

How can universities best contribute to economic and cultural innovation?

Presentation by Professor Klaus Landfried at the EPP-ED Hearing on European Innovating Minds, Brussels, 29 January 2009

Für die ehrenvolle Einladung, Ihren Ausschuss bei der Beantwortung der für unsere gemeinsame Zukunft wichtige Fragen unterstützen zu dürfen, danke ich Ihnen sehr. Auch wenn ich die besondere Leistung der hier tätigen Dolmetscher(innen) sehr hoch schätze, habe ich mich doch entschlossen,

to deliver my presentation in English, because I want most of you to hear directly whom and what you see. You all know that the question raised here may well be treated in a series of 10 long lectures instead of a 20 minutes shortcut. Therefore to focus on a few points is a must. I will now focus on 4 propositions. I will not tell you many figures, not deal with many known facts, but instead concentrate on principles. Now the propositions:

The FIRST deals with INNOVATION. Innovation means to break up traditional patterns and build new ones: in business and technology, in art, music and literature, in sports, but also in religion. Inventing and designing new products, new processes and to market them successfully worldwide, that is what we need everywhere in Europe to be economically competitive on this globe. What we need most for this goal are creative minds, minds that think and act freely, free from all outdated prescriptions and regulations (“patterns”) which have penetrated our mind-maps to much. I talk about prescriptions which have often been initiated by well meaning bureaucracies or other authorities. Only these free minds will be able and willing to shoulder the responsibility and to act according to the value system that has coined our common history during which the axiom of HUMAN RIGHTS has been developed.

In the US of 100 employable people 10 are willing to found an enterprise and work self-employed, in Europe we count between 2 and 6, varying from country to country. This has to do with the kind of education and culture we are growing up in, it has to do with the self-consciousness of those thinking and acting in their own responsibility on the one hand and the prejudice of those thinking and acting along prescriptions and waiting passively for the government to show or even to order the way.

There is a strong link between innovation and the way we are used to learn: either, first, by being lectured from “above”, being filled up with so called “confirmed knowledge”, passively trying to memorize it for the next examination, but forgetting rapidly after exam what was not really hitting our interest and emotions, our will to comprehend. Or we learn, second, by searching for new knowledge on our own, gently guided by teachers, experiencing by trial and error what is real, what is possible and

what is not, experiencing our own responsibility, also in ethical terms, because our efforts to learn are respected and we as personalities are recognized.

I cannot elaborate more extensively on this remarkable difference in the culture of learning, but I do insist that a change in the way children in schools, students in Higher Education Institutions (HEI) and vocational trainees in school and workplace are mobilized to learn will make our whole educational systems much more effective in terms of generating more innovative minds. This does not mean, that learning is made easier, on the contrary, but just more active and self reliant. This insight alone makes the often phrased and very traditional borderline, always drawn by people distant from the process of generating new knowledge, the borderline between teaching and research in HE a pure nonsense. Professors teaching without encountering the challenge of unanswered questions in research become soon sterile loudspeakers, and “pure” researchers who do not care for educating the young loose touch with reality. Learning by researching is a practice that can be learnt and trained and that will contribute to economic and cultural innovation. I am well aware that there is a long way to go to reach such a practice in more than a few of our universities. But it must be gone.

And your legitimate question will be: what can we, the European Parliament, do to support this process? My answer is rather simple: if learning by researching or in another term entrepreneurial learning would be declared a goal of the EU, I could imagine ways to inject more of this spirit into already existing programmes like ERASMUS, ERASMUS WORLD or LEONARDO, MARIE CURIE and others and design certain incentives to develop and make visible good practice-examples. This can and must be accomplished without producing raised eye-brows on account of so called violations of sacred subsidiarity.

So my first proposition has been to encourage more of an active, entrepreneurial way of learning in our HEI in order to promote sustainable conditions for more innovation.

My SECOND proposition deals with – no, not yet with money, that comes later – it deals with traditional structures in universities. These old structures and habits keep many universities from becoming “workshops for the future of our societies”. This task had been assigned to HEI about 8 years ago by former German chancellor Gerhard Schroeder. It still is with many HEI more of a task than a reality. European universities, noble as many of them are, represent the second oldest social institution in old Europe after the Catholic Church. If someone has made it to such enormous age, the risk of sclerosis is not to be excluded. It is difficult to make both institutions move.

To get now closer to the problem: when universities were really small and social participation in higher learning very low (below 1% of an age-group), the academic corporation governed as an oligarchic craft (not even a republic) of some peers may have had some merit. Although there is reason to even doubt that. Most of the great

innovations of the past did not emerge from universities. Thomas Kuhn in his history of science paradigms has told the story long ago.

But in a social environment in our time, when – thanks God – between 30% and 50% of an age-group are or should be qualified for HEI and lifelong learning is spreading, HEI need a completely different form of organization. Public spending in HEI, now ranging in the EU from 0,8 up to 2% of GDP, can only be justified when all their activities in researching learning, in lifelong learning and in services to society are made transparent by comparable reports to the public, so that they can be evaluated. You all know that we have not reached that stage.

But my SECOND proposition is that the governance of modern HEI in mass education has to follow the patterns of great service enterprises and therefore has to be called: the entrepreneurial university. Of course, a university, funded mainly by public funds, is not a software-company or an insurance company, it is a special form of enterprise in the field of learning which entails special features. One is that it normally is not for profit but for sustainable development. But the entrepreneurial university in order to be a real workshop for innovation (there exist some good examples in Europe already) needs well organized decision making (far from the endless palaver-like talk-rounds in the old-fashioned crafts) and a well trained, professional leadership. It needs a leadership of trained scientists who know that research mainly means expecting the unexpected, but have been trained also to manage a diverse and complex, often also large organization. HE-managers, at least the good ones among them, know that such a complex enterprise cannot be “ruled” from above. Larry Summers had wonderful ideas for Harvard University but he failed to build enough consensus within the institution. Also consensus-building, without producing hot air-compromises, is part of the leadership task, and not the easiest one.

But we should recognise that the average professor, even the best in his special field of research, rarely is also good in management. If he or she is not trained for it. She? Yes, at this moment I may be allowed to mention that the proportion of competent and well trained (in leadership matters) women in academic leadership positions is still unacceptably low, though there are some variations country wise. This is still a real scandal. I know that the European Parliament has already concluded very clear and forward positions on this issue. But we will have to pay special attention to it for the next three decades at least.

If you just allow for a short intersection: where as in earlier times universities looked rather similar in tasks and performing them, we now have according to diverse social and economic demand a system of diverse HEI, some few very elitist in claim and performance, concentrating mainly on basic research and training excellent young scientists, many though just delivering so called “knowledge” to millions of students, doing some average research also, but still preserving the often arrogant attitude towards such important goals as employability and professional competence of their graduates and also towards the necessary dense cooperation with industry. Many professors and students in these institutions try to justify their segregationist attitude, especially towards industry with claims to academic freedom and independence which

in turn are often violated mainly by themselves when trying to silence groups opposed to them.

So far the number of large HEI in Europe managed as entrepreneurial universities which also produce high-quality education and research is still limited. When I mention here only Warwick, Twente, TU Muenchen, St.Gallen or Kuopio, others not mentioned should pardon me on account of being short. Oxbridge (Oxford and Cambridge) should not be taken as good examples to be imitated. They are both elitist to the extreme, excellent in research and teaching in many fields, but not all, but only for the happy few being privileged enough to have made it there.

And again you will ask me: what can we, the European Parliament, do to support what is necessary to modernize structure and governance of our HEI and the attitudes towards their tasks. Not much for the moment.

According to the still valid Maastricht –Treaty HE remains in the responsibility of member states. But: you, the European Parliament, could well publicly insist by means of a general resolution that there is still work to do, that a responsible autonomy of HEI and their entrepreneurial structures are important for the competitiveness of European universities in the field of innovation, but need also the personal accountability of those governing the institutions.

Such a position may contribute to some reflections within member states and within the HEI-system of Europe. Hearings like this one today will, if well publicised and also repeated in a panel-like form every two years, give the EP more leverage in HE affairs than any more centralised legal competencies. Also it seems worthwhile in my view if the European Parliament would support the public awareness and acceptance of the EUA (European Universities Association). By doing this, EUA's efforts to help create an open European HE and Research Area would receive positive signals also not to be overheard by national governments and HEI alike.

My THIRD proposition deals with one of the most urgent challenges confronting our ageing societies: the increasing scarcity of bright young minds. It is at the same time also one of the toughest problems we face in the global race for bright minds: it deals with recruiting and promoting young scientists and junior academic staff.

In some European university-systems recruiting and promoting academic staff does not really follow the principle of performance and merit, but is handled here and there along the special likes and dislikes of superiors in the rather extended and firmly established hierarchies of the institution. We know well from interviews and opinion surveys conducted with young European scientists who had fled Europe for the US and Canada that flat hierarchies and a strong team-spirit are seen as main advantages to work there.

Now that Harvard, Stanford and others have lost around a quarter of their fortunes in the financial crisis, European research-institutes and universities may well use the time-window to re-recruit quite a few homecoming young scientists. My proposition is that universities – and I insist on this – really make an effort to further improve the working climate among others by flattening the hierarchies, allowing young scientists groups much more independence and responsibility.

Another challenge will be to wipe out all the bureaucratic obstacles for intra-European mobility which all come from outdated national laws. One especially odd example is that pension-claims in many member-states are not transferable to others.

Also to my third proposition belongs the fact that in many universities doctoral or PhD-students are trained as if they would all later become professors. Which they cannot and even do not want to. So the way they are trained is not appropriate. In most industrial countries the percentage of PhD's working in research or HEI after they earned their doctorate varies between 15% and around 40%, depending on discipline. So far academic education including research-training does not often include all those skills desperately needed in professional life outside the academic ivory towers. Human resources development is what we urgently need also in academia. The empowerment of young women in science is part of the challenge. Some prudent faculties and universities have started already new forms of graduate schools in which training of those skills, mentoring (also by people from industry) and coaching are now offered and exercised. But one thing should be publicly denounced by the European Parliament: It is a scandal that two member states of the EU still do not have a statistic of students/young researchers registered for a PhD-program or working for a doctorate. These two states are Germany and Slovenia. Maybe you can exercise your influence to get this gap closed.

But with regard to the training-programs: I am very happy and also grateful to the European Parliament that the new and extended ERASMUS WORLD programme now explicitly supports such trainings also among PhD students.

With regard to research students from China and some other states I just want to mention that there have been observed quite a few data-protection problems. Or to put

it more bluntly: in a not small number of cases foreign students have been misused or at least have let themselves be made instruments of industrial and scientific “intelligence” gathering or espionage. HEI and research-labs will have to pay more attention to this new kind of warfare in the future.

And again you will ask me: what can we, the European Parliament, do to meet the challenges I have put before you? It remains what I told you at occasion of the other propositions: make your positions clear to the public and to the governments of member-states. Take initiatives that help to tear down all those walls of bureaucratic obstacles for mobility within Europe. Mobility will be part of the innovation-offensive which is possible and must include many more enterprise-founders than before. And I hope you will provide again tangible funds for such programs which help to support the bright minds. As you have done especially with ERASMUS/SOCRATES and ERASMUS WORLD.

The word “FUNDS” brings me to my FOURTH and last proposition. It deals with money. When I was a member of the board of CRE, the predecessor of what is EUA today, we again and again heard in the mid-nineties of the last century from national governments their slogan: do more with less. My simple proposition is: competitiveness in the field of innovative Higher Education demands much more money spent than now.

The situation has fairly improved in some EU-member-states, but not in all and not enough. On average the proportion of GDP or national budgets spent on HE is much lower than needed for the main resource for global competition. National politicians work hard on their lip-service to the issue but fail when tangibles are to be put into the budget. I am not here to complain to you. The European Parliament has not been bad on the subject during the last decade. But its purse remains limited to joint action.

But what the European Parliament can do is: it could tell national parliaments, that for instance the parliament of the Indian Union has concluded a budget for last and for this year, in which spending on education will be raised by 20 %. Indian National Knowledge Commission has already recommended to increase the number of HEI from 350 to 1500, of which some 50 should reach elite-status. Similar figures we have learnt from China. Of course, the financial crisis will also hit those budgets. But it is the size of the increase and of the effort which should impress our national governments.

I have tried to focus on four propositions which can and should contribute to more innovation through more bright minds in our HE systems. I am well aware that this is not all that is needed. But I am sure that these 4 points are important. And that a prudent balance must be found between a good education for the many and the support for those few who are the brightest and who help to shape a new world. Let me end with a quote from famous French filmmaker Francois Truffaut who once said: <If you want to overtake your predecessors you must not walk in their footprints>.

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