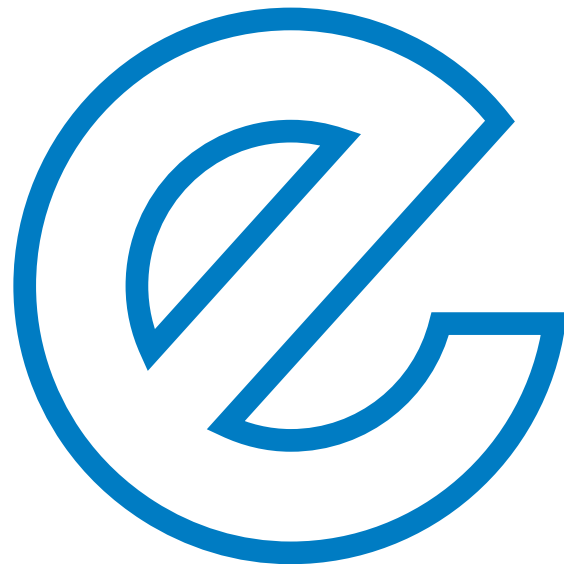


The Knowledge Triangle Shaping the Future of Europe

We are the Future

31 August – 2 September 2009
Göteborg



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Swedish Presidency Conference, Göteborg, 31 August - 2 September 2009

Session: We are the Future

Distinguished Guests, Ladies and Gentlemen,

It is a great pleasure for me as the President of Eurodoc – The European Council of Doctoral Candidates and Junior Researchers to speak here at this conference.

I would like to address my special thanks to the organisers for giving me the opportunity to speak on behalf of the European federation of national organisations of young researchers.

Eurodoc represents doctoral candidates and junior researchers in the form of a federation of national organisations. We have 32 members and six working groups within: Career development, Mobility, Gender Equality, Surveys and two internal workgroups.

Eurodoc was accepted as a working partner in the Bologna process, to be able to represent the voice of and highlight the issues of doctoral candidates. Apart from that, Eurodoc is a partner of EC, EUA, Euroscience, ESOF and many other organisations that consult Eurodoc on questions concerning doctoral education and also on distribution of information to the doctoral level.

And now, as I was asked to give the opinion of the doctoral candidates and young researchers to the issues raised up during this conference, let me continue and tie up to the discussion which started yesterday during the last panel discussion "The changing role of universities in the knowledge Triangle".

It was great to hear all of the speakers telling that universities should change. More pleasant was to hear, that you have already agreed, what should be changed. But what I missed, was, **HOW it could be changed. What are the next steps, the real steps, to do the changes?**

We are speaking about the knowledge triangle – education – innovation and research – which, together, should shape the future of Europe. Have you ever try to design the triangle? If yes, where would you pose the HEIs? Where is their place and what is their role in the knowledge triangle?

I think, with the diversity we have in Europe, we would get many nice, but also very different pictures. So please, be tolerant when seeing my picture of the knowledge triangle. I would like to show there, how I think, the knowledge triangle is working now, what is the position of HEIs´ and how the links between education, innovation and research are working. The second picture gives more idealistic view on how it could work better.

It is natural, that the implementation should start at the place, where education, innovation and research meet. This place is provided by Higher Education Institutions. Here is the centre of the knowledge triangle. So nowadays, a big responsibility is put on HEI´s. But other stakeholders - out of academia - researchers´ centres, SME´s and others should not be omitted.

The system how it works, I call **"pushing"**. What does it mean? Pushing academia to do the research, to innovate. By sending new requirements, needs of the market from stakeholders, universities are pushed to react on changes, pushed to innovation (updating graduate or doctoral programmes, doing research regarding the new needs of the market, etc.) What does this mean in reality? "Pushing from outside academia" can mean "pushing from a few large companies" (so not a general need of the market) Universities also can be pushed towards short-term targeted research and forgets about long-term perspectives. "Pushing" can have its merits, when implemented in the right way. But still, the whole process of updating and innovation take too much time and thus, is not flexible enough.

A big responsibility is put on HEIs. We should not educate to unemployment, but the process of changes at labour market is so fast, that sometimes, it can be very difficult to react flexible and act quickly. That is why the model of "pushing" should be changed to "foresight approach".

"Foresight approach": Universities should not only wait for the changes that comes, but should have an idea and **vision**, how the market will change, what the changes will be and thus, what requirements could come from industry/research/market/from the society. By having this vision, the process of adaptation graduate or doctoral programmes and involving new methods of education could be more flexible and it means could meet the market requirements "JIT" and thus, prepare "future workforce" better.

And where is the place of doctoral candidates and young researchers in the triangle? No matter if we are speaking about the "pushing" system or "foresight approach", during this conference, I did not hear much about the role of doctoral candidates in the system. Even, I did not hear to use the word "doctoral candidate".

Can doctoral candidates and young researchers help universities in strengthening links?

Strengthening the links can be done only with close cooperation with all stakeholders. Doctoral candidates are a great opportunity for universities to start and keep the cooperation. During their doctoral studies, they work on different projects with companies, research centres; they are in contact both with academia and business. In their work, they have the opportunity to meet innovations and bring them to academia and vice versa. Many times doctoral candidates teach and give lectures. They can be the link between education and innovation in the frame of new methods of teaching.

Doctoral candidates **already ARE the links between education, innovation and research**. The links could be much stronger **if the conditions for doctoral candidates are better**. We all know about obstacles in working conditions of doctoral candidates. Funding of higher education, research and innovation activities is very important and should be increased. **Funding**, right from the beginning of any research, is absolutely essential to young researchers making the most of their brains on more substantial research issues that making sure, if they can cover not only the research but living expenses. **If working conditions are not ideal and young researchers are constantly searching for funding, then, they do not really have time and concentration for thinking about innovation and exploitation of the results.**

One more important point which should be mentioned is **IPR** (intellectual property rights). Young researchers and doctoral candidates should be given training on IPR and patents and there should be clear regulations on IPR which do not disadvantage or demotivate young researchers (i. e. avoiding the case professors are exploiting research result of their PhD candidates in their own name). Even copyright and other basic forms of IPR should be taken into account. **The clear contracts with industry defining IPR issues should be necessarily taking into consideration too.**

Support structures to help young researchers **to launch startups** are also missing.

Mobility, as mentioned already, is very important, but how can a Doctoral Candidate be mobile, if he is considered as an employee and the Erasmus program is for students?

How can the links between education, innovation and research be strengthened in Europe?

European contribution:

- Raise innovative awareness of students/doctoral candidates: Motivate students/doctoral candidates to

cooperation with industry by offering different grants, studies abroad, internship programmes

- Raise innovative awareness of stakeholders: Motivate stakeholders to cooperation with HEI´s.
- Creating better working conditions for doctoral candidates and young researchers

Individual approach:

- Networking and transfer of innovation: Exchanging examples of good practice between HEI´s and stakeholders. Transferring innovations from industry to academia and v.v.
- Exchanging programs: Support mobility programs for students/doctoral candidates/researchers/staff.
- Market research: Doing market research in order to get information how the market will change, what will help universities in adaption of study programmes.
- Centres of collaboration: Collaboration HEI´s - Industry in different fields as working on common projects, involvement students/doctoral candidates in research, external lecturers (experts from industry having lecturers at universities), start up companies, etc.
- Innovation in teaching: New methods of teaching, innovative approach - special courses for teachers and other university staff
- Implementing common strategies regarding working conditions for doctoral candidates and young researchers

To conclude my speech here, the message for this conference from me and from EURODOC – the European Council of Doctoral Candidates and Young Researchers, is:

YES, WE ARE THE FUTURE and we are prepared to contribute and help strengthen the links between innovation, education and research. We are prepared to make the **MISSION POSSIBLE**.

Nikola Macharová

President