

# Strengths and development needs of Estonian higher education in light of results of the quality assessments of study programme groups

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Quality assessment of study programme groups is external evaluation of higher education by external experts who provide higher education institutions with feedback on how to improve the quality of teaching, by study programme group. Assessments have been conducted since 2014 by the Estonian Quality Assessment Agency for Higher Education and VET (EKKA). Assessment decisions are adopted by the EKKA Quality Assessment Council for Higher Education<sup>1</sup>.

Assessments are based on self-evaluation reports written by higher education institutions. Then assessment committees, composed of experts with international experience, visit the higher education institutions where they interview study programme managers, staff members and students. Based on the self-assessment reports and information gathered during the site visits, committees prepare their own reports according to five assessment areas: (1) study programmes and study programme development, (2) resources, (3) teaching and learning, (4) teaching staff and (5) students. Under each area of assessment, compliance with standards is analysed and recommendations made for further development of the given area at the higher education institution. The aim of the assessment is to support an internal assessment process and self-development of the higher education institution. Assessments are not followed by sanctions, and expert recommendations are of an advisory nature.

## **An overview of assessments carried out in 2015**

Based on assessments carried out in 2015, the EKKA Quality Assessment Council for Higher Education adopted 29 decisions regarding study programme groups, which contained assessments of 159 study programmes. On 16 occasions the Council decided that the next assessment would be undertaken in seven years, and on 8 occasions in less than seven years. On 5 occasions the Council decided that the next assessment would be carried out in seven years but with a secondary condition. The Council may impose a secondary condition on a decision when there is a specific non-compliance with legislation or national or international standards in the study programme group — which, in the opinion of the Council, can be eliminated in less than two years and the result evaluated without the help of external experts.

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<sup>1</sup> All assessment committees, reports, and decisions by the EKKA Quality Assessment Council for Higher Education are publicly available on the EKKA website:  
<http://ekka.archimedes.ee/korgkoolile/oppekavagrupi-kvaliteedi-hindamine/>

**Table 1. Assessment results for study programme groups (2015)**

Decisions by the EKKA Quality Assessment Council for Higher Education:

7 years 7 years, with a secondary condition less than 7 years

Educational institution	Study programme group
Tallinn University	Sports
	Personal Services
	Life Sciences
	Environmental Protection
	Humanities
	Social Services
	Languages and Cultures
University of Tartu	Sports
	Personal Services
	Medicine
	Engineering, Manufacturing and Technology
	Humanities
	Social Services
	Languages and Cultures
Tallinn University of Technology	Life Sciences
	Engineering, Manufacturing and Technology
	Transport Services
	Environmental Protection
	Personal Services
Estonian University of Life Sciences	Engineering, Manufacturing and Technology
	Life Sciences
	Environmental Protection

Euroacademy

Environmental Protection

Lääne-Viru College

Languages and Cultures

Social Sciences

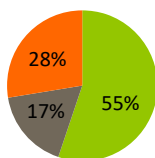
Tallinn University of Technology

Engineering, Manufacturing and Technology

Transport Services

### Results for quality assessments of study programme groups in 2015

■ 7 years ■ 7 years, with a secondary condition ■ Less than 7 years



## Strengths and development needs of higher education based on current assessments

The purpose of this analysis of quality assessment decisions on study programme groups was to map the main strengths of and challenges for higher education institutions in Estonia and to generalise the development needs, if appropriate.

We sought answers to the following questions:

- 1) To which subthemes of quality assessments of study programme groups have experts paid more attention?
- 2) Which areas were identified as strengths by experts, and which areas needed to be improved?
- 3) What were the most frequent recommendations?

The sample of the study included all assessment reports on 10 study programme groups evaluated in 2015 at 4 universities and at 3 professional higher education institutions (see Table 1) — a total of 29 reports. This analysis was based on the decisions by the EKKA Quality Assessment Council for Higher Education, which in turn were based on the reports of the international expert committees, containing the *strengths* and *areas for improvement*, in a concentrated form.

This was a qualitative study and therefore we used content analysis as the method of analysing, where all *strengths* and *areas for improvement* identified in the assessment reports were categorised and coded. A qualitative data analysis software — QSR NVivo 10 — was used. This analysis examined the *strengths* and *areas for improvement* that had been identified by the assessment committees, which in general related to more than half of the study programme groups under review in the given period, i.e. the *strengths* and *areas for improvement* that recurred in at least 15 assessment decisions.

Limitations of the analysis stem from the fact that the *strengths* and *areas for improvement* emphasised in the reports may have had different weights, but in the analysis still form a single unit or reference. Also, a *strength* or an *area for improvement* of the entire study programme group is coded only once in the analysis, although it may actually apply to all study programmes in that group.

Content analysis of the assessment decisions revealed that several themes arose as both *strengths* and *areas for improvement* at the higher education institutions. These themes are pointed out below. Examples accompanying the *strengths* and *areas for development* are provided for illustrative purposes.

## MAIN STRENGTHS

In their reports, the assessment committees emphasised the excellent quality of **LEARNING ENVIRONMENTS AND INFRASTRUCTURES** of higher education institutions in Estonia, including laboratories, equipment, and libraries (48 references/in 23 assessment decisions).

*The laboratories and other infrastructure components are in very good condition, well managed and well equipped. Financial support from the European Union Structural Funds has been expertly used. (Engineering, Manufacturing and Technology)*

Themes associated with **TEACHING STAFF** were also identified as *strengths*:

- teaching staff are competent with high qualifications (35/17)
- teaching staff carry out high-quality research (28/15)
- teaching staff participate in international networks, and practitioners as well as external lecturers are involved in teaching (18/15)

*The teaching staff are highly qualified and committed to teaching and to students, and include several scholars who are leaders in their fields in Estonia. (Humanities)*

With regard to **STUDY PROGRAMMES**, their logical structure was commended, and it was often highlighted that study programmes were broad based and interdisciplinary, they complied with international standards, and took into consideration good world practices (62/21). The increasingly wider use of **active teaching and learning techniques** was also mentioned but less frequently (28/15).

*The study programme has been developed in cooperation with international experts and is comparable to other similar study programmes in Europe. A strength of the study programme is high-quality study in natural science, complemented by social science, environmental law and environmental economics. (Environmental Protection)*

*The study programmes are broad based and interdisciplinary, and the updated study plans are effective. Several subject courses of different languages have been interconnected to form interdisciplinary modules that are taught in Estonian or in English and are available to all students in the College. (Languages and Cultures)*

## DEVELOPMENT NEEDS

The assessment committees provided numerous specific recommendations for improvement of study programmes in their reports — for adding topics, integrating subjects, and improving the quality of theses (106/25). Since these recommendations were very specific to a relevant study programme, it is not useful to generalise them here. Below we highlight those recommendations which were repeated for most study programme groups and higher education institutions.

### TEACHING STAFF AND TEACHING METHODS

#### Teaching staff

The assessment committees pointed out the following development needs:

- staff development at higher education institutions needs more strategic management to ensure that new generations of teaching staff are prepared; that workload distributions are more balanced with regard to research, instruction and supervision; that teaching staff are given optimal workloads; and that teaching staff receive feedback on their work (37/15)
- more attention should be given to regular and purposeful self-development of teaching staff: to prepare individual development plans for staff for improving their professional and e-learning skills; to seek adequate funds for participating in international conferences; and to create favourable conditions for the completion of doctoral studies (33/20)
- teaching staff's research skills need to be improved, as well as their opportunities to spend more time and energy participating in international research projects (35/18)
- more international lecturers should be involved in teaching (27/18)

*With regard to changes in the structure of the University and the switchover to open-ended contracts, it is advisable to develop a system for staff evaluations, which will enable management to assess the effectiveness of the teaching staff's work once a year, and to identify their development needs. (Languages and Cultures)*

*Teaching staff should observe and reflect upon the teaching of their colleagues in order to learn from one another. It is recommended that staff members share assignment questions and the feedback on assignments in order to improve uniformity of assessment principles, as well as to ensure a comparable quantity and quality of feedback given to students. (Humanities)*

*Teaching staff are not accustomed to visiting each other's lectures and to providing feedback. It is advisable to establish a system of staff peer mentoring to support development of the teaching staff and the entire speciality. (Engineering, Manufacturing and Technology)*

External experts analysed the effectiveness of research by the teaching staff and their research skills as both *strengths* (28/15) and *development needs* (35/18) at the Estonian higher education institutions. In the assessment reports on 11 institutions of higher education, the existing research skills and their improvement, publishing activity, research-led teaching, the distribution of teaching and research loads, etc., were identified as both *strengths* and *areas for improvement*, and specific recommendations for

improving the given areas were provided. In study programme groups composed of many study programmes the situation may vary for different study programmes.

For example, Languages and Cultures:

*The teaching staff members of the Department are highly qualified (the majority of them have doctorates). Research by staff is of internationally high value and is clearly reflected in their teaching activities. The Department of Slavic Studies excels at actively and successfully applying for research grants.*

*The number of translation-related publications is very limited. Currently staff members of the department do not participate sufficiently in international conferences. It is advisable to encourage the teaching staff to publish more professional articles and to participate in professional conferences.*

In 7 reports, teaching staff's research activities were identified only as an *area for development*.

The need to improve staff development, staff self-development and teaching methods employed (including practical training and digital learning) was viewed as more critical in the Environmental Protection; Engineering, Manufacturing and Technology; and in the Languages and Cultures study programme groups.

#### Teaching methods, digital learning

It was recommended that teaching methods include, to a greater extent, active learning techniques and problem-based learning, and for that purpose, inter alia, a relevant strategy be developed at the institutional level. It was also recommended that students be involved in research right at the beginning of their studies and more attention be paid to development of their academic literacy (34/18). Although the resources for utilising information and communications technology tools in teaching, or offering digital learning opportunities, were mostly available —their use was seen as providing plenty of room for improvement (27/17).

*Digital technology should be used more extensively in teaching, and this in turn would require investment in staff trainings and digital tools. Teaching staff need to be motivated to further develop their teaching skills and make greater use of modern teaching methods. (Humanities)*

*When organising studies, it should be kept in mind that 80% of the students work while studying. Online interactive methods should be used more frequently and more widely, such as the Moodle platform, and access to learning materials in the digital environment should be made easier. (Humanities)*

Teaching methods used at higher education institutions were listed by external experts under both *strengths* and *areas for improvement* in the cases of 11 institutions. They were listed as *strengths* in 15 reports (28 references) and as *areas for improvement* in 18 reports (34 references). In 7 reports, teaching methods were only identified as *areas for improvement*.

For example, Languages and Cultures:

*High staff turnover makes it difficult to further develop teaching methods and research. Currently the workload and scope of research of the teaching staff is limited and the use of innovative methods is not sufficient. Staff members should be provided with more opportunities to improve their pedagogical skills.*

*A variety of teaching methods is used. The structure of lectures supports active student participation in discussions.*

Digital learning was regarded as both a *strength* and an *area for improvement* in 6 assessment reports, as a *strength* in 9 reports (16 references) and as an *area for improvement* in 17 reports (27 references). In 11 reports, e-learning and the use of ICT tools in teaching and learning were only identified as an *area for improvement*.

For example, Transport Services:

*Teaching staff should be encouraged to use **teaching methods** and digital tools in teaching (logistics software, e-learning materials, etc.). Despite the availability of e-learning materials, the majority of teaching and learning activities take place in the classroom, and therefore the load for students' independent work is too small.*

*A flexible approach is taken to teaching and learning; distance learning materials developed in the Moodle environment are made available.*

**Comment [JG1]:** Altekst: Õppejõude tuleks innustada kasutama õppetöös **õpetamismeetodeid** ja digivahendeid (logistikatarkvara, e-õppe materjalid, jne.). Lisaksin mõne täiendi: **modern teaching methods** või **innovative teaching methods** või midagi mud sobivat.

## DEVELOPMENT AND IMPLEMENTATION OF STUDY PROGRAMMES

### Practical training

The assessment committees pointed out the need to increase the applied elements in study programmes by means of practical works and internships, including: establishing a network of practical training facilities, specifying the objectives and expected learning outcomes for practical training, analysing the effectiveness of practical training and making changes as needed, formalising the system of feedback regarding practical trainings, helping students to find practical training placements, and creating closer ties with the working world in bachelor degree programmes (47/19).

*The study programme could contain more practical elements. The content of courses (especially general courses) must be reviewed on a regular basis, to ensure the coherence of theory and practice. It is advisable to organise seminars for staff members where best practices for integrating general and speciality courses are shared. (Personal Services)*

### Key competencies, soft skills

Higher education institutions were advised to pay more attention to the development of key competencies. Innovation, entrepreneurship, management, teamwork, digital competencies, analytical skills, presentation skills, social and personal skills were not sufficiently addressed by or implemented in the study programmes (22/14).

*It should be clearly indicated how the expected learning outcomes of individual courses are linked to the learning outcomes of the entire study programme. It remains unclear how generic competencies (teamwork skills, communication skills, etc.) are achieved through the courses mentioned in the self-evaluation report ('Estonian Birds', 'Estonian insects', etc.). (Life Sciences)*

*Employers are of the opinion that graduates are lacking soft skills. Bachelor degree programmes should include subjects that support development of management, communication and presentation skills. (Engineering, Manufacturing and Technology)*

*Students should be engaged in entrepreneurial activities to a greater extent, by utilising . . . opportunities for this purpose. Also, students could benefit from courses or seminars in management and/or entrepreneurship offered by the study programme. (Engineering, Manufacturing and Technology)*



## LEARNER SUPPORT

### Dropout rates, counselling

Since the declining student numbers and the high dropout rates continue to be a concern for higher education in Estonia (33/18), assessment committees have made recommendations on how to pay more attention to it — to advise student applicants before enrolment, to proactively analyse the reasons students drop out, and to improve the counselling system (22/16), including offering guidance for the preparation of individual study plans. Student applicants should be clearly informed about prerequisites for admission, requirements for completion of the study programmes and their prospects in the labour market; and remedial study groups should be established to level out the expertise of incoming students, if needed.

*To reduce the large number of dropouts in the early stages of studies, student applicants should be offered a more comprehensive overview of the content of the study programme, and the first-year students provided with better support for planning their academic activities. (Languages and Cultures)*

*It is advisable to consider imposing admission requirements that are based on the specifics of the study programme group, facilitating the assessment of both academic ability and practical skills. (Medicine)*

### Student assessment and feedback on students' assignments

The committees were of the opinion that feedback to students required more attention — it is necessary to ensure the transparency of assessments, more clear linking of learning outcomes with marks, and coordination (among staff members) of verbal feedback to students on their assignments (30/13).

*It should be verified that the courses within the study programme provide assessments for a variety of general competencies (analytic, presentational, cooperative, etc.). (Humanities)*

*The choice of teaching and assessment methods to be used is made independently by each individual staff member. Primarily in the interest of students, it is necessary to agree on a uniform approach which is also understood by students. (Sports)*

*To ensure the objectivity of student assessments and that students receive appropriate feedback on their achieved learning outcomes, it is advisable to establish a uniform and transparent system of student assessment (e.g. building it on a system of moderation and double marking employed in some European universities). Assessments should involve at least two members of the teaching staff. A new kind of assessment could be carried out initially as a pilot project that will pave the way for further University-wide discussions. (Languages and Cultures)*

The objectives, learning outcomes, and corresponding assessment criteria and methods of study programmes continue to require review. It has been recommended that soft skills and key competencies be better integrated with specialist competencies (19/12).

*Assessment procedures and criteria are not clearly related to the planned learning outcomes. Assessment procedures are not transparent. Cooperation should be encouraged between members of the teaching staff to specify the objectives and learning outcomes for subjects. (Languages and Cultures)*

*Correlations between expected learning outcomes, teaching methods and assessment methods are not sufficiently clear. (Social Services)*

In view of the quality assessment results by study programme group, it appears that the reduction of dropout rates, as one of the *areas for improvement*, seems to be related to the need to improve the

student counselling system and student assessment (including feedback) in at least three study programme groups — Languages and Cultures, Humanities, and Social Services. Interconnections between the *areas for improvement* by study programme group and by higher education institution will still require a more in-depth qualitative analysis.

## RESOURCES

Although learning environments and laboratories have often been identified as *strengths* at Estonian higher education institutions, funding for academic activities and laboratory courses is often dependent on research projects — but the opportunities to apply for such funding are limited. The committees were of the opinion that there was a need to expand the opportunities to seek funding for research (26/16). The relative condition of teaching laboratories and research laboratories may not be equally good.

*There is a big contrast between the substantial investments made in buildings and equipment on the one hand and the difficulties in meeting the running costs for the study programmes (especially for practical courses) on the other. Funding of costly practical courses can be made more efficient by better combining the existing modules and research. (Life Sciences)*

*Only minimum research is undertaken due to a lack of central government funding. It is advisable to recruit teaching staff with experience in successful research and research group leadership. (Transport Services)*

*The study programmes should incorporate more practical and group work. The teaching laboratories should be better equipped. (Engineering, Manufacturing and Technology)*

**In addition to the above, assessment reports and decisions revealed that cooperation and internationalisation were frequently considered to be *areas for improvement*.**

## COOPERATION

The assessment committees pointed out that higher education institutions need to have more formalised and more purposeful cooperation (83/24):

- **with employers, enterprises and alumni** with regard to study programme development, involvement in teaching (including practical training), popularisation of study programmes, and cooperation in research (37/19);

*The Master's degree programme is based on the interests of the university research groups, which ensures the integration of teaching and research, but may limit students' prospects for finding work outside the academic world. In collaboration with biotechnology companies, it is necessary to develop the courses for both bachelor degree and master degree studies which would increase graduates' opportunities to find employment outside academia. (Life Sciences)*

- **between members of the teaching staff** (18/11)

*The English Language study programmes could benefit from mutually supportive cooperation with other specialities in language study / . . . /. The teaching staff should share best practices to a greater extent. (Languages and Cultures)*

- **between Estonian higher education institutions** (16/13)

*Higher education institutions who offer youth work programmes do not sufficiently collaborate with one another. Communication and cooperation regarding youth work programmes should be enhanced at Estonian, European and international levels. (Social Services)*

*To gain greater international impact, it would be practical to launch joint research projects with teaching staffs of . . . University and . . . University. (Humanities)*

*To ensure that teaching and translation methodologies as well as the content of studies are up to date, cooperation with higher education institutions in Estonia and abroad should be expanded. (Languages and Cultures)*

– **with foreign higher education institutions (12/9)**

*No ordinary teaching staff member holds a doctorate in social work, and only a few are engaged in research. Very few teaching staff members are involved in international or Estonian research networks. This inhibits development of a theoretical orientation in the programme. It is necessary to seek international partners among universities that belong to leading research communities in the field; as well as to seek funds allowing the teaching staff to participate in these networks and the higher education institution to involve international scientists in supervising the doctoral theses of its teaching staff. (Social Services)*

References to scant cooperation occurred most frequently in the Engineering, Manufacturing and Technology study programme group. Moreover, the majority of references pointed to insufficient cooperation with employers.

#### **INTERNATIONALISATION**

Throughout the quality assessment reports on study programme groups, similar to the analysis of the results of institutional accreditations (Udam, Seema, Mattisen 2015<sup>2</sup>), the theme of internationalisation arose (104/26). The assessment committees have recommended:

- developing teaching and learning in the English language (23/11)
- increasing staff and student mobility (20/10 and 33/19 respectively)
- involving foreign lecturers (27/18)

Development of staff mobility needs a more strategic approach. With regard to increasing student mobility, it is necessary to review the organisation of studies, including a more flexible implementation of recognising prior learning and work experience. To have effective 'internationalisation at home', it is necessary to involve more international lecturers and to offer more subject courses and modules taught in English.

*The higher education institution should develop strategies for comprehensive internationalisation (including improvement of the English language proficiency of teaching staff) and for better cooperation within the institution, as well as with other higher education institutions in Estonia and abroad. Student international mobility should be more vigorously encouraged. (Engineering, Manufacturing and Technology)*

*To make the study programmes more attractive to students, it is necessary to increase internationalisation and to recruit more young teachers. It is therefore necessary to increase the number of international teaching staff and to increase the outward mobility of both teachers and students. The new development plan of the higher education institution for 2015–2020 provides good impetus for the necessary steps. (Environment Protection)*

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<sup>2</sup> Udam, Maiki; Seema, Riin; Mattisen, Heli (2015). [Eesti kõrgharidus institutsionaalse akrediteerimise tulemuste taustal ehk Mida juhid peaksid teadma](#). Eesti Haridusteaduste Ajakiri, nr 3(1), 2015, 80–102

*Although there is close interaction with foreign universities, there is a lack of stable international partnerships regarding the two main areas of the study programme. Teaching staff lack adequate funding to attend international conferences. (Social Services)*

*The number of modules taught in English is small and English language skills are relatively poor at the higher education institution. The proportion of visiting teaching staff included in the teaching process is very limited due to financial reasons and an inadequate number of international relationships. It is recommended that the higher education institution develop an internationalisation strategy to improve the English language skills of its teaching staff, offer them the opportunity to practice at international higher education institutions, and support development of international partnerships. (Transport Services)*

## SUMMARY

External views by international experts along with their recommendations to higher education institutions are essential inputs for improving higher education in Estonia. Based on recommendations by tens of assessment committees on 159 different study programmes within 10 study programme groups at 4 universities and 3 professional higher education institutions, it may be summarised that in order to improve the quality of higher education, the Estonian higher education institutions must above all:

- 1) create a situation where teaching staff cannot continue teaching in the old way, and support their staff during the transition from the teaching-centred approach to a learning-centred approach by all possible means (peer learning, trainings, motivation systems, evaluation requirements, etc.);
- 2) implement approaches to teaching and learning that consider the development of students' soft skills and key competencies (teamwork, entrepreneurship, management, digital competencies, analytical skills, presentation skills, social and personal skills) and the development of their professional knowledge and skills to be equally important tasks;
- 3) change student assessment methods — provide regular feedback on their progress and ensure maximum objectivity when assessing their achieved learning outcomes;
- 4) link theory more closely with practice, and improve the content and organisation of practical training;
- 5) expand the international dimension in all its aspects — staff and student mobility, study programmes or modules taught in English, joint projects with foreign higher education institutions to improve teaching and learning.

In all of this, the keyword is cooperation, that makes it possible to achieve the desired results, but only when common values are shared and common goals are set. The need for a closer, more purposeful and more effective cooperation — between staff members and between departments within higher education institutions, between higher education institutions in Estonia, and with companies and foreign universities — is a theme that has been highlighted in various analyses of the results of external

evaluations of higher education over a longer period (see the Transitional Evaluation [2012]<sup>3</sup>, the Institutional Accreditation [2015]<sup>2</sup>).

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<sup>3</sup> [Üleminekuhindamine – kõrghariduse välishindamise erijuhtum Eestis 2009-2011 \(koostajad Hillar Bauman, Heli Mattisen\)](#)