POSITIONING PAPER: DAY 5

EDUCATION & FUTURE EMPLOYABILITY

INTRODUCTION: FRAMING THE DISCUSSION, CLARIFYING THE CHALLENGE

As part of Crowdsourcing Week Europe 2016, a discussion group on **Education and Future Employability** has been set up to tackle current issues on that matter, identify the limitations of our society and suggest potential solutions.

For many years one of the major concerns in Europe has been the evident **gap between the business sector and the education system.** In a continuously evolving business market, the matching of offer and demand is difficult, certain skills are not developed and on top of that the perception of creativity and entrepreneurship is undermined by old concepts of society. Following these observations, forthcoming perspectives of the labor market are quite alarming.

IDENTIFIED ISSUES AND LEVERS FOR IMPROVEMENT

While multiple aspects of the theme Education and Future Employability are equally interesting, this paper addresses **three main ideas** which are based upon the expertise and professional background of the contributors: (1) the gap between the business sector and educational institutions, (2) the need for new skills, and (3) the importance of entrepreneurship and creativity in education, business and society.

1. THE GAP BETWEEN THE BUSINESS SECTOR AND EDUCATIONAL INSTITUTIONS

To adapt the education system to the evolution of the business market, the academic, public and private sectors should align the content of the learning programs to the needs of the labor market. The learning programs could be a more **balanced combination of theoretical background and hands on practice**. To do so, the education and business systems could improve **internships** and implement **lifelong learning and mutual exchange programs**.

Internships are essential to the education process but are perceived as being adequate to low budget workforce only. **A tripartite commitment upfront** between companies, students and high schools or universities should ensure an equal benefit from internships, which is hardly the case today. A company could commit to ensure the student's benefit by hands-on learning and the acquirement of soft skills, whilst the company in turn takes advantage of academic research and development or consultancy, and a high school or university gets fresh views on current business processes and tendencies.

Also, the programs for youngsters should be only the beginning of a

lifelong partnership between individuals and the education system according to the personal and common needs. Lifelong learning has by all means its importance in our society due to the digitization effects on society. Jobs evolve and so the need for long-term employees to catch-up is indispensable.

Another solution to ensure the alignment between the business market and education, the educational institutions and companies is to create **mutual exchange programs**. This could be achieved through **mobility programs** between the work floor and the educational institutions, comparable to an Erasmus exchange (e.g. academics transferring for a specific duration to industry or the other way around).

Next to human mobility, a learning program can also include the **optimization of exchange of know-how** between both systems, as illustrated by the subjects of theses chosen by students and promoted by their lecturers. There could be more attention for potential subjects with business-oriented relevance. Giving the opportunity to students to work on these issues would be mutually enriching for the student, the educational system and the business market.

2. THE NEED FOR NEW SKILLS

Education is key to acquire a theoretical background and hard skills. Though it has to be optimized with **practice oriented learning programs** as mentioned above, including soft skills, interdisciplinarity and digital thinking.

The development of personal skills such as social and emotional intelligence, adaptive thinking, critical learning, problem solving reasoning, creativity and people management is essential for students, teachers and lecturers. These skills should be **measured, qualified and awarded credits** as a complementary asset of the theoretical program by means of practice, such as internships and exchange programs mentioned in point (1) above. They could become an integral part of the education system and even of society as a whole **from pre-schoolers level**.

Besides soft skills, a very important aspect of education to bridge the gap between the businesses and educational institutions is interdisciplinarity. In a world where diversity and **interdisciplinarity** are the norm, the educational system is still often a combination of separate disciplines, with students asking more and more for interdisciplinary formats where they can learn to appreciate the values of other disciplines as well as position their own disciplinary strengths in interdisciplinary teams.

Whilst society is rapidly incorporating technological advances, the need for **interdisciplinary STEM project-based learning** from pre-school level to higher university level becomes apparent.

STEM defines an **integrated program of science, technology, engineering and mathematics** in the classroom. The purpose is to teach students to think critically and have an engineering approach towards real-world problems. This way, students (and so citizens) are encouraged to make proper informed decisions.

In addition to the STEM program, educational institutions could also implement **collaborative and cross-border projects** between different levels: disciplinary (social sciences, economy, biology, etc.); sectorial (business, culture, etc); or geographical (institutions in other villages, cities, regions or countries).

Finally, future work skills should obviously also include a **digital agenda**. It is unnecessary to note that so little is done in the education programs to familiarize students, teachers and lecturers of all disciplines to computational thinking and the use of new technological equipment. An existing idea (in France) that should get more attention is the mobile Fablab. It circulates amongst schools and allows children to discover new tech equipment such as 3D printers.

3. THE IMPORTANCE OF ENTREPRENEURSHIP AND CREATIVITY IN EDUCATION, BUSINESS AND SOCIETY

At the educational level, opportunities to realise one's innovative ideas are easily accessible today, though there is still a low level of entrepreneurial projects initiated by students. This could be significantly improved by involving **teachers and lecturers with entrepreneurial experience and expertise**. Setting up **training programs for trainers** to keep them updated on the evolution in entrepreneurship and digitisation via bootcamps could also be a step in the right direction. On top, incubator processes should start earlier in the higher education program, and not only during the last year of a Masters degree.

Business, and even society as a whole, could also consider structural changes with a view to encouraging entrepreneurship. Why not integrate entrepreneurial projects as **part of a career plan** for employees? One of the new ways of employment could be to give **time credits** for these types of projects or to **employ people on a project-based rather than job-related basis**.

Minor innovations in the **welfare system** could trigger a mentality shift for those who are risk-averse, such as reducing social charges, ensuring a basic income for starters (students or employees) or even aligning the status between entrepreneurs and employees. Today, apart from some local initiatives there are no assistance services to accompany individuals to entrepreneurship (e.g. legal counseling). Unfortunately, our system nourishes **fear of failure**. The best illustration is the fact that newly graduated students are encouraged to contact public employment agencies (Forem, Actiris and VDAB) as soon as possible to secure unemployment

allowances. Shouldn't they be encouraged from a young age to be autonomous and to learn to experiment instead? A failure is not shameful, as already discussed above.

Although creative and innovative skills are becoming more and more appreciated in all types of jobs, the creative sector as a whole is often significantly undervalued by today's society. Since creativity may be the key to develop new markets it should be valued as such in research and development in Europe. Why not consider **a STEM to STEAM learning program** where Arts and Design are included in the STEM fields education system. The artistic process and the scientific method can be complementary. Both are about exploration of ideas and possibilities and encourage students in creative and critical thinking that supports collaborative learning. Also, creativity lies in the process and not in the result. Our education system still pays too much attention to results.

CONCLUSION FOR FUTURE EDUCATION AND EMPLOYMENT

Some **societal challenges** have a considerable impact on how the education to employment system needs to be redefined, amongst which globalization leading toward greater exchanges, new technologies and social media platforms, and young entrepreneurship.
Next to these societal issues, the **misalignment between the education programs and the job market**, and the **lack of porosity between departments** in both the education and business systems, are also in major contrast with the globally connected and interdependent world. For that reason, the goal must be to **conceive exchange programs and to develop new skills**, which make education to employment transition stronger, as suggested in points (1) and (2) of this paper.

Regrettably, whether it is in education or business, there is an important **resistance towards innovation and creativity**. Hence the tendency is to secure employment and **discourage entrepreneurial initiatives**.
To counter this mentality, the discussion group proposes a few structural challenges in point (3), which could trigger a mentality shift and hopefully **foster autonomous and innovative behavior**.

Find on **Wooclap** the work-group's **concrete proposals** to address the challenges explained in this positioning paper. Everyone is invited to contribute with his/her own opinions and ideas.

CONTRIBUTORS:

Yolande Berbers
Professor of Computer Science (faculty of engineering science KU Leuven) & Responsible for Entrepreneurship

Wim Fyen
Innovation Manager (KU Leuven R&D) & Coordinator Lcie

Karen Boers
Co-founder & CEO Startups.be and European Startup Network

Béatrice De Mahieu
General Manager & Co-founder, Virtuology Academy

Kris Leys
Partnership Manager Hello bank! Belgium

Gwenaël Mouthuy
Freelance project manager & board member, Ustart Belgium

Sofie Kellers
HR Business Partner, BNPPF

Karlien Vekemans
Relationship Manager Social Profit, BNPPF

Geert Arron
Area Support Manager, BNPPF

Cécile Huylebroeck
Facilitator, Crowdsourcing Week Europe

CONTACT:

hello@crowdsourcingweek.com