European Commission

Education and Training Monitor 2013

Luxembourg

Education and Training

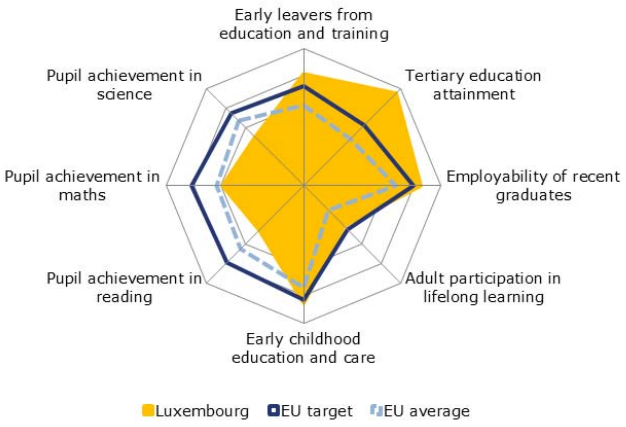
1. Key indicators and benchmarks

Europe 2020 headline targets			Luxembourg 2009	Luxembourg 2012	EU average 2009	EU average 2012	Europe 2020 target / Benchmark
1. Early leavers from education and training (age 18-24)			7.7%	8.1%	14.2% EU28	12.7% EU28	**EU target: 10%** National target: <10%
2. Tertiary educational attainment (age 30-34)			46.6%	49.6%	32.1% EU28	35.7% EU28	**EU target: 40%** National target: 40%
ET 2020 Benchmarks							
3. Early childhood education and care (4 years old - year before start of compulsory primary)			94.6%	95.6% 11	91.7%	93.2% 11	**95%**
4. Basic skills Low achievers (15 year-olds; Level 1 or lower in PISA study)	Reading		26.0%	:	19.6%	:	**15%**
	Mathematics		23.9%	:	22.2%	:	**15%**
	Science		23.7%	:	17.7%	:	**15%**
5. Learning mobility	Initial vocational training (IVET)	**a.** Students participating in Leonardo da Vinci programs as a share of vocational students at ISCED 3	1.3%	1.5% 11	0.6%	0.7% 11	
	Higher Education	**b.** Erasmus inbound students as % of student population in host country		6.7% 11		1.1% 11	
		c. Inbound degree mobile students as % of student population in the host country		40.6% 11		7.0% 11	
6. Employment rate of graduates (age 20-34) having left education 1-3 years before reference year			85.5%	84.6%	78.3%	75.7%	**82%**
7. Adult participation in lifelong learning (age 25-64)			13.4%	13.9%	9.3%	9.0%	**15%**
Proposed ET 2020 benchmark							
8. Foreign languages skills	**a.** ISCED 2 students at proficiency level B1 or higher in first foreign language[1]		:	:	:	43.5% 11	
	b. ISCED 2 students learning two or more foreign languages		100.0%	100.0% 11	58.6%	60.8% 10	
Other ET 2020 Indicators							
9. Investment in education and training	**a.** General government expenditure on education (% of GDP)		5.3%	5.1% 11	5.5%	5.3% 11	
	b. Annual expenditure on public and private educational institutions per pupil/student in € PPS	ISCED 1-2	€ 12,757 08	€ 15,262 10	€ 5,732 08	€ 6,021 10	
		ISCED 3-4	€ 15,617 08	€ 13,203 10	€ 6,964 08	€ 7,123 10	
		ISCED 5-6	: 08	: 10	€ 9,309 08	€ 9,168 10	
10. Digital competences	**a.** Pupils in grade 4 (ISCED 1) using computers at school		:	:	60.7% 07	64.7% 11	
	b. Individuals aged 16-74 with high computer skills[2]		42.0%	40.0%	25.0%	26.0%	
11. Entrepreneurial competences	Individuals aged 18-64 who believe to have the required skills and knowledge to start a business				42.3% a	42.0% a	
12. Vocational education and training	Share of vocational students at ISCED 3		61.3%	61.4% 11	49.6%	50.3% 11	
13. Skills for future labour markets Projected change in employment 2010-2020 in %	High qualification		:	34.3%	:	19.1% EU28	
	Medium qualification		:	21.6%	:	4.6% EU28	
	Low qualification		:	-22.3%	:	-20.2% EU28	
14. Low-skilled adults	Literacy		:	:	:	19.9% EU17	
	Numeracy		:	:	:	23.6% EU17	
	Problem solving in technology rich environments[3]		:	:	:	26.9% EU13	

Source: Cedefop: 13 / EAC: 10a,b / European Survey on Language Competences (ESLC): 8a / Eurostat (Government finance statistics): 9a / Eurostat (LFS): 1, 2, 6, 7 / Eurostat (ISS): 10b / Eurostat (UOE): 3, 8b, 9b, 10c, 12 / IEA TIMSS: 10a / Global Entrepreneurship Monitor: 11 / OECD (PIAAC): 14 / OECD (PISA): 4

Notes: 07 =2007, 08 =2008, 09 =2009, 10 =2010, 11 =2011, e= estimate, a= unweighted average b= break, p= provisional
Number of countries included in EU average: PISA=25, Entrepreneurship=18, Language skills=13, ICT/Computers at school=13, others: EU27
[1]= average of skills tested in reading, listening, writing, [2]= having carried out 5-6 specific computer related activities, [3]= Results cover people with scores below level 1 as well as people who have no computer experience or failed the ICT test

Figure 1. Position in relation to highest (outer ring) and lowest performers (centre)



Source: DG EAC calculations on the basis of data from Eurostat (LFS 2012 and UOE 2011) and OECD (PISA 2009). *Note:* all scores are set between a maximum (the highest performers visualised by the outer ring) and a minimum (the lowest performers visualised by the centre of the chart).

2. Main challenges

A high proportion of immigrants in the population leads to disparities in success rates between native and immigrant students. The fact that Luxembourg is a trilingual country poses additional challenges, in particular for students of migrant background. While Luxembourg has a relatively low overall early school leaving rate (8.1% in 2012, compared to the 12.7% EU average), the rate is high among the migrant population, which requires further measures, notably to improve early childhood education and care, and to increase the resources available for language support and remedial classes. The PISA 2009 results also confirmed the worrying inequities within Luxembourg's school system.

While the employment rate of graduates is good, 84.6% in 2012, the youth unemployment rate is relatively high compared to the low overall rate of unemployment and is often linked to a lack of skills or qualifications.
Consequently, the 2013 CSR for Luxembourg related to education points to step up efforts to reduce youth unemployment by improving the design and monitoring of active labour market policies. Luxembourg is also called on to strengthen general and vocational education to better match young people's skills with labour demand, in particular for people with migrant background. Furthermore, to take resolute action to increase the participation rate of older workers, including by improving their employability through lifelong learning.

3. Investing in skills and qualifications

Investing in education and training in a context of economic crisis

Public spending on education is in line with the EU average (5.1% of GDP compared to 5.3% in 2011) but this does not include tertiary education, and combined with a very high GDP per capita, it still leads to high level of spending per pupil/student.

Between 2000 and 2010, the level of public spending on education registered an increase of more than 50% in Luxembourg. A major increase of the budget for human resources in education was registered (almost 4%). Special additional support and funding for adults in education is provided for re-skilling and upgrading the skills of the workforce. The government increased the central funding for training initiatives delivered by businesses for improving skills and language competences among the adult population. In 2011, the direct state aid for these actions was increased from 14.5% to 20%. In Luxembourg, specific target groups are selected for preferential support with the objectives of combating unemployment, and promoting the social integration of migrants. The target groups identified by the authorities are adults without recognised qualifications; those working for more than ten years with the same employer; and the over-45s. For these groups, there has been an increase of 35% in the public contribution towards their salary costs aiming at encouraging greater participation in training.

Skills

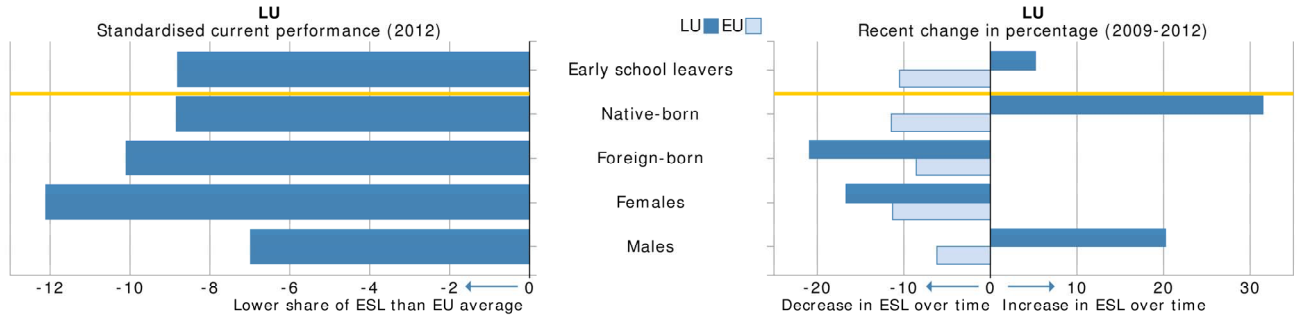
PISA performance on basic skills of young people is relatively weak and there has been a negative tendency in reading, mathematics and science since 2003. The fact that Luxembourg is a trilingual country (Luxembourgish, German and French are official languages) poses additional challenges for students, in particular those of migrant background. The Government is pursuing discussions on a future reform of secondary schools that focuses on four major themes: student progression through the school system, preparing students for university studies, language training and the autonomy of secondary schools.

The Luxembourg qualifications framework (CLQ) was adopted in 2010 by the Government Council. It covers all types and levels of qualifications, schools, vocational education and training and higher education as well as adult education and validation of non-formal and informal learning. The CLQ is seen as contributing to the overall modernisation of national education and training. The learning outcomes approach has a prominent place in these reforms. In the second stage of the development of the CLQ, it will be possible to submit requests for linking qualifications that are awarded outside formal education and training systems with the levels of the CLQ. This will be done using an accreditation procedure that still remains to be defined. Being host to a large number of workers from the neighbouring countries Belgium, Germany and France, Luxembourg also sees the development of the NQF and referencing to the EQF as a way to facilitate the comparison and recognition of qualifications.

4. Tackling early school leaving and raising the bar in school education

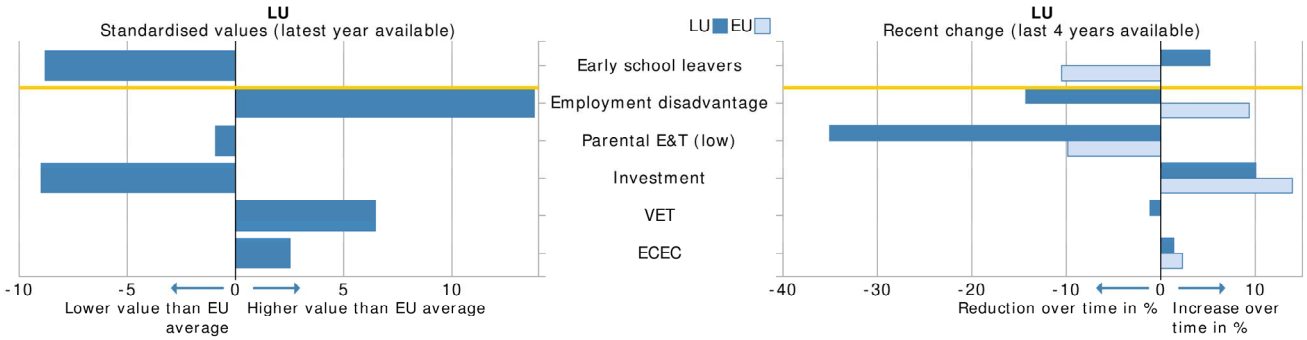
Regarding Europe 2020 targets, Luxembourg had a relatively low early school leaving rate of 8.1% in 2012, compared to the 12.7% EU average. Luxembourg's national target is to maintain the drop-out rate below 10%, however if the rate stabilizes at a lower level than 10%, the target will be modified in 2015. However, early school leaving remains a problem among the migrant population. The figure below shows that there is an increase in early school leavers among native born pupils and males.

Figure 2. Early leavers from education and training: sub-groups



Source: JRC-CRELL. *Note:* ESL = early school leaving. See Annex 2 for further information.

Figure 3. Early leavers from education and training: sub-indicators



Source: JRC-CRELL. *Note:* see Annex 2 for an explanation of the sub-indicators.

The sub-indicators show that in Luxembourg early school leavers have a much higher employment disadvantage compared to the EU average.

On early school leaving in Luxembourg, the figures resulting from the Labour Force Survey (LFS) are subject to significant annual variations due to the limited size of the sampling. Thus, the LFS does not help in identifying which students are affected or why they drop out. To plug these gaps, in 2003-2004 the Ministry of National Education and Vocational Training developed a nationwide study for monitoring the school dropout phenomenon. The new results of the national study concerning the 2010-2011 academic year demonstrate that the policies and measures currently in place are stabilizing the school dropout rate below 10%. The policies intended to improve orientation activities and programs for re-integrating education and training will be maintained not only to provide a second chance to dropouts from school but also to contribute to reducing unemployment among the young. Particular emphasis will be placed on promoting academic success as a means for preventing young people from leaving school and to increase young peoples' qualifications levels[1].

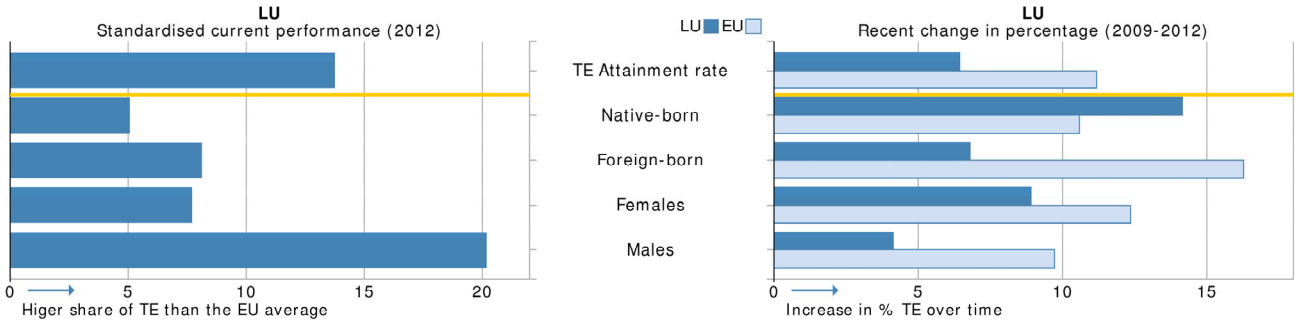
[1] National plan for smart, sustainable and inclusive growth Luxembourg 2020

Luxembourg's performance in international comparisons of student outcomes suggests that much can be done to improve the effectiveness of teaching and learning. Despite substantial spending on teachers, there is an important shortage of qualified teachers[2]. The percentage of 15 year-old pupils who are in schools affected by the lack of qualified teachers in core subjects is the highest among European countries[3]. A number of reforms are currently planned or are in progress in order to respond to national particularities as well as to more comprehensive social developments (technical progress, changing family structures, and economic change). A reform of secondary schools is currently being prepared – a project giving rise to lively public debates. The vocational education system is currently undergoing a reform in order to bring jobseekers' qualifications more in line with labour market demands.

5. Encouraging participation in tertiary education and modernising higher education

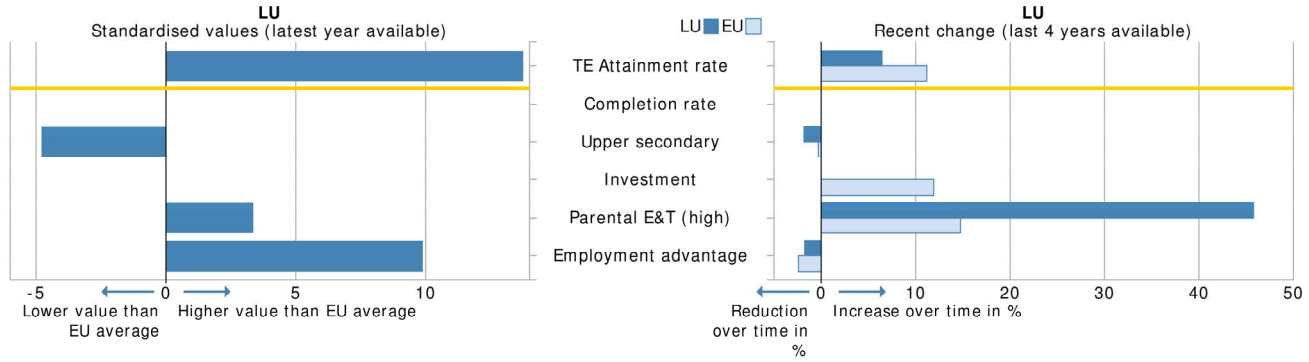
The tertiary education attainment rate according to the Eurostat methodology was 49.6% in 2012, well above the EU average of 35.7%. This is, however, misleading because Eurostat measures the tertiary attainment based on the working population in Luxembourg, but a high percentage of this population is either not resident in, or not originally from the country. Luxembourg therefore revised its national target[4] in 2012 and set it at 66% instead of 40%. The figure below shows that in Luxembourg, males have a very high tertiary attainment rate compared to the EU average. Efforts to reach a higher education attainment among residents are important in view of the Europe 2020 benchmark for higher education.

Figure 4. Tertiary education attainment: sub-groups



Source: JRC-CRELL. *Note:* TE = tertiary education. See Annex 2 for further information.

Figure 5. Tertiary education attainment: sub-indicators



Source: JRC-CRELL. *Note:* see Annex 2 for an explanation of the sub-indicators.

The sub-indicators show that parental education and training has an increasing level of influence on tertiary attainment.

Students registering for an approved university training program may obtain financial aid for higher studies, comprising a subsidized loan and a scholarship, the scholarship-loan ratio (weighting) depending on the

2 Study on Policy Measures to Improve the Attractiveness of the Teaching Profession in Europe. April 2013 contract EAC -2010-1391

3 OECD economic Survey Luxembourg

4 Luxembourg intends that this indicator provide data on the capacity of the national education system to train young people who can earn post-secondary school diplomas rather than it being a reflection of post-secondary qualifications requirements of the labour markets. In Luxembourg, 30% of people between the ages of 25 and 64 have university degrees. In Luxembourg, there is a large disparity depending on birth country. Among people born in Luxembourg, only 22% have university degrees, while this proportion is 40% among those persons born in other countries. Differences between these two populations are much less marked in bordering countries. Furthermore, in these countries, the proportion of university degrees is higher among natives than among foreign born persons.

revenues of the concerned student. The financial aid is moveable in the sense that Luxembourg students are free to choose the location of their studies[5].

[5] Eurypedia: Financial Support for Learners

6. Facilitating the transition from education to work and reshaping vocational training

The youth unemployment rate, at 18% in 2012, though still below the EU average, is persistently high when compared to the country's overall unemployment rate. On the other hand, the youth employment ratio is very low, pointing to a low percentage of the active population in this age cohort. Several measures have been set up to help young people to enter or return the labour market, including setting up a career guidance centre, an Employment Observatory, and the "fit4jobs[6]" incentives. The government, in collaboration with the national employment agency (Agence pour le développement de l'emploi (ADEM)), is assessing the measures taken to analyse how they could be improved. An ambitious action plan for youth employment has been announced, which envisages a 'Youth Guarantee' (Garantie Jeune): in line with the Council recommendation.

Participation of upper secondary students in vocational education and training is above the EU average (61.4% vs. 50.3% in 2011). The recent reform of VET provides possibilities to bridge the gap between vocational training and higher education. For example, the "Maison de l'Orientation", which provides guidance services and direction, opened in 2012. A key challenge will be to increase the quality and attractiveness of VET studies and to raise them to the 'excellence' level in order to provide a qualified workforce to the labour market and to offer professional perspectives to the learners.

The Ministry of National Education and Vocational Training manages the guidance centre and coordinates the steering committee made up of various heads of departments. Staff from these departments work in close collaboration to produce presentations in schools, assisting with the transition phase from school to work and helping during the systematic monitoring periods of young school dropouts. Individual group workshops involving the different departments are offered to young people so they can set up a new professional project, confirm it and implement it. The guidance centre is also open to adults seeking information, guidance or assistance in authenticating acquired professional experience.

7. Upgrading skills through lifelong learning

Adult participation in lifelong learning is at 13.9% compared to 9% EU average. In Luxembourg already a large proportion of employees in large enterprises participate in training (60% compared to EU average of 48%)[7]. A law approved on 6 March 2012 aims to motivate small companies to take greater advantage of continuing education programmes, and to get companies in general to extend continuing education programmes to workers with low levels of initial training.

The national strategy for lifelong training, which was adopted in November 2012, specifies measures for meeting the national target of at least 15% of adults to participate in education and training programmes[8]. The national strategy is based on cross-sector principles and separate measures for connecting the multiple initiatives and providing better visibility to Luxembourg's national policy. The national qualifications grid will be implemented to facilitate recognition of training programs and to place special emphasis on getting vulnerable groups to participate.

[6] https://www.fit4job.lu/about

[7] Continuing vocational training News Release: http://epp.eurostat.ec.europa.eu/cache/ITY_PUBLIC/3-11062013-AP/EN/3-11062013-AP-EN.PDF

[8] Livre blanc sur la stratégie nationale en matière de Lifelong Learning. http://www.s3l.lu/livreblanc/Livre%20blanc/Livre%20blanc%20Stratégie.pdf