

Opening ceremony of Aalto University's academic year 2 September 2014

President Tuula Teeri



Aalto University

“Knowledge is the key in strengthening new growth and employment” – according to the current government programme.

We often talk about the importance of building a knowledge-based society as the foundation for our competitiveness and fact-based decision-making. We seldom stop to think, however, what this means in practice. How do we know, in fact, whether something is really based on knowledge? How can we best assemble reliable knowledge to take our decisions? How will we know when or if we are really at the international forefront in a particular area? In the sports world, a camera on the finishing line will prove it, but measuring the success of a university is much more complicated.

In essence, the key to success in building a knowledge-based society, I believe, lies in learning to really understand the logic and fundamentals of knowledge generation, and in comprehending how knowledge, expertise, and economic growth are linked. When society has a solid understanding of these things, we will be able to take the right decisions to secure our future success.

High-quality scientific research generates the most reliable knowledge. Many different ways of amassing knowledge are called research, but not all research is carried out by using scientific methods. A knowledge-based society must be able to distinguish true knowledge from assumptions and beliefs, and recognise that an opinion about something, however strong, is not necessarily the same as knowledge. For something to be considered knowledge, it must be based on repeatedly similar observations and facts. Theories turn into facts when they are tried by using scientific methods, you can only rely on current data that has been confirmed many times over by scientists.

New generations of scientists are educated in universities, under the guidance of experienced scientists. A doctoral degree is the ‘driving licence’ of a scientist. For a scientist to become excellent, on the top of his or her field, it is important that he or she has very good teachers. University professors are chosen with great care, only the very best get to lead research work and train the next generation of scientists. A good researcher and a good teacher is a respected member of the international scientific or artistic community, a recognised expert in his/her field. It is under the guidance of such experts that new qualified scientists and experts are born to continue to build and develop the knowledge society when they leave university.

What then is the role of universities in driving the success of society? Why does everyone want a top-flight university and at the same time talk about innovation?

A competitive edge can only be built on new knowledge and expertise that others do not have, by being at least one step ahead. If the best you can do is copy others, you will always be playing catch-up, following and not leading. World-class research teams play a critical role in generating genuinely new knowledge and training new graduates. Innovations are generated by those who understand both

the problems and challenges facing society and the potential of their expertise to solve these problems. It is therefore essential that university professors have good links to the business world and the rest of society. In this respect, Finland and Aalto University are already world-leading, together with the Netherlands and a couple of other Nordic countries. Our ability to collaborate with industry and business on a really broad basis is a unique competitive advantage, and one that we must make the most of.

Finland back at the beginning of the new millennium was a brave and decisive country. There was a consensus across the political spectrum about the importance of research and education for economic growth. University presidents, business leaders, and political decision-makers all agreed that a major reform of Finland’s university system was needed. The preconditions for university operations and their resourcing were improved. One of the key elements of the reform was the decision to found Aalto University, a new, multidisciplinary institute. Aalto University was given a national task to generate new, unique, and internationally competitive expertise that could help expand Finland’s industrial base.

What is happening with this reform today?

Aalto University has carried out a series of very major changes over the past five years: our professors, other scientists and teachers, and our students, together with all the rest of our staff, have made an immense effort to unite the three institutions we once were into one new, unique university. Our international reputation is now strong. We are carrying out pioneering work in leveraging our multidisciplinary capabilities, reforming our teaching to match future societal needs, and putting innovation and entrepreneurship at the heart of who we are at Aalto. The quality of our activities has improved, in terms of all relevant indicators: Aalto researchers now win significantly more competitive research funding and produce more quality international publications than before. Aalto also attracts a growing number of international experts, over a third of our new professors come from outside Finland today. Not only do they bring their own talent and expertise to Finland, but they also connect us with their scientific community of origin, thereby helping to strengthen our knowledge networks.

According to the surveys of Taloustutkimus, Aalto University has been the most well-known university and the number-one pioneer among Finns under 30 for two years now. The pride of our students in being a part of Aalto is seen as faster accumulation of study credits and increasing number of degrees. Our students also work closely with business during their studies, learning essential working life skills in the process. The work they have done, in the Design Factory for example, has generated numerous promising product leads for our corporate partners and a number of new start-ups.

In a short period of time, Aalto has become one of Europe’s most appreciated and one of the world’s fastest

rising stars in developing academic entrepreneurship. This was highlighted in a recent study published by one of the world's best universities, MIT. Collaboration with excellent universities is well known to improve the competitiveness of business and industry. The world's best innovation ecosystems have typically grown up around leading universities: Stanford University lies at the heart of Silicon Valley, for example; seven world-class universities drive the success of the area around Boston; in the UK, Oxford and Cambridge in Britain act as business catalysts. The Otaniemi-Keilaniemi area around Aalto University is already of Europe's largest centres of innovation and is now well on its way toward world-class.

In addition to our academic development, we have improved the efficiency of our operations to ensure that the resources we have been trusted by the Government can be channelled primarily to our core academic tasks. Making a leap forward in quality has called for a massive effort by both our faculty, staff and students, but one that is now bringing success. I would like to sincerely thank all of you, collectively and individually, for the great work that you have done.

The question now is whether Finland is proud of what we have achieved and happy that the country's investment in Aalto is progressing as requested?

One of our faculty, Professor **Sixten Korkman**, speaking at the Alumni Day held by our School of Business put it very aptly, alluding to the Kalevala, that Finland seems to have a unique ability to sing itself up to its neck in a swamp. It does indeed look very much like that since Finland is now ready to compromise an obviously well earning investment. The Government is already lagging behind its funding commitment to Aalto, and its budget proposition last week implies further reductions in this commitment. A well justified question is whether this decision really is based on facts about Aalto's results, its development, and its obvious potential to help expand Finland's industrial base.

The President of the Republic, **Sauli Niinistö**, also spoke at the same event, and I quote: "Everything is born out of either a spiritual or monetary investment. Where that something is born is decisive. If investments are born here in Finland, they will translate into jobs and prosperity for Finns."

The decisions we make in Finland today do matter. The success of our entire society is based on international competition. Businesses need to be able to develop new and well-selling products, manage global value chains, and design and manage worldwide networks of suppliers, partners, and customers. Aalto University was given the task of generating new, internationally competitive expertise in order to lay a new basis for technology-based business and to leverage the potential of creative economy.

This is Aalto's mission, this is why the university was established, and this is where we are about to succeed.

Universities have a number of different and important tasks and goals, all somewhat different for each university. One or even two top universities are not enough to meet the needs of even a small country but it is absolutely essential that those universities that Finland decides to maintain are internationally competitive in their specific areas of strength. Without extensive international networks and global mobility, we are become an isolated island without access to the vast knowledge base that the rest of the world has to offer. If we want to succeed as a nation, we need excellent scientists and experts, truly the best in the world.

University performance must be assessed fair and square in the global context. Developing cutting-edge knowledge and expertise is expensive, but trying to live without will cost us everything. Finland's total investment in the university sector is roughly the right size in relation to comparable countries, but the fact is that this investment is not currently generating a competitive result. This problem must be solved, even if doing so will inevitably call for difficult decisions.

Developing new knowledge calls for long-term work. That is why the investments made in universities also need to be long-term, sudden cuts in funding will always have a negative effect. Government resources should be invested in high quality research and education. Assessing the quality of university performance must be based on facts and true competition. Given the current economic crisis, laying a new foundation for future employment and prosperity is all the more important. What we need for growth is already at our fingertips if only we were to open our eyes.

Aalto University will continue to work for Finland's success; we have a strong vision and excellent plans. We have already proven ourselves and others that we can deliver on our plans and generate results that society expects of us. We are well on our way to becoming a world-class university, as we promised we would. I still believe that the Government's overall commitment made when Aalto was founded will come through over a reasonable time-frame. I also believe that Finland is capable of taking decisions that will enable the country's universities to win additional resources by excellent performance, and that the Government will continue to invest in quality and do so boldly. I believe that a consensus about this will soon emerge, as it did at the beginning of the new millennium – since there are no alternatives if we wish to restore our competitiveness as a nation.

Let's all retain our courage and faith in the future. Let's continue the good work and keep up the good collaborative spirit that we have developed during Aalto's first years during the coming academic year.

I declare the 2014-2015 academic year at Aalto University officially open.