

Commissioner Geoghegan-Quinn
Speech for the opening of the Academic Year of Maastricht University
Monday 2 September 2013
"Research, Innovation and the Maastricht Generation"

Thank you very much for inviting me to the Opening of your Academic Year. It is an honour to be here.

When I received the invitation, I jumped at the chance.

It got me thinking straight away.

Maastricht is known as a city with a rich history and a very modern university.

But for many people, Maastricht is also famous for the Treaty on European Union signed here in February 1992.

I still remember how it grabbed the headlines.

The Maastricht Treaty broke new ground. It created the European Union, established European citizenship and led to the creation of the Euro.

Clearly one of the most important milestones in the history of the EU.

Many of the students here today were born within a year or two of 1992.

... I know that Luc Soete has suggested that you could be called the "*Maastricht Generation*".

I agree. Not just because of that date, but also because, for me, you represent the best of Europe.

Travelling across borders, studying or working in other countries, these are second nature to you.

You are more connected, more international and more tech-savvy than we could have imagined twenty years ago.

That's why, today more than ever, it's young people who can show us the way forward.

But today's young people will face tough challenges, tougher perhaps than those faced by previous generations.

Youth unemployment has risen sharply. In some Member States, we may be facing a 'lost generation.'

Yes, there are signs of growth. But they remain fragile, and the averages hide important differences between different Member States.

Europe is out of intensive care but it still needs careful monitoring and medication.

There may be signs of recovery, but no one can claim that we have resolved the fundamental problems in our economies.

We haven't. Indeed, I worry that, if there is some kind of upturn, albeit muted, we will lose the will to reform and simply slip back into our old ways.

We mustn't let that happen.

Because we need to build an entirely new economy – one that generates deep and genuine competitiveness - not the 'false' growth we saw before.

That's the real challenge and we've only just begun to scratch the surface of it.

So, today, I would like to highlight what universities can do to help build an economy that will provide good jobs and a bright future for the Maastricht generation; to help this generation realise its full potential.

The role of universities is crucial; after all, it's knowledge and ideas that now drive competitiveness.

But to play that role effectively, they need to change.

Indeed, all kinds of developments are forcing universities to re-think the way they operate.

MOOCs, for example, are revolutionising teaching and thinking. Big data is transforming scope and scale of research.

Competition is now coming – not just from US universities – but from new challengers in Asia.

So, how should European universities respond to these developments?

I will focus on **five areas** which seem to me to be particularly important:

As you'd expect, I will begin with **research**.

Europe performs well; we produce more scientific publications than any other part of the world.

However, when it comes to the most cited publications, in other words the upper end of quality and relevance, we are falling slightly behind the US, particularly in fast moving new fields.

That is why, despite some opposition, I insisted that, in the EU's new research and innovation programme, Horizon 2020, funding would continue to be awarded on the basis of excellence and impact.

The EU is pressing Member States to do the same with their funding.

To stay ahead, most universities will have to specialise in a few fields where they have the potential to excel.

Maastricht University has done this very successfully; and because of this, it has established an excellent reputation, although it was founded relatively recently.

So, I care deeply about the quality of research. But I care about the quality of **teaching** too. This is also part of the core mission of a university. It is my second point.

Universities have to prepare you for the jobs of tomorrow.

Some of them we can only imagine now ... and others we can't even guess at yet.

Who knows, for example, what industries and jobs will arise from nanotech, biotechnology, 3D printing or climate change?

Futurologists tell us that job titles which do not yet exist will soon become mainstream professions.

Examples include elderly well-being consultants, memory augmentation surgeons, artificial intelligence programmers, augmented reality architects, haptic programmers, body-part makers, nano-doctors and urban vertical farmers!

Not all of this will come true, of course!

But it's clear that you will need different skills to equip you for the labour market.

Certainly, more of you will need specific science, technology, maths and engineering (STEM) skills.

But you will also need what are called "generic" or "21st century skills": the ability to come up with new ideas and solutions, complex problem-solving capacities, critical thinking, team-working, cross-cultural communications and entrepreneurial skills.

This calls for a different model of pedagogy – one which is less focused on simply cramming facts into students' heads.

In any case, I am told that your generation learns differently. Used to constant collaboration and inter-action, you don't necessarily want to sit in a lecture hall and listen passively to someone talking – like me!

I know that, here in Maastricht, the emphasis is on problem-based learning, rather than spoon-feeding students.

But too many universities are still ignoring the changing needs and desires of your generation – the 'Maastricht generation' – and they will lose out as a result.

They won't be able to attract the brightest students.

So, universities must improve the quality of teaching and research. And that, of course, starts with **people** – the third of my priorities.

It's an all too familiar story. Brilliant young scientist gets PhD and heads off to the US. We have to stop this exodus of talent.

Funding from the highly successful European Research Council – or ERC – has done a lot to attract talent back into Europe. It will get a major increase in support from Horizon 2020.

It is already enabling many world class scientists to conduct riskier frontier research in Europe.

Scientists like Rainer Goebel, professor of Cognitive Neuroscience at Maastricht's Faculty of Psychology and Neuroscience, who received an ERC advanced grant for his research into the functional organisation of the human brain.

But, while funding is important, there is no doubt that the lack of a defined and stable career path is also a factor.

At the moment, in some European countries, young researchers are frustrated. Getting a foot on the first rung of the professorship ladder is fraught with uncertainty. They don't always have the freedom they want to pursue their chosen research topics independently of established professors.

I have even heard some European universities described as gerontocracies!

Many universities are now turning to the Tenure Track system to tackle the problem.

Already established in the US, this provides a clear, merit-based system that takes the best researchers from postdoc to professor more quickly.

I think is a positive development; it can certainly form part of a forward looking human resources strategy.

It must, of course, be compatible with the European Research Area, the single market for researchers.

The fourth point is **regional development** and the role that universities can play in it.

I have already said that universities need to specialise.

Well, the EU is urging regions to do the same thing.

Indeed, to qualify for EU structural funding, they will have to develop smart specialisation strategies.

The idea is to identify their strengths and to focus resources on those areas.

When defining their respective priorities, a university and its region must work together. For Maastricht University this would include the wider Meuse-Rhine Euregion.

Ideally, their priorities should overlap.

Maastricht University provides a good example.

The region has decided that its strengths lie in life sciences, chemicals, advanced materials and agri-foods.

So, major campuses have been set up that focus on these strengths, notably the Chemelot and the Health campuses, which combine knowledge and training with entrepreneurship.

Universities must engage more closely with business.

They can provide advice and services to small businesses, for example; or host incubators for spin-offs in science and technology parks. Or re-invent their doctoral education programmes so that they prepare young researchers for careers in industry, in line with the EU's seven 'Principles for Innovative Doctoral Training.'

And there is no reason why it should stop there. Universities should also interact with citizens, governments and NGOs.

Campuses should become shared spaces where education, research, business and culture inter-act with the life of the city or the region.

So I know that you will play a key role in Maastricht's bid, on behalf of the entire Meuse-Rhine Euroregion, to become European Capital of Culture in 2018.

Finally, universities today must be **outward looking**.

Maastricht certainly is!

I bet that half of you here in the room aren't actually Dutch!

Indeed, the university's European character is echoed all the way to the top, with Luc being the first "Belgian" rector in a Dutch university since the Fleming Justus Lipsius in the 16th century.

These are big shoes to fill, but I know that Luc is up to the task. He is a valuable friend and ally for us in Brussels and we have called on his expertise on many occasions.

And Maastricht has adopted a strategic approach to international co-operation, choosing, for example, to invest heavily in medical co-operation with India. This is now bearing fruit in terms of talent development and research output.

Indeed, it's interesting to me that the name Maastricht derives from the Latin 'Trajectum ad Mosam' meaning 'crossing at the Meuse'. It summons up images of bridges, links, connections and openness. With its international outlook, its close collaboration with business and its emphasis on multi-disciplinary approaches, Maastricht University very much reflects this.

So, ladies and gentlemen, the quality of research, the quality of education, better human resources strategies, becoming the economic motors of their regions and adopting an international outlook: these are the priorities for universities.

But of course if we want universities to make all these changes, we can't keep them in a straitjacket.

It's a controversial subject, I know. But I do think that, in some Member States, universities need more autonomy, at least in some areas.

Universities need to be free to develop their own distinctive missions and decide on issues like staffing.

How else could we expect them to keep pace in a rapidly changing world?

We are asking a lot of our universities. We are counting on them to be flexible and nimble, and the European Union is there to support you all the way.

I couldn't ask Europe's universities to modernise and reform without ensuring we do the same in Brussels.

EU leaders have decided to boost the budget for Horizon 2020 over the next seven years.

This was the only part of the next EU budget to see a significant increase.

While Horizon 2020 maintains a strong emphasis on excellent research, there's a new focus on innovation and scientific and economic impact. We will fund actions along the whole innovation chain, from lab to market.

Universities must get ready to grasp the many new opportunities. Horizon 2020 can support the modernisation and reform of universities, for example through the ERC and the Marie Skłodowska-Curie programme.

Maastricht University is well placed to build on its successful record under the existing 7th Framework Programme – participating in 121 projects with a total EU contribution of nearly 47 million Euro.

Ladies and gentlemen,

Each generation has its own traits.

This was true of the Baby Boomers, who came immediately after the War, or Generation X, who followed them.

The 'Maastricht Generation' also has its own characteristics and values.

You certainly face tough challenges, but you also have exciting opportunities, since you are riding the crest of the digital revolution.

You master the technologies that are re-shaping our economies, our societies and our world in a way that people of my age cannot.

You live in challenging times, but exciting times.

The walls between different subjects are crumbling. I have no doubt that your careers will cover different disciplines and call on a wide array of new technical and people skills that will need lifelong updating.

What you need – what older generations must bequeath to you – is a robust, resilient economy.

Universities must play their part – by doing the excellent research – and they must prepare you to reach your potential.

It will then be up to you to forge ahead and build your own future!

Thank you.