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Higher Education Systems and Institutions, Luxembourg



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The System of Higher Education

Luxembourg, among the world's smallest but also wealthiest countries, lies in the heart of Western Europe. Bordered by Belgium, France, and Germany, Luxembourg is one of the three main seats of the European Union's institutions. The Grand Duchy of Luxembourg sits at the crossroads between Europe's Germanic and Francophone language communities. The country has experienced remarkable migratory flows, resulting in an ethnically hyper-diverse and multilingual population. Reflecting this cultural diversity, the educational system at all levels emphasizes language learning. Historically an agrarian society, a century ago it developed a very strong steelmaking industry and over the past decades has witnessed extraordinary growth in its financial services sector.

Established to broaden the economic bases of the country, thus reducing overreliance on the steel and banking industries, yet against considerable pecuniary and ideological resistance, the

national flagship University of Luxembourg (UL) was founded in 2003 upon the initiative of a small group of elite decision-makers (cf. Braband 2015; Dondelinger 2013). As a private, government-dependent institution (*établissement public*) directed by a Board of Governors (*Conseil de Gouvernance*), the University's major funding is provided by the state, although its third-party funding has increased rapidly and substantially.

Ironically, while spatial mobility is supported everywhere, Luxembourg has invested considerable capital and strategic planning in establishing its own national university. It aims to compete globally by concentrating its intellectual and financial resources and by building on the country's strengths and priorities. The state took this ambitious step in scientific capacity-building by founding a research-oriented university, thus also providing a stay-at-home alternative for Luxembourg's youth, traditionally educated abroad. The long-standing custom of educating elites in other countries was ostensibly justified by the establishment of cosmopolitan, Europe-wide networks. Today, rising international competition and supranational coordination have increased pressure on Luxembourg to grow its higher education system and foster educational and scientific innovation. The University provides a means to diversify the economy and to integrate citizens from diverse cultural backgrounds, while the polity remains dominated by local elites who have mainly studied in the neighboring countries.

Oriented toward the Grand Duchy's unique context – small in size but simultaneously a flourishing center of European governance and international business – the University was founded upon the principles of internationality, multilingualism, and interdisciplinarity.

Relying heavily on faculty, staff, and students from other countries for its development, the UL organizationally replaced and integrated several postsecondary training institutes: the *Centre Universitaire de Luxembourg*, which had provided a range of short-cycle courses across the humanities and social and natural sciences, the *Institut Supérieur de Technologie* (engineering), the *Institut Supérieur d'Études et de Recherches Pédagogiques* (schoolteacher education), the *Institut d'Études Éducatives et Sociales* (training social workers), and, most recently (in 2016), the *Centre virtuel de la connaissance sur l'Europe* (CVCE). During a period of fast growth, these other organizations have been integrated into the University, yet not without challenges, exacerbated by multiple sites across the country and the ongoing construction of the Campus Belval in Esch-sur-Alzette. The current government aims for a consolidation of the higher education and public research sector, also privileging collaborations with industry and applied fields, such as biomedicine and information technology. The public research institutes include the Luxembourg Institute of Health (LIH), the Luxembourg Institute of Science and Technology (LIST), and the Luxembourg Institute of Socio-Economic Research (LISER) as well as the Max Planck Institute for International, European, and Regulatory Procedural Law. All of these research organizations rely on international recruitment, yet increasingly the University also provides graduates needed in an expanding labor market.

The University of Luxembourg's three faculties and three interdisciplinary centers offer three cycles of instruction, according to the Bologna system (Bachelor, Master, PhD), and a number of vocational and continuing education courses for lifelong learning and specific professional preparation. Beyond this national research university, more applied postsecondary institutions offer a range of courses of study, from study abroad

programs and short-cycle vocational courses to full-fledged degree programs. Examples include Lunex, devoted to training physical education teachers, the international branch campus of the US-based Sacred Heart University that offers an MBA degree, and various executive education courses provided at ArcelorMittal University, in Esch-sur-Alzette, to serve the world's largest steel company, based in Luxembourg.

Today, tertiary attainment of more than half of each cohort of 25- to 34-year-olds is among the very highest across OECD countries (OECD 2015).

Governance of Higher Education

The higher education sector in Luxembourg is placed under the authority of the national Ministry of Higher Education and Research, established in 1999. The legal framework for the sector is primarily defined by two laws: the 2003 *Law creating the University of Luxembourg* and the 2009 *Law concerning the Organization of Higher Education*. The latter law sets out a framework for recognized qualifications and establishes the accreditation procedures for higher education institutions other than the University of Luxembourg. Currently (as of January 2018), there are 7 institutions operating with an accreditation granted under the 2009 law, collectively offering a total of 24 bachelor's and master's level degree programs.

The 2003 University Law establishes a governance model based on the triumvirate of the Board of Governors, the rectorate, and the University Council. The Board of Governors, whose seven voting members must all be external to the University, is mandated to establish the general policy and strategic framework for the institution while also exercising a general oversight function. The rectorate as a collegial body is vested with executive authority as regards the day-to-day operation of the University together with wider strategic responsibilities. The University Council, including faculty and student representatives, is charged with overseeing the “pedagogical and scientific activities” of the University. Formally, its role is

largely consultative, having in most cases only the authority to “issue an opinion” (“*émet un avis*”) within the decision-making process.

The drafters of the University Law opted for a comparatively centralized governance model, reflecting the demands of a substantially new institution. This has continued to define institutional practice. Although modeled on an Anglo-American concept of bicameral university governance, the Luxembourgish variant has not reproduced its characteristic institutional balance. The Board of Governors has tended to assume a substantially larger role in operational decisions and the day-to-day management of the university than is typical in such models, while the University Council has conversely been subject to criticism for not fully assuming its role as a central deliberative forum or “university senate” (cf. Committee for the External Evaluation of the University of Luxembourg 2013: 15–16).

At the time of writing (early 2018), a new university law is under discussion in parliament. If adopted in its current form, the new legislation would take the appointment of the rector, vice-rectors, and administrative director formally out of the hands of the government and place it with the Board of Governors, enlarging the scope of institutional autonomy in general but also the role of the board in particular. The new law would further vest the power of appointment of the deans of the faculties in the board, to be exercised on the basis of a proposition by the rector and the joint opinion of the professors of the faculty concerned. The board is also set to be enlarged, growing to 13 voting members. This would for the first time include (four) voting members drawn from within the University itself (two members designated by the University Council, as well as the heads of the personnel and student associations). The University Council would see its role redefined, gaining in organizational autonomy (senior university officers would no longer be voting members and the rector would no longer chair), but only to a limited extent in decisional authority (acquiring a decisional authority as regards the orientation of study programs). The rector individually would replace the rectorate collegially as the principal executive authority

within the institution, while the role played by students in institutional governance would be placed on a clearer and more expansive footing. The broad orientation of the new law appears consistent with, and in important respects reinforces, the initial centralized governance model. It is noteworthy, however, that the government proved willing to make some significant amendments to its initial proposals in the face of criticisms levelled particularly by members of the professoriate concerning issues of democracy and transparency (cf. Heuschling 2017). The opening out of the Board of Governors to internal members and the modest gain in decisional authority for the University Council noted above were, for example, both the products of the public debate on the initial text.

The University Law sets out two principal instruments of accountability. Every 4 years, the University must conclude a contract with the state (*contrat d'établissement*) on the basis of an agreed strategic plan. The institution is also subject to external evaluations coordinated by the ministry, similarly placed on a 4-year cycle. A governmental commissioner (*commissaire de gouvernement*) provides the principal operational channel of communication between the ministry and the University. This office is held by a senior ministry official who sits as a nonvoting member on the Board of Governors.

The “pedagogical, scientific, administrative and financial autonomy” of the university is clearly affirmed in the University Law. In the absence of an established national university tradition, defining the scope of this autonomy has given rise to occasional frictions in practice. In particular, debates have surrounded the question of where the balance should be struck between the principle of academic autonomy on the one hand and state expectations concerning the University’s intended role as a driver of national social and economic development in priority areas on the other. The University has sought to address this issue by way of a statement on “Living Academic Freedom” in its 10-year (2016–2026) strategic framework (University of Luxembourg 2016: 5). The statement strongly affirms the principle of academic freedom, while also recognizing that

the institution's unique position is such that it may legitimately be entrusted with specific missions by the state, on condition that those missions meet the scientific, financial, and quality assurance requirements established by the University itself.

Funding Higher Education

The country's research intensity is low compared with its neighbors, especially Germany. Even with the establishment of the University, such recent investments as a €200 m bid to harvest metals in outer space reflect research policymakers still seeking direction. The total University budget in 2015 amounted to around €205 million, with external funding of €38.7 m, which has more than doubled since 2010. Sources of external revenue include the Luxembourg National Research Fund (FNR), which since 1999 has offered competitive research funding programs, with a 2015 budget of €60 m, including programs to recruit leading scholars to Luxembourg. European programs such as Horizon 2020 are a crucial source of revenue for international collaborative projects that are of particular importance in a higher education system with only one research university. Overall, Luxembourg has considerably increased its national research and innovation investments over the past decade (to €326 m in 2014; see OECD 2015). Yet this stable annual gross expenditure on R&D (circa 1.5%) remains far lower than that of the neighboring countries and is about half of the EU target of 3% to be invested in "innovation" by 2020.

Stakeholders: Academic Profession, Students, Administrative Staff

Academics: To develop an institution based on local strengths, regional needs, and global trends, the UL aims to achieve excellence by recruiting top faculty members worldwide and by identifying in advance research areas that reflect Luxembourg's economic and geographic contexts. Recruitment is facilitated by competitive

salaries, yet limited by the UL's nascent reputation and the more-or-less required command of the UL's three official languages. It leads the world in terms of "internationality" (top score in the THE 2018 World University Ranking for "international outlook" that reflects performance in such indicators as proportion of cross-national collaborative publications). Limited domestic career paths for Luxembourg researchers demand tremendous mobility, both incoming and outgoing.

Students: From 2005/2006 to 2015/2016, the overall student enrollment nearly doubled, from 2692 to 6288 (5064 in Bologna cycle programs). Two-fifths of UL students are of Luxembourgish nationality, another 46% come from other EU-28 countries, and 11% from countries farther afield. With over 100 countries represented, the student body consists in large part of Western Europeans, with a strong presence of students from the neighboring countries of Belgium, France, and Germany. In terms of graduates, the key fields studied were social sciences, business and law; education; humanities; science, mathematics, and computing; engineering; and health and welfare.

Administrative staff: The key challenge for and strongest competency of the administrative staff are languages spoken. Although the University's three official languages are English, French, and German, Luxembourgish and Portuguese (due to the largest migrant group hailing from Portugal) are further crucial languages of everyday interaction in society and for the education system as a whole, since around a fifth of the school-aged population speak Portuguese at home.

Teaching and Learning

The University of Luxembourg consists of three faculties and three interdisciplinary centers, with the former devoted to both research and teaching and the latter focused mainly on research. Not reflecting the complete range of disciplines of a comprehensive university, the UL has strengths in such fields as the social sciences, education, European law, biomedicine, and computer

science. Numerous study programs have been recently developed, and most courses are evaluated each semester via online student surveys. Blended learning options have increased, and a well-developed Internet-based learning platform facilitates communication among students and between teaching staff and students.

While most study programs have not yet been officially accredited by an external agency, in 2016 the University was evaluated by numerous international review panels. Several of these external groups focused on key research areas. Another review board, made up of members of the European University Association (of which the UL is an active member), focused on its institutional development. While the UL overall has been very positively evaluated, the interdisciplinary structures at various organizational levels require ongoing support and efforts to build bridges across disciplinary boundaries. With an emphasis on graduate education, the many new courses of study must continue to establish themselves.

Internationalization

Internationality is a key feature of the University of Luxembourg, as in the rest of the higher education system. Along with dozens of university partnerships globally, the UL requires all its bachelor-level students to spend at least one semester abroad. Although the UL offers study programs solely in English that are attractive to students recruited worldwide, especially given the low tuition fees of around €200/semester for all students regardless of nationality, most programs are bi- or multilingual, providing unique educational advantages. Alumni often find employment in leading sectors of the country's economy, including finance, supranational governance, national administration, and communications and satellite technology, among others.

Focusing on key priorities and excelling in cross-border collaborations, also due to the fact that nearly all of its academic staff hold an

international degree, the UL's international strategy has shown positive results. Just a dozen years after its founding, the University is now ranked 179th worldwide (THE World University Rankings 2018). Along with Qatar, it is among the most internationalized of all higher education systems globally (Powell 2014). Furthermore, the University partners with a number of other nearby research universities in the "University of the Greater Region."

References

- Braband, Gangolf. 2015. Ein günstiges Zeitfenster: Die Gründung der Universität Luxemburg und der Einfluss internationaler Entwicklungen im Hochschulbereich. *Die Hochschule* 24 (1): 144–156.
- Committee for the External Evaluation of the University of Luxembourg. 2013. Second external evaluation report of the University of Luxembourg. http://www.uni.lu/university/official_documents. Last accessed 28 May 2017.
- Dondelinger, Germain. 2013. Une université pour le Luxembourg. In *Université du Luxembourg 2003–2013*, ed. M. Margue, 42–51. Luxembourg: University of Luxembourg.
- Heuschling, Luc. 2017. Commentaire du projet de loi no. 7132 ayant pour objet l'organisation de l'Université du Luxembourg. 15 November. <http://orbilu.uni.lu/handle/10993/33030>. Last accessed 26 Jan 2018.
- Meyer, Morgan B. 2008. The dynamics of science in a small country: The case of Luxembourg. *Science and Public Policy* 35 (5): 361–371.
- OECD. 2015. *OECD reviews of innovation policy: Luxembourg*. Paris: OECD.
- OECD.stat. 2016. *Main science and technology indicators*. http://stats.oecd.org/Index.aspx?DataSetCode=MSTI_PUB. Last accessed 10 Aug 2016.
- Powell, J.J.W. 2013. Founding the Inter/National University of Luxembourg in the Bologna Era. In *Université du Luxembourg 2003–2013*, ed. M. Margue, 22–27. Luxembourg: University of Luxembourg.
- Powell, J.J.W. 2014. International National Universities: Migration and mobility in Luxembourg and Qatar. In *Internationalization of higher education and global mobility*, ed. B. Streitwieser, 119–133. Oxford: Symposium.
- University of Luxembourg. 2016. *Strategic framework for the University of Luxembourg 2016–2026*. http://www.uni.lu/university/official_documents. Last accessed 28 May 2017.