

## The Price of Accelerating Studies

Politicians are busy debating ways to speed up higher education studies and extend careers at the beginning. The debaters often give the impression that institutions of higher education and their students are not getting the job done through sheer laziness. Let's take a look at this from a technology studies standpoint.

First off, the accelerated completion of technology studies will not necessarily extend a career at all. A majority of advanced students are working in their respective fields, providing a flexible labour force that fills a gap on the otherwise rigid market. If a student graduates quickly without work experience, the employer has to accept a major risk in hiring, often leading to delays in finding a job. Such fresh graduates cannot be assigned positions with as much responsibility as graduates who completed their studies on a slower schedule but possess work experience.

So, how can studies be accelerated? The on-going tuition fee trial demonstrates that an annual tuition fee that can, for the nominal study period, be paid with study vouchers or scholarships, will force a change in the organisation of studies and university operating practices that will cater to accelerated studies: (a) courses will be clearly organised into a pipeline in which they can be completed in three terms in a Master's degree programme; (b) courses will be extremely well planned (c) sideline interests, which can delay graduation, will not be encouraged or even allowed (d) study counselling will be efficient and (e) the professor will assign the student a topic for the final thesis at a suitable time in the programme and an instructor from the department. Work on the thesis is done without pay. A student is pressured to do his best because if the degree is not completed on time, he must pay the tuition fee out of his own pocket from the beginning of the third year.

The strength of Finnish universities of technology and higher education institutions has not been university rankings, but real societal impact. This does not come from speeches made by decision-makers – it comes from routine practices: (1) thesis work is primarily done in the industry on topics that are important to companies, and a salary is paid for the work; (2) the goal of thesis work is to solve a real problem; (3) thesis work often leads to longer-term employment with the same company; and (4) industry employees with Master's degrees can also continue their studies to pursue a doctoral degree without leaving their main job.

If a Master's degree is to be earned in 5 years, the solution is simple: adopt the long-ago proposed study vouchers, which would ensure that studies are free of charge for the nominal study period, i.e. 5 years. After this period, students must pay tuition out of their own pocket. This would fundamentally change university operating practices. It eliminates the use of study time by students to "search for themselves", reduces academic freedom to a minimum and streamlines university study processes, thus producing standard results in standard work hours. Diploma theses are done primarily in departments and always in the nominal time of 6 months. Theses in which no clearly defined problem has been solved are allowed – the written thesis is merely a report on what was done.

The social cost is that the link between universities and the workplace is significantly compromised. Another consequence is that labour markets will become rigid, when one flexible labour reserve is lost. Students who could not keep up are left to fill the gaps. The academic cost is that the link between studies and research is compromised: while things are still on the researcher's desk, it is tedious and time-consuming to put together a shop-worn course that can always be completed in the

nominal time. Because getting ahead in an academic career is completely dependent on publishing, researchers just starting out should not invest themselves in creating new courses. University administration costs are rising, because attention must be given to fees and scholarship terms and an investment has to be made in study counselling. These instruction costs will also rise.

As there is a desire to also accelerate post-graduate studies, the resulting solution is that only those to whom the school can offer full-time, salaried employment will be accepted for post-graduate study. This excludes part-time post-graduate students from industry, thus fixing the graduation statistics. However, it also ends one tradition that has long united universities of technology and the industry.

Thus, accelerating studies in technology results in Finnish universities of technology losing the rare strengths that we are known for, both here in Finland and abroad. At the very least, those strengths: strong ties with industry, high quality thesis work and education's strong link with both practice and research are under serious threat. Our industry may also suffer the consequences: it is known as a fast adopter, a strength that, as far as I understand, comes partly from its strong ties with universities in the field. Are the companies prepared to do what it takes to counter these threats? Working alone, universities cannot stop the threats becoming facts.

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