

NORDIC FIVE TECH

Nordic Five Tech (N5T) is an alliance of the leading Nordic technical universities based on shared Nordic values - an entrepreneurial spirit, green environmental focus, student-oriented learning environments, societal responsibility. Together the N5T universities comprise approximately 100 000 students and produce c. 50 % of all the master-level engineering graduates in the Nordic countries.

Position Paper

by the Nordic Five Tech universities

on

Lifelong Learning in the 21st Century

Facts — where we are now

Working life as we know now will change dramatically. According to most estimates, advances in digitalisation, robotization and automation will cause one-third of current professions to disappear. The remaining two-thirds will undergo a massive transformation by year 2030, after which disruptive transformations will continue at an accelerated pace. In consequence, most of today's graduates and professionals will have to update their competencies, perhaps many times, over the course of their careers. For example, the Finnish Ministry of Education and Culture estimates that one million Finns—approximately 40 per cent of the total workforce—will need to enter continuing education in the near future to cope with this transformation. All Nordic countries face a similar challenge.

A higher education degree alone will not offer the same kind of protection against unemployment as it once did. The world is changing so rapidly that knowledge, skills and competencies need to be updated continually. A higher education degree cannot in general give sufficient tools for an entire career, but it can form the basis for effective lifelong learning.

Traditional academic virtues—the mastery of state-of-the-art knowledge and technologies, careful thinking, the ability to critically evaluate information and learn new things—remain the key success factors in the digitalised and robotised world of tomorrow. Universities will continue as the cradle of these virtues. The importance of higher education will increase when lifelong learning, including its solid base, are emphasised in the future.

The changing role of universities

The growing need for continuing education, or lifelong learning, requires that continuing education can be fully integrated into the education system rather than being regarded as a separate and distinctive operation employing different staff. The paradigm shift in the demands of working life will inevitably force universities to expand their educational role.

The traditional educational mission of universities has been to educate new generations of students to serve their country and humanity at large, while preparing young minds for working life. When this mission is expanded into a more lifelong partnership foreseen in the future, the nature of the educational mission changes accordingly-

In addition to serving a significantly larger number of students, universities will also need to fundamentally restructure their courses and programmes to serve the needs of those returning to universities at different phases of life and with a greater variety of educational needs. Universities must be much more agile in delivering their expanded educational mission. This is not only a practical complication with more part time

studies tailored for people with full-/part-time employment, but also a qualitative transformation of the educational effort to meet the changing needs of society.

Full implementation of 21st-century lifelong learning not only requires that the private and public sectors better utilise the intangible capital nurtured at universities, but also that universities see these sectors and their employees returning to university as holding invaluable skills and competencies acquired elsewhere. They are ideal partners for younger students and staff alike in understanding what the rapidly changing public sector, business and industrial life expects from academic research and education. Continuing education is not a matter of a one-directional transfer of knowledge; universities must also understand the needs and expectations of business life, and utilise the skills and competencies held by returning students and organisations in first degrees education. Large-scale continuing education will turn universities into major meeting points of different generations, offering exceptional possibilities for two-directional mentorship. The presence of lifelong learners in the community can, and will, enhance the working life relevance of traditional degree programmes.

What needs to be done

We must acknowledge that continuing education entails both a quantitative and qualitative expansion of the educational mission of universities. It cannot be seen as a straightforward extension of universities' current activities without added funding that covers the full cost of the expansion. Continuous education requires funding at least at the same level as for full time students getting their first degree, as part time studies tailored for people with full-time employment, often require more resources than full time studies.

Current educational funding models are sized to sustain the (one-off) education of new generations¹ and a relatively small-scale continuing and open education.² When extensive continuing education of nearly the whole population becomes an essential ingredient of the educational mission of universities, new resources and, in some cases, new funding mechanisms are warranted.³

At its core, expanding the educational mission relates to economic and employment trajectories in addition to the national competitiveness of business, industrial life and public sector. It differs significantly in emphasis from universities' traditional concern of securing the foundations of a civilised nation and state.

State administrations should acknowledge the new emphasis. It is of utmost importance that the lifelong education is approached from a cross-governmental perspective. Continuous learning in its new form is a major aspect of economic, industrial as well as labour policy; it should be seen as a key investment that supports and promotes employment and competitiveness. Indeed, in order for the Nordic countries to further consolidate and improve our positions as innovative economies, additional and sufficient funding to develop our highly skilled workforce must be prioritised. In an increasingly competitive globalised economy, this will serve not only to make the Nordic countries more attractive to highly skilled labour, but also to highly advanced companies.

Continuous learning of the future should be funded (or be at least fundable) in a flexible manner by several sources. Major funding sources could include public funding through educational as well as economic development policy, private companies and other organisations, and in some clearly defined cases, from students themselves.

¹ In Finland there were approximately 27 000 new upper secondary school graduates in Spring 2018. In the near future, the country aims to have 1 000 000 Finns entering continuing education.

² Finnish universities awarded a total of 362 861 credit points in open university education in 2015 (corresponding roughly to 6 000 student FTEs) and organized 1 926 continuing education study modules in 2017.

³ The Nordic countries have different policies on own-financing and tuition for continuing education.

Continuous education that responds to the rapidly changing needs of the private and public sectors presents a natural remedy. The N5T universities are willing to work closely with these stakeholders to plan and execute lifelong learning courses, modules and programmes within the boundaries of national and international regulations. External partners should, in turn, be prepared to assume more responsibility for funding the education of their employees.

The growing need for continuous learning in a paradigm-shifting scale can be seen across developed countries globally. Governments around the world are quickly developing models of effective and high-quality lifelong learning. The most forward-thinking models emphasise that increased continuous learning cannot be developed at the expense of the full time students getting their first degrees. Additional and cost covering funding is required.

Conclusions

Universities will remain as the primary producers of new knowledge and the core seat for learning, a place where education and research are uniquely intertwined. Accordingly, universities are in a key position to equip lifelong learners with the knowledge, skills and competences required for flourishing in a world of accelerating change. At the same time, with its unprecedented scale and complexity, lifelong learning poses a significant challenge for universities.

N5T universities are willing and able to take up the challenge and assume a significant role in continuous education. All parties must understand that lifelong learning is a wide-ranging, complex set of issues, requiring the attention and support of society as a whole. A first-class and internationally competitive continuous learning model will be critical to successful economic, industrial and labour policies—and, ultimately, economic and societal wellbeing—of the 21st Century. Permanent and sustainable funding for lifelong learning is urgently required.

Signed in October, 2018

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