individuals out there are prepared to make use of their potential and cultivate it to a higher level should they have a chance to have a different approach in studies.

And, nonetheless, there are countless academics doing their best to help these young students in conditions that are swiftly and unprecedentedly changing.

All of this can be improved once the university and industry starts to cooperate. And this not from a 'nice to have' perspective, but considering UCB as a necessary and essential component in the study programme.

THE NEW STUDENT-UNIVERSITY-BUSINESS COOPERATION ESSENTIALS

Imagine you lived in a knowledge – driven society

- Where everyone was eager to learn
- Where everyone was thrilled by the idea to know themselves better
- Where everyone was open to the improvement of their own skills and
- Where everyone was naturally working on what they have, to help the society grow

Such future vision would for sure require to employ:

a **TALENTED individual**

With capacity of quality skills, knowledge and experience, the one that thinks and act as an entrepreneur

a **RESEARCH**

To have an access to new technologies and discoveries and the possibility to “touch” them ⇒ Leading to innovation and growth with prosperity

How does one become a talented individual with excellent human capital?

They need variety of options for employability, support for the development of entrepreneurial skills, gaining practical experience and the opportunity to create networks

➡ It is the social responsibility of HEI to boost the human capital, to unwrap it and give a variety of opportunities to have it developed further.

What are the necessities for higher education area?

They need further development of the university - industry links, new research, adapted teaching opportunities, possibilities to access resources and funding and nonetheless an integrated UBC may have a positive impact on the ranking of universities.

➡ **What is important for the world of business in this matter?**

They are confronted with a lack of talented young individuals prospective for employment, expensive hiring and training costs and at the same time improving employees’ skills, capacity for innovations and qualitative growth

The cooperation between university and industry is a people's game, which should support people and foster relationships thus leading to technological, humanitarian and economic development.

It is the domain of the Higher Education institutions to address the gap in the skills that are being offered to the market and develop a skilled human capital. HEI are well placed to bridge the skills gap; it is a social responsibility, shared with the world of business that should offer a variety of real life learning opportunities, complementary to classroom training.

CURRENT SITUATION IN EUROPE AND COMMON COOPERATION MODELS

The world of work is constantly evolving and changing. A research, an understanding on what is going on, is crucial for both businesses, Higher education institutions, students, academics and governments in today's global market.

According to Robbert van Eerd, Global Shaper, Paris Hub, and Jean Guo, Global Shaper, Paris Hub¹ from World Economic Forum Annual Meeting:

- "In 10 years' time, 50% of jobs will be changed by automation - but only 5% eliminated.
- 9 out of 10 jobs will require digital skills.
- Young, low-skilled and vulnerable people - all need help with upskilling."

It is believed that over the decade, 1.2 billion people worldwide will be affected by the rapid growth of technology, most of them being women. We are on the verge of revolution, which rather than eliminating jobs, will change them forever, requiring the employees to adapt to this technological progress and work alongside with it.

Statistics say, that:

"In the future, 9 out of 10 jobs will require digital skills, yet today 44% of Europeans aged 16-74 lack even basic digital abilities. In Europe, the impending skills gap will lead to 1.67 million unfilled vacancies for ICT professionals by 2025."²

To support flourishing of not only digital skills among young individuals, universities are those who should take on this role, as in the forthcoming future the motivation of academics and business representatives are very likely going to merge, while financial motivation shall become insignificant compared to the necessity to cultivate the best professional qualities on both sides.

Ahead of us is:

- Willingness to engage in cooperation
- Focus on capabilities
- Focus on skills development
- Focus on graduates and employability

¹ Source: <https://www.weforum.org/agenda/2020/01/future-of-work/>

² Source: <https://www.weforum.org/agenda/2020/01/future-of-work/>


- Focus on improved ranking

In Europe, universities still have study programmes that are:


- very theoretically oriented
- have limited interconnection with practice
- have low focus on individual skills
- offer limited inclusion of placements into curriculum
- miss a link to support entrepreneurial skills,

even though they moved from their traditional scope: from studies to research activities. Current pandemic situation and the shift from present to distant learning emphasised the need for more knowledge sharing and engagement.

With students, the young brains, learning often from their homes, lacking the real educational interaction, the traditional learning based on simple theoretical education is no longer apt and stimulating.

 Brings about the necessity for university – to – industry cooperation

The change in educational approach at the university level towards the university – to – industry cooperation depends on the maximised communication, motivation, willingness and capability to share knowledge between the stakeholders.

 Leading to a change in our society with more entrepreneurial spirit in the jobs of future generation

The entrepreneurial spirit is able to

- identify the opportunities
- follow them
- use own resources smartly
- create
- lead the way
- withstand adversity
- be persistent and positive,

thus representing a young professional worthy of forcing the changes for the whole society and how the society is functioning.

STUDENT INTERNSHIPS AND OTHER SUPPORTING ACTIVITIES FOR STUDENTS

How does a university switch from their usual ways of functioning into an institution providing the supporting atmosphere to motivate the young brains into becoming entrepreneurial?

The Higher Education Institution engaged in cooperation with the world of business may quickly become an attractive option for newcomers students not only from the local area but also from abroad, which is an important information for some Higher Education Institutions fighting for their place on the educational market.

A university to industry cooperation may just start by a small preparatory step: the supervision of the thesis by the professional from the company or having a consultant for a business project. At the same time, it may be some common project financed by some European funds or a joint activity like having a professional explaining the practical issues from their own experience.

More in-depth cooperation of the universities – to – industry cooperation in the short term, as well as in the long term horizon, could develop in:

- common curricula
- common research
- valorisation
- management

Having common curricula presents some open space for the businesses to have an eye on the most prosperous students and take them under their protection and supervision, paving the carrier mutually advantageous both for the student and the company.

Common research based on the company's assignment facilitates the progress of a company and if based on the university's request, it loops the educational institution closer to current trends.

“Valorisation activities relate to the commercialisation of knowledge emerging from a Higher education institution, such as ‘commercialisation of Research & Development’, ‘academic entrepreneurship’ and ‘student entrepreneurship’. Management activities relate to illustrate a more strategic nature to cooperation between Higher education institution and business with the activities grouped into three categories: ‘governance’, ‘shared resources’ and ‘industry support.’”³

³ Source: https://www.ub-cooperation.eu/pdf/final_report2017.pdf

UBC AREAS	UBC ACTIVITIES
Education	<ol style="list-style-type: none"> 1. curriculum co-design (e.g. employers involved in curricula design with HEIs) 2. curriculum co-delivery (e.g. guest lectures) 3. mobility of students (e.g. student internships/placements) 4. dual education programmes (e.g. part academic, part practical) 5. lifelong learning for people from business (e.g. executive education, industry training and professional courses)
Research	<ol style="list-style-type: none"> 6. joint R&D (incl. joint funded research) 7. consulting to business (e.g. contract research) 8. mobility of staff (i.e. temporary mobility of academics to business and of business people to HEIs)
Valorisation	<ol style="list-style-type: none"> 9. commercialisation of R&D results (e.g. licencing/patenting) 10. academic entrepreneurship (e.g. spin offs) 11. student entrepreneurship (e.g. start-ups)
Management	<ol style="list-style-type: none"> 12. governance (e.g. participation of academics on business boards and business people participation in HEI board) 13. shared resources (e.g. infrastructure, personnel, equipment) 14. industry support (e.g. endowments, sponsorship and scholarships)

Image: ⁴ 14 recognized university – to – business activities:

Nonetheless, there are other ways of building foundation for the university-to-industry cooperation. Even though it may not be recognized in the annual assessment of an academic or measured in the survey, the informal bonds are of equal importance to support the idea of entrepreneurial environment at the university.

According to the authors of the Final report 2017, Prof. Dr. Todd Davey, Arno Meerman, Dr. Victoria Galan Muros, Balzhan Orazbayeva and Prof. Dr. Thomas Baaken⁵, the broader notion of university-to-industry cooperation could also be understood as informal and formal social links:

- attendance at industry sponsored meetings,
- attendance at conferences,
- personal informal contacts,
- informal contacts, talks and meetings,
- ad-hoc advice and networking with practitioners,
- informal technology transfer,
- career talks, interviews, career fairs.

An interesting idea in this concept is the scenario, where a Higher education institution becomes so profoundly involved in the industry that it becomes an unseparated part of the region/nation, serving as an important facilitator of local or national changes in the areas involved.

New ways of cooperation need to arise, and indeed, new ways of cooperation are being created. Even though it may seem that with COVID-19 it is difficult to start new

⁴ Source: https://www.ub-cooperation.eu/pdf/final_report2017.pdf

⁵ Source: https://www.ub-cooperation.eu/pdf/final_report2017.pdf

activities, it is just the perception from the point of what we were all used to: the old ways of functioning.

Traineeship mobilities, that have been by far the most common way of interconnection between the stakeholders (university, students, companies or institutions) are undergoing the major change. In COVID-19 era the perception of what a mobility is, changed, passing the change to the whole flagship programme of the European Union. In the reaction to the spread of coronavirus, the European Union issued the instructions where it encouraged the Higher education institutions to be flexible and pragmatic to help the students from all geographical area to pursue their mobility activities, even remotely.⁶

The virtual mobility took an increase with some reluctance on the side of the students as well as on the side of International Relation officers initially. However, the shift brought about by the pandemic gave space to new approaches which could emerge, mainly to remote form of working, thus allowing the continuous development of different forms of internships and studies.

In 2020, The European Council ensured that all the actions are clearly communicated and coordinated and according to its latest issue of Conclusions of 22 October 2021⁷, it recalls the goal to transform Europe digitally, to gain digital sovereignty, particularly with the focus on digital skills and education in its “**Path to the Digital Decade**”

In the light of this development, each part involved in the goal of university-to-industry would first need to identify its resources:

- financial resources
- human capital
- technological options
- network resources

and then, universities should

- encourage financial incentives
- support the staff to transform in a more digital way
- strategically encourage students to take part in internships
- make reasonable partnerships with industry

and business should

- redesign its way of function into more digital way
- build connections with career centres
- involve students into the its digital transformation
- allow students to become part of the processes they pursue even remotely
-

⁶ Source: <https://erasmus-plus.ec.europa.eu/coronavirus-impact/essential-practical-advice>

⁷ Source: https://ec.europa.eu/commission/presscorner/detail/en/ip_21_6186

Erasmus+ University Consortia

Talking about students and internships, in particular, for many years the European Commission has promoted the establishment of regional consortia for traineeship mobility and many successful consortia have been formed. The Erasmus+ University Consortia for traineeship mobility play a key role as a regional point of contact for different target groups: students, graduates, Higher education institutions, host organisations/companies and decision makers.

Moreover, the Erasmus+ University Consortia have considerable potential for creating added value: quality assurance of traineeships for both trainees and host organisations, quality services in an efficient and cost-effective manner or knowledge centres for international traineeship expertise.

They can play a key role

- in promoting and supporting active networking between Higher education institutions and companies
- in helping to unlock more traineeship opportunities for young graduates
- in raising the quality of the traineeship experience for all parties involved
- in optimizing the impact of the traineeship experience by debriefings and other initiatives.

They can facilitate dialogue and cooperation between the Higher education institutions members and different regional stakeholders (policy decision makers, regional employment agencies, regional companies), for which these consortia could act as a go between.

BENEFITS: WIN-WIN

A win-win situation is one where both the involved parties come to a conclusion of profit. According to the State of the University – Business cooperation in Europe Final Report⁸ there is a need to shift the way of assessment of universities away from the focus on publications to the focus on universities to business cooperation. A cultural shift needs to happen pushing national governments to change their way of functioning in regards with the funding, thus becoming the facilitator of the modern 21st Century's education with a win-win quality, where the outcome of such activity would have a significant impact on the society as a whole.

Currently, the most common ways for universities to collaborate with businesses happens through student projects, dual education programmes, co-creation of curriculum, lifelong learning, common research and development projects, mobility of staff and consulting. The most common ways for businesses to collaborate with universities also happens through mobilities and dual education programmes, but they also seek consulting, governance, support and involve themselves into shared resources.

Some typical profile of an academic in cooperation with industry may be depicted as follows:

- they start their cooperation with business on their own initiative
- they cooperate with more than one company
- the companies are from their own area, region, country
- they plan the sustainable cooperation
- they are involved in more than one activity

On the other hand, the profile of the business to university cooperator would be:

- the one who finds the partner at the university to work on the set task
- the one who cooperates with more than one university
- the one who continues the cooperation with more activities
- the one who plans and maintains the cooperation

The advantages of such cooperation for universities would surface in the innovation strategies which help them build a competitive advantage over others and advance in the ranking by developing the research and development, whereas the organisation would gain on its social performance and gain greater credibility with its stakeholders.

To sum up the benefits:

For Business it would be that they can:

- discover talented individuals
- help improve their business profile
- help progress and gain profit
- access to the latest discoveries and innovation

For Universities:

- new ways for teaching
- more practice embedded education
- better graduate profile
- better ranking

⁸ Source: (https://www.ub-cooperation.eu/pdf/final_report2017.pdf)

- possible valorisation of research and development

For Students:

- more practical learning, thus better developed skills
- learning about one's own natural talents and career awareness
- insight in the challenges and innovation needs in the professional sector
- more attractiveness for the labour market
- becoming entrepreneurial

And for Academics to develop and maintain relations with the employment market would bring:

- insight in the challenges of the sectors / employers
- new ways of teaching, classroom simulations of real professional contexts
- source for research, insights in the challenges of the sector / the labour market as well as specific needs for innovation
- impact of their research on society
- reputation
- more professional realisation

MULTIPLE SENSES OF HOW TO MAKE A COOPERATION BETWEEN UNIVERSITY AND INDUSTRY SUSTAINABLE

It is generally recognised that there are three types of barriers to university - to - industry cooperation; funding, relationship barriers and usability of results. Indeed, universities may experience limited resources for mobilities and sometimes even the lack of employees with business experience would add to the feeling of internal obstacles to the cooperation.

How to overcome them is a matter of simple steps.

First of all, longer interaction may contribute to the quality of the cooperation. It takes some time to shape the cooperation. Identify the pros and cons of the cooperation and help the links between the parts. Allow for the experience to be shared. Five years' funding as a recommendation to create the space of time do start, develop and deepen relationships between the stakeholders.

Moreover, physical location may no longer play an important role, taking into account that many companies are now aiming at the remote, digital ways of interaction, but, best if you can meet in person whenever it is possible and sustain the cooperation.

University management should be aware of the importance of UBC more than ever. Different initiatives and pilots can be developed by the teaching staff and liaison officers. Good practices can find their way through the institution on a bottom up basis. However the institution's management should formally support UBC in its many appearances, by creating a framework and putting the necessary earmarked resources at the disposal of the institutions' departments to build out UBC in each study programme. UBC initiatives can take place off campus and on campus.

- Make the most apt students the ambassadors of the university-industry projects to raise the awareness among the peers.
- Allow for the local/national forums to emerge among the like-minded individuals. Support their meetings.
- Open space for the programmes that would interconnect the needs from the industry with the offer from the university.
- Involve Alumni.

To add up, the findings of the State of University-Business Cooperation in Europe study summarise it as follows:

- 1) Ensure there are mechanisms in place that support university – business development.
- 2) Promote the short and long term benefits of university-business relationships and of university engagement generally.
- 3) Policy needs to embrace a broader understanding of what is university - business as well as engagement more generally.

- 4) Create more opportunities for cooperation with employers in education including more practical programmes, both within and cross-faculty.
- 5) Provide support for the creation of new curricula, to redesign existing curricula or undertake ongoing modernisation of curricula at Higher education institutions.
- 6) Develop improved employment and recruitment pathways from higher education to employers.
- 7) Provide improved support to employers in educating and upskilling their employees during their working lives.”⁹

Especially the role of the Alumni in university to business cooperation may strengthen the link with the world outside the university. Keeping good relations with Alumni may support the institution by gaining input on Alumni’s professional experiences, needs and challenges of the sector they are working in, or by involvement in some (structural) cooperation. Alumni are often willing to engage into the cooperation with their alma mater, bringing necessary dialogue, university to business initiatives and providing insight on many employment possibilities and the related necessary skills.

And again, as it has already been said, it is all people’s game. Once questioning how to make it sustainable, the answer may come in simple steps:

Build it like a marriage!

1. Show respect at the beginning
2. Learn about the shared values
3. Ask them what they expect
4. Handle the expectations
5. Understand cross values
6. Express your mind
7. Be tolerant
8. Keep going

Start with a small project, add more, proceed to complexity, share the activities online and in person and create a strategic cooperation.

⁹ Source: https://www.ub-cooperation.eu/pdf/final_report2017.pdf

Sources:

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