

Higher education reform and demand for labour

Has access to higher education improved as a result of the higher education reform and does the education system take labour market needs into account more than before?

Summary of audit results

The Parliament (Riigikogu) and the Government of the Republic decided to change the Estonian higher education system in 2012. The objective of the higher education reform was to make access to higher education more fair and improve the effectiveness of studies at the level of higher education. The new organisation of higher education system, which entered into force in 2013 and became known as free education among people, mainly supported the idea that if someone has the desire and ability to acquire higher education, then their financial possibilities should not become an obstacle to this. The higher education system was also expected to respond more to the demand for labour.

What did we audit?

The purpose of the audit carried out by the National Audit Office was to assess whether the area of higher education has changed as desired after the reform – people with different social background find their way to higher education and studies are completed faster; people choose specialities where the demand for labour is higher; institutions of higher education have become more international; the sustainability of funding institutions of higher education is guaranteed.

Why is this important to taxpayers?

The lack of employees with the necessary knowledge and skills has been one of the biggest obstacles to the development of the state and the economy of Estonia in the last decade. The problem will not disappear by itself, as the working-age population of Estonia is decreasing and ageing, and further increase of the employment rate is becoming more and more difficult. Approximately 10,000 more people will leave the labour market in the next 10 years than will enter it; the shortage of people with higher education, especially in areas where the demand for labour is higher, is *ca* 1000 people per year. Therefore, it's important to support the acquisition of (higher) education by all capable and motivated people, incl. learning the specialities where the demand for graduates is and will be the highest on the labour market and which would help realise the potential of the Estonian economy in the best possible manner. The share of the government sector's higher education costs in the GDP in 2017 was *ca* 1%, i.e. almost 239 million euros.

What did we find and conclude on the basis of the audit?

In the opinion of the National Audit Office, some of the desired changes have occurred in higher education after the reform: students usually graduate from institutions of higher education faster and the dropout rate has decreased. However, students prefer specialities that don't correspond to labour market needs and working alongside studies has not decreased after the reform. More foreigners than before acquire their education in Estonia, but the number of Estonian students with different social backgrounds has not increased.

There is also no financial model that would give the reassurance and an overview of whether the funding of institutions of higher education is sustainable in a situation where the state took greater responsibility for the maintenance of the institutions with the higher education reform.

■ **The number of people who have enrolled at institutions of higher education among different social groups has basically remained the same after the higher education reform.**

The higher education reform started at the time when the number of potential students had decreased year after year, which is why the absolute number of people who enrol in institutions of higher education has also decreased from *ca* 17,000 students to *ca* 13,000 from 2008 to 2018. 2% of working-age population decided to start acquiring higher education in 2008; 1.81% in 2012 and 1,6% as of 2013.

The share of persons who enrolled in institutions of higher education among people aged 18 to 24 has increased 0.3% in comparison with 2012, the year before the reform. Enrolling in an institution of higher education (again) in the age of 40 and over has become more popular. The share of people who enrolled at institutions of higher education has increased somewhat among the unemployed and members of households that have received subsistence benefit, but it remained below 2.5% in both cases before and after the reform. The share of people without professional qualifications who enrolled at institutions of higher education has also remained the same – similar to the time before the reform, there were *ca* 1.5% of them in 2017.

■ **The dropout rate has decreased and graduation in the standard period of study has improved.**

The dropout rate has decreased from 16.8% before the reform in 2012 to 14% in 2017 at all levels of study. Students who receive student scholarships and need-based study allowances are less likely to drop out. The dropout rate is higher among support recipients, but it has still decreased from 5.8% in 2014 to 4.5% in 2017. Graduation in the standard period of study has improved at the first and second level of study, but deteriorated in doctoral studies. The main reasons that improved graduation in the standard period of study were the stricter requirements established with the reform – a part-time student must complete at least half of the annual volume of the curriculum and pay a tuition fee, and passing courses during academic leave is not allowed¹.

■ **Working alongside studies has not decreased after the reform.** 50% of students worked regularly in 2013 and 53% on average worked from 2016 to 2018. The total share of working students has remained around two-thirds for the last decade. According to the Eurostudent survey, the only country in the EU where the share of working students is bigger than in Estonia is Germany. The dropout rate of working students is higher in groups where salary payouts during the academic year range from two to seven. Therefore, working more intensely does not necessarily mean that a student will drop out and the principle ‘if you can take it, you can make it’ seems to apply.

■ **Admission of students to specialities where the lack of specialists on the labour market is the biggest has not increased after the reform.** Admissions to curricula groups where the demand for specialists is decreasing has increased to a small extent. Although the state has determined the specialities where the need for new specialists is the greatest, admissions to these 14 curricula groups meet the expectations of the state only in the areas of IT, medicine and healthcare. Whilst the share of student places subject to tuition fee before the reform was the biggest in social sciences, business and administration, humanities and arts, and service, then the opportunities to study these specialities free of charge also improved after the higher education reform. The Ministry of Education and Research (MER) has made agreements with universities using contracts under public law and with institutions of professional higher education using directives on allocation of operating grants to ensure that the provision of education corresponds more to the demand for labour, but the agreements and the contracts under public law that generally allow for greater decision-making freedom have remained too general. The contracts under public law and the directives on the allocation of activity support are the main lever that allow the MER to influence correspondence to the need for labour.

It is worth mentioning that speciality-based grants have a positive impact on enrolment. The number of students has increased in almost all curricula groups where they are paid speciality-based grants since such grants became available. The institutions of higher education agree that speciality-based grants have a good impact.

¹ The Higher Education Act that entered into force on 1 September 2019 leaves it up to the institutions of higher education to decide whether or not they permit taking courses during academic leave.

■ **Institutions of higher education have become more international after the reform.** Admission of foreign students has tripled from 2012 to 2018. The opening of additional curricula in English after the higher education reform has contributed to the increase in the number of foreign students. The majority of students who study in English are from abroad (over 70% in 2017) and their increasing admission has compensated the decrease in the number of Estonian upper secondary school graduates to a certain extent. According to the MER, a little over a quarter of the foreign students who graduate from an institution of higher education stay in Estonia and start working here. The share of Estonian students participating in short-term learning mobility has increased from 1.4% in 2015 to 3.4% in 2018, but the target of 10% in 2020 cannot be achieved at the present rate.

■ **With the higher education reform, the state took the responsibility for financing institutions of higher education, but it's unclear what the actual funding needs of higher education are like.**

Funding on the present conditions is not sustainable in the opinion of institutions of higher education. Almost all institutions of higher education stated in their feedback to the National Audit Office that since the amounts allocated from the state budget have not increased much in recent years, the salaries of teachers are not competitive. This may deteriorate the quality of education. Since the funding data of institutions of higher education are not comparable or transparent, partly because the differentiation of the expenses of academic activities from the expenses of research is largely based on estimates, it's not possible to obtain a full overview of how much money is needed for higher education. However, the state needs this data for making funding decisions.

Key recommendations of the National Audit Office to the Minister of Education and Research:

■ to develop, within 2020 at the latest, accounting policies and a financial models that would make it possible to assess the financial status of institutions of higher education by way of comparison and the MER to clarify on the basis of this whether and on which conditions the funding of institutions of higher education by institutions is sustainable;

■ to review the list of speciality-based grants proceeding from the curricula of specialities where the demand for labour is increasing in order to promote choosing specialities that support the needs for labour. To extend the payment of speciality-based grants, primarily in the specialities where the need for specialists will be the biggest in the future;

■ to guarantee that clearer agreements are made in the contracts under public law and directives on allocation of operating grants and implemented, incl. determine the compulsory components that contracts under public law must include and their level of accuracy. This makes it possible to steer higher education according to the demand for labour. Also to analyse the performance of the agreements made in the present contracts under public law and directives.

The Minister of Education and Research largely agreed with the conclusions of the audit and described how the recommendations made by the National Audit Office will be implemented or which action is already being taken. The Minister emphasised that the implementation of several recommendations, such as expanding the circle of speciality-based grant recipients or the (partial) compensation of the tuition fees of part-time students in specialities where there is a continuing lack of specialists, could be considered if the state increased the funding of institutions of higher education. The Minister also stated that the needs and trends of the labour market have been given increasingly more attention in the last funding agreements entered into with the institutions of higher education and they will also be taken into account in the future after the relevant analyses and forecasts have been updated and completed.

Speaking about the funding of institutions of higher education, the Minister said that the funding trends of the last 10 years have been analysed and according to them, the general cost of living has increased faster than the funding of institutions of higher education. The competitiveness of the salaries of teachers is under pressure whilst the share of the labour expenses of institutions of higher education has already reached the critical limit. At the same time, the Minister agreed that the institutions of higher education can be requested to analyse sustainable funding and the accounting policies of financing institutions of higher education in cooperation with the ministry, but conceded that this is an enormous task, as the institutions differ from each other in terms of size and profile.