The impact of Lithuanian science and study reform on university activities (admission): A case of Vilnius Gediminas Technical University

Alfonsas Daniūnas, Romualdas Kliukas, Olegas Prentkovskis, Dovilė Ulinskaitė*

Vilnius Gediminas Technical University, Saulėtekio al. 11, LT-10223 Vilnius, Lithuania

Abstract

Education and research are among the most important issues in every country, as only educated society develops its prosperity. In order to meet society’s needs, education and research have to be developed. After the independence was gained in 1991, higher education in Lithuania was reformed in 2000 and 2009. The latest reform intended to change higher education funding system, management of higher schools and attitude towards the improvement of study quality. As the activities of higher schools depend on the State subsidies and number of students, i.e. funding, it is very important to reach good admission results. This article deals with the main principles of higher education reform in Lithuania and how the situation has changed in the field of admission to Lithuanian higher schools, including Vilnius Gediminas Technical University.

© 2012 Published by Elsevier Ltd. Selection and peer review under the responsibility of Prof. Dr. Ferhan Odabaşı

Keywords: higher education, reform, admission, analysis

1. Introduction

Higher education in Lithuania was influenced by the Soviet Union higher education system for a long time. After independence of Lithuania was gained in 1991, the first reform of higher education was ensued. The next reform of higher education happened in 2000 when the Law on higher education was passed and the main principles of Bologna declaration were settled. Yet, in the last decade, Lithuania’s society (or politics) emphasized the necessity of fundamental changes in higher education system and named a lot of negative aspects in the existing one, such as: the quality of higher education meets the needs of neither students, nor the society itself; the diplomas of higher education have lost their value; the brightest students and researchers choose foreign higher education institutes; the scientific work is often unproductive; the existing system of financing studies in universities and colleges does not encourage competition among them; students lack responsibility for their studies; the management system of higher education institutions is petrified (For Intelligence of..., 2009; Ginevičius & Ginevičienė, 2009; Ginevičienė et al., 2007; Daniūnas et al., 2007; Prentkovskis et al., 2007, 2009).

The main tool of higher education reform became the Law on higher education and research passed in 2009. This law does not intend to change the system of research and education. Higher education funding system, management of higher education institutes and attitude towards the improvement of study quality are the main targets of the law.

*Dovilė Ulinskaitė. Tel.: +370 5 2744949
E-mail address: dovile.ulinskaite@vgtu.lt
Great attention was given to the issue of study quality while implementing the reform. A survey carried out in 2008 by the Ministry of Education and Science of the Republic of Lithuania showed that 74% of the republican and international science Olympiads winners were planning to study abroad as they evaluated the study quality in Lithuanian schools institutions only by 7 points out of 10, whereas the study quality in foreign higher education institutes was evaluated by 9 points (out of 10) (Disastrous to Procrastinate… 2009). On the other hand, quality of studies is a miscellaneous issue influenced by many direct and indirect factors. As it is an expectation of different interest groups (society, students, employers, higher school’s personnel, etc.), such unambiguous and hasty change of quality, especially planned and imposed, is in fact inconceivable (Analysis of Science… 2009).

According to the higher education reform initiators, study quality will become one of the most important subjects for people who will be planning their future, career and choosing studies at the higher school. Quality is expected to be the key in the competition between higher education institutes and their sponsorship (Presentation of the Law… 2009).

Due to the fact that government cannot control and establish study quality by interfering in the work of higher schools, and especially by allocating the number of state-funded student places to certain higher schools, the responsibility of study quality goes to the higher schools. So the idea of education reform was to improve study quality by transferring more autonomy and independence to personnel and students of universities and colleges, though to be more specific – to schoolchildren. An entrant, who is usually a pupil and who will be planning his/her future, career, will be choosing studies in any of higher schools, first of all, he/she will pay attention to study quality. Thus, higher education institutes will try to improve the quality in order to attract schoolchildren, and especially the talented ones, to choose their study programmes. The quality is expected to be the key in the competition between higher schools.

The competition between higher education institutes is expected also to be stimulated by the changes in the management of higher education institutes (Analysis of Science… 2009). According to the higher education reform initiators, several higher education institutes will have to face a merger or even a breakdown if they want to improve study quality and to satisfy the needs of students. Consequently, an entrant, who will be choosing the studies, will become the factor that determines which higher schools will fall unable to stand the competition or join the other – a better higher school.

The admission results of Lithuanian higher education institutes and modification of higher education funding structure, after the new Law on higher education and research has been passed, showing the feasibility of the main principles of the Lithuanian higher education reform are analysed in this article.

2. Higher education reform through the state-financing policy

One of the main aims of the reform is an effective use of state finances. Until the Law on higher education and research was passed all national higher schools obtained a certain share of state budget according to some fixed proportions. Simultaneously, a maximum number of students were fixed too according to a demand for specialists, the quality of prepared specialists. As the new law was passed, the general (and maximum) number of students can fix a higher school itself; the state-funded student places are allocated not to a certain higher education institute but to the best entrants who can ‘bring’ their state-funded student places to that higher education institute he/she wants. The state-funded student place includes 100% financing of: lecturers and other personnel’s salaries; teaching devices and other items or services; student promotion (scholarships).

Until 2008, a state-funded student place was financed only by 47% and it was considered to be one of the reasons of poor study quality (Presentation of the Law… 2009).

Applying this new state-financing policy, the Government do not regulate directly the preparation of necessary specialists, though some indirect regulations still exist: the 70th article of the Law on higher education and research states that the Government has a right to influence the number of specialists in certain study areas or fields taking into account the needs of the national economic, social and cultural development and financial possibilities of the State (Higher Education and Research Act (2009)). The Government also regulates indirectly the number of specialists by allocating a certain amount of State budget to studies – certain study areas (see Table 1).
A state-funded student place is allocated to a person according to his/her capabilities which are determined according to the results of Matura examinations, studying or other results as well as special capabilities.

The Ministry of Education and Science every year set principles of formation of a consecutive order of persons who have completed a secondary education programme with the best results, which outlines selection criteria of persons applying to Lithuanian higher schools to a state-funded student place. Admission to Lithuanian higher schools is based on competitive marks of applicants, which are calculated according to the results of four study subjects. A list of certain study subjects is determined in different study fields and is set two years before the admission started. The state-funded student places are allocated to the entrants during the admission to Lithuanian higher schools through the joint admission system.

### Table 1. Allocation of funding to study areas, (thousands of Litas, 1 € = 3.45 Litas)

<table>
<thead>
<tr>
<th>Studies</th>
<th>Year</th>
<th>Humanitarian sciences</th>
<th>Social sciences</th>
<th>Physical sciences</th>
<th>Biomedical sciences</th>
<th>Technology sciences</th>
<th>Arts</th>
</tr>
</thead>
<tbody>
<tr>
<td>University</td>
<td>2009</td>
<td>2 520</td>
<td>4 860</td>
<td>4 106</td>
<td>3 580</td>
<td>7 781</td>
<td>2 780</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>1 985</td>
<td>5 277</td>
<td>3 109</td>
<td>2 903</td>
<td>6 086</td>
<td>1 687</td>
</tr>
<tr>
<td></td>
<td>2011</td>
<td>1 985</td>
<td>5 201</td>
<td>3 109</td>
<td>2 903</td>
<td>6 086</td>
<td>2 209</td>
</tr>
<tr>
<td></td>
<td>2012</td>
<td>1 925</td>
<td>4 395</td>
<td>3 015</td>
<td>2 815</td>
<td>5 845</td>
<td>1 833</td>
</tr>
<tr>
<td>College studies</td>
<td>2009</td>
<td>234</td>
<td>4 357</td>
<td>223</td>
<td>1 966</td>
<td>4 677</td>
<td>960</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>133</td>
<td>4 066</td>
<td>248</td>
<td>2 260</td>
<td>5 018</td>
<td>641</td>
</tr>
<tr>
<td></td>
<td>2011</td>
<td>131</td>
<td>3 456</td>
<td>300</td>
<td>2 463</td>
<td>5 092</td>
<td>649</td>
</tr>
<tr>
<td></td>
<td>2012</td>
<td>132</td>
<td>2 961</td>
<td>300</td>
<td>2 600</td>
<td>4 714</td>
<td>575</td>
</tr>
<tr>
<td>Total</td>
<td>2009</td>
<td>2 754</td>
<td>9 217</td>
<td>4 329</td>
<td>5 546</td>
<td>12 458</td>
<td>3 740</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>2 118</td>
<td>9 343</td>
<td>3 357</td>
<td>5 163</td>
<td>11 104</td>
<td>2 328</td>
</tr>
<tr>
<td></td>
<td>2011</td>
<td>2 116</td>
<td>8 657</td>
<td>3 409</td>
<td>5 366</td>
<td>11 178</td>
<td>2 858</td>
</tr>
<tr>
<td></td>
<td>2012</td>
<td>2 057</td>
<td>7 356</td>
<td>3 315</td>
<td>5 415</td>
<td>10 559</td>
<td>2 408</td>
</tr>
</tbody>
</table>


### 3. Admission to Lithuanian higher schools

A joint admission system to Lithuanian higher schools was first introduced to Lithuanian society in 1999 in order to help applicants to enter a higher school and to make the selection of potential students more objective, as the applicants are given the opportunity to choose a higher school, participating in this joint admission system, and a study programme according to their order of preference, depending on the marks obtained in a secondary school (Prentkovskis et al. 2009; Kliukas et al. 2006, 2007; Kliukas & Vadlūga, 2008).

After the higher education reform has come into force, all higher schools of Lithuania participate in the joint admission system, as the system now serves, first of all, to form a consecutive order of persons with the best competitive marks in different study fields (as a competitive mark is calculated differently in different study fields) and to allocate the state-funded student places to the best ones. Until 2008 not all Lithuanian higher schools participated in the joint admission programme. Many colleges used to organize separate admission according to a certain school’s methods.

An applicant, participating in the joint admission programme, can mention up to twelve study programmes (choices) in the application to study at any of Lithuanian higher schools. Study programmes are arranged in the order of preferences in the application. The applicants also choose the form of studies and the type of financing.

If the chosen study programmes belong to different study fields, the applicants’ possibilities to be awarded with the state-funded student place are different due to different competitive marks. The least competitive mark is not set beforehand, as it depends on the applicant to a certain study field.

The joint admission has three stages. The first one is the most important. During the first stage an applicant is offered two options: a state-funded student place in one of the programmes he/she mentioned in the application and
a non-state-funded student place, if such a position was mentioned in the application. The applicant can accept or reject the given offer. Yet, if the state-funded student place was suggested according to the applicant’s first three choices mentioned in the application, and the applicant rejected the suggestion, he/she is not allowed to participate in the second stage of admission. During the second stage, an applicant can adjust the application only by changing the consecutive order of the chosen study programmes. To add new study programmes or study form, type of financing is possible only during the third stage of admission.

The joint admission system today serves only to admit a student to bachelor (I cycle) studies. The admission to master (II cycle) studies is organized separately according to each of the higher schools methods (rules). The Government and the Research Council of Lithuania set the number of state-funded student places to Lithuanian higher schools according to: research result of a higher school, statistics of exchange students, admission results of the bachelor study programmes.

4. Comparison of admission results: the case of VGTU

The proportion of students in different study institutions in 2008 were: 18% of vocational schools students; 24% of colleges’ students and 58% of universities students. One of the main objectives in the higher education reform was to adjust the proportion of students’ number in different study institutions. So, in order to enhance studies at universities, the amount of state-funded student places in colleges was increased in 2009 and later (see Table 2). Consequently, the number of state-funded student places in universities has declined since then.

Vilnius Gediminas Technical University (further – VGTU) is a technical university providing approximately 40 bachelor study programmes to applicants. The majority of study programmes belong to technological or physical sciences. There are a few study programmes of social sciences and arts as well. After the higher education reform VGTU remains one of the most popular universities among applicants, especially the ones, who are allocated the state-funded student places (the second result of received state-funded student places among all universities of Lithuania, see Figure 1).

Figures 2 and 3 show the distribution of received state-funded student places in different study areas or fields among Lithuanian universities and in VGTU in general.
Table 2. Allocated state-funded student places to universities and colleges

<table>
<thead>
<tr>
<th>Studies</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>University studies</td>
<td>23 010</td>
<td>11 019</td>
<td>9 680</td>
<td>9 680</td>
<td>8 975</td>
</tr>
<tr>
<td>College studies</td>
<td>9 190</td>
<td>10 151</td>
<td>9 164</td>
<td>9 165</td>
<td>8 224</td>
</tr>
</tbody>
</table>

Figure 2. Distribution of state-funded student places in Lithuanian universities in different study areas in 2011.
Figure 3. Distribution of state-funded student places in VGTU in 2011

Figure 4. Admission result of VGTU since 2008
The received state-funded student places are related to the State budget subsidies for the University. Since the beginning of the higher education reform, though the number of received state-funded student places has declined (Fig. 4), VGTU subsidy expenditures declined only by 3%.

The general university income per student in 2011 was 11 thousand Litas (1 € = 3.45 Litas) and it increased by 25% if compared with the year 2010 (Fig. 5).

5. Conclusions

In order to improve higher education and research in Lithuania, several study reforms were ensued (in 2000 and 2009).

One of the main objectives of the latest reform was the funding system for Lithuanian higher schools. After the reform, the state-funded student places are first of all allocated to certain study areas: humanitarian sciences, social sciences, physical sciences, biomedical sciences, technological sciences and arts. The highest funding (12 000–10 500 thousand Litas, 1 € = 3.45 Litas) is allocated to technological sciences study area, the least (2 700–2 000 thousand Litas) to humanitarian sciences study area.

Vilnius Gediminas Technical University is a technical university, so the majority of admitted students (1 170 students) choose technological sciences study programmes.

Between 2003 and 2008 the general number of students in VGTU used to increase (from 13 016 to 16 806) but lately (till 2011) – declined (up to 13 073 students). This decline is related to demographical situation: in recent years depopulation has reduced the number of potential entrants (school leavers) in Lithuania.

Despite the increase or decrease of students in VGTU, the incomes per student tended to grow (from 2003 to 2011). These incomes have increased twice during the above-mentioned period – from 5 000 Litas to 11 373 Litas. This case can be explained by inflation in the economy of Lithuania as well as by the Government’s decision to allocate more funds for studies in order to improve the quality of studies in general.
References


