Reviews of National Policies for Education

Education in Latvia

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BETTER POLICIES FOR BETTER LIVES

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Foreword

Latvia is committed to providing all its citizens with a high-quality and inclusive education and has been making steady progress towards realising this goal. Since the start of the millennium Latvia has managed to significantly improve the performance of its education system. Nowadays children start their education at a young age and many of them continue into tertiary education. These are remarkable achievements considering the socio-economic challenges Latvia has faced during this period including the economic recession that struck the country hard during 2008-10, and the ongoing decline of the student population. Sustaining this progress will be central to realising Latvia's ambitions in education and for society as a whole.

This report has been developed as an input into the process of Latvia's accession to the OECD. It provides an assessment of Latvia's policies and practices compared to OECD best policies and practices in education and skills. Covering the whole education system from early childhood education and care to tertiary education, it assesses current policies and practices against five important principles of well-performing education systems:

- a strong focus on improving learning outcomes
- equity in educational opportunity
- the ability to collect and use data to inform policy
- the effective use of funding to steer reform
- extended multi-stakeholder engagement in policy design and implementation.

The report highlights not only the many strengths of Latvia's education system, but also its challenges and provides recommendations for improvement.

I hope this report will support Latvia in its reform efforts and help realise its ambitions for enhancing the quality and equity of its education system and strengthening the contribution of education and skills to economic growth and competitiveness. The OECD is there to help Latvia in this effort.

Andreas Schleicher

Director for Education and Skills and Special Advisor
on Education Policy to the Secretary-General
OECD

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This report is the result of an assessment of Latvia's policies and practices in the field of education and skills, informed by international experience and best practices from OECD countries. The assessment process has involved a background report prepared by the Latvian Ministry of Education and Science, an OECD pre-visit to help define the key areas for review, and an OECD review visit to Latvia in November-December 2014, as well as many exchanges and consultations with different experts and stakeholders in Latvia and internationally.

The review team (see Annex A) is indebted to the Latvian government which under the leadership of the Ministry of Education and Science has supported this review. We are also grateful to Reinis Markvast and Jeļena Muhina for organising the review visits and to Jeļena for co-ordinating the whole review process.

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Abbreviations and acronyms

AES	Adult Education Survey
AIC	Academic Information Centre
AIKNC	Latvian Higher Education Programme Accreditation Commission
BIZ	Berufsinformationszentren (Austria)
CfE	Curriculum for Excellence (Scotland, the United Kingdom)
CPD	Continuing Professional Development
DQP	Desenvolvendo a Qualidade em Parcerias (Portugal)
ECEC	Early Childhood Education and Care
EDI	Early Development Index
EQAR	European Quality Assurance Register
EQF	European Qualifications Framework
ERDF	European Regional Development Fund
ESF	European Social Fund
EU	European Union
EYTS	Early Years Teacher Status (England, the United Kingdom)
ICT	Information and Communications Technology
ISCED	International Standard Classification of Education
IT	Information Technology
MoES	Ministry of Education and Science
NEET	Not in Employment, Education or Training
NATO	North Atlantic Treaty Organization

NGO	Non-Governmental Organisation
OFIP	Ontario Focused Intervention Program
PIRLS	Progress in International Reading Literacy Study
PISA	Programme for International Student Assessment
PPP	Purchasing Power Parity
R&D	Research and Development
SEC	Sectoral Expert Council
SEDA	State Education Development Agency
SEIS	State Education Information System
SEQS	State Education Quality Service
SME	Small and Medium-Sized Enterprises
STEM	Science, Technology, Engineering and Mathematics
TIMSS	Trends in International Mathematics and Science Study
VECC	Vocational Education Competence Centre
VET	Vocational Education and Training
VISC	National Centre for Education

Executive summary

The performance of Latvian students on the Programme for International Student Assessment (PISA) has improved significantly since the start of the millennium. Twelve years on, Latvian students have neared the performance of many of their peers in OECD countries and even scored slightly above the OECD average in science. Further, while ongoing demographic decline has significantly decreased the absolute number of students, the share of the population in education has grown considerably since the mid-1990s. Children start their educational career at a young age, younger than many OECD countries, and many continue into tertiary education. Sustaining this progress will be central to realising Latvia's goal of providing all its citizens with a high-quality and inclusive education for personal development, human welfare and sustainable national growth. Latvia aims to achieve this goal by increasing the quality of the education environment and supporting the development of professional and social skills; this in turn requires increasing the efficiency of the system.

This review has been undertaken as part of the process of Latvia's accession to the OECD Convention. Its purpose is to evaluate Latvia's education policies and practices in comparison with OECD member countries. The review looks at where Latvia stands on the eve of accession, and how far it has to travel to realise its educational aspirations. This international comparison brings to the fore the many strengths of Latvia's education system arising from its past commitment to learn from global best practice, but also highlights areas where further progress could be made. This review suggests how Latvia can overcome these challenges. It assesses current policies and practices against five important principles of well-performing education systems: a strong focus on improving learning outcomes; equity in educational opportunity; the ability to collect and use data to inform policy; the effective use of funding to steer reform; and extended multi-stakeholder engagement in policy design and implementation.

Improving education outcomes

Latvia has a relatively well-educated population and its students perform relatively well in international comparisons. Though the share of top performers in PISA 2012 was lower than in many OECD countries, compared

to the OECD average, Latvia has a smaller share of students lacking basic skills. Latvia aims to further improve the quality and equity of its education system through a range of reform measures on several fronts.

The single most important step Latvia could take to improve learning outcomes will be to establish the conditions for high-quality teaching and leadership to thrive. Latvia has already taken several steps in this direction. However, it should consider adopting a more systematic approach to reform with a comprehensive medium- to long-term human resource strategy for the education system. This should include raising salaries to nationally competitive levels, but as part of a well-designed career structure founded on teacher and school leadership standards that guide appraisals and inform professional development. It should develop a coherent assessment and evaluation framework built around educational goals and improving student learning and invest in teachers' assessment capacity. The ongoing reforms of vocational and tertiary education which are essential for improving the quality and (labour market) relevance of education should also be fully implemented.

Promoting equity in educational opportunities

Though Latvia has made good progress in expanding access and improving learning outcomes, the data suggest there still are considerable disparities in learning opportunities. Despite a range of policies, from compulsory participation in early childhood education and care for 5-6 year-olds to ensuring free basic and upper secondary education, there are marked differences in student performance between rural and urban schools, while students with special education needs and/or from at-risk groups do not benefit equally from quality learning opportunities. Reducing inequities will require greater and more targeted efforts to support students in rural areas and/or at risk of social exclusion. Latvia needs to strengthen the quality of teaching in rural schools and continue its efforts to integrate students with special needs in regular schools. Furthermore, at the tertiary level the funding model currently under development should be more equitable, moving away from the purely merit-based selection system to ensure promising disadvantaged students have access to free study places.

Gathering and using data to guide skill development

Latvia is committed to improving the quality and use of data for evidence-based policy making. It recognises the need to improve its education information system and the strategic use of research to inform its reform agenda. The Ministry of Education and Science (MoES) intends to develop a comprehensive quality monitoring system, but only by 2023.

It should consider bringing forward the development of this system in order to enhance its capacity for evidence-based policy making and as such help Latvia achieve its education objectives by the year 2020. Vocational education and tertiary education have benefited greatly in recent years from a series of important research reports that have acted as a catalyst for education reforms. Such efforts should be continued and expanded to other levels of education. MoES should further strengthen its own capacity for data collection and analysis, and consider supplementing it with an independent research institution. At the school level there is much scope to strengthen self-evaluation and teacher appraisal to foster sustained school improvements.

Ensuring adequate and efficient education funding

Latvia's public expenditure on education and per-student funding at all levels are lower than many OECD countries which means that efficiency in education spending is especially important to make the most of what is invested. In the longer run, there is a risk that education spending will prove inadequate to achieve the desired outcomes of equity and quality, especially given the pressure to invest in other social services. Long-term efficiency gains depend on the success of the reforms in school and tertiary education funding which Latvia has already embarked on and will require making clear spending choices. Raising teacher salaries to nationally competitive levels will improve recruitment but will necessitate bigger class sizes and higher student-teacher ratios. The demographic decline will require Latvia to revisit the education system's capacity, including numbers of schools and tertiary education institutions, and staffing levels.

Engaging stakeholders in designing and implementing policy

Developing the professional and social skills of Latvia's citizens requires the full commitment of all stakeholders within the system and beyond. Latvia has a well-established culture of involving key stakeholders in the design and implementation of education policies and mechanisms to achieve this. There is scope for improvement, however. Realising Latvia's lifelong learning ambitions will require stronger co-ordination and collaboration across national and local levels, involving key stakeholders such as vocational schools, companies and non-governmental organisations. The recent structural involvement of social partners in vocational education through the Sectoral Expert Councils is a positive development, but it will take time and additional effort for this collaboration to flourish. At the tertiary level, there is much to be gained from further involving external stakeholders, such as companies or international researchers, in the governance of institutions.

Chapter 1

Latvia and its education system

This chapter provides a brief description of Latvia's education system and the context in which it operates. Since independence in 1991, Latvia has experienced continuing demographic decline. Income inequality is relatively high, and not all groups have benefited equally from its recent economic recovery. Latvia has high levels of access to and participation in school and student performance has been improving.

Latvia faces a number of policy challenges. It has developed a highly decentralised education system which has proved both a strength and a weakness. Funding levels are low by OECD standards and fell further during the economic crisis. The education system needs to increase its efficiency and adjust to a declining population and an ageing teaching workforce. Finally, Latvia needs to improve the data it gathers about the education system and improve its ability to use that data in order to improve its education system for the future.

Context

The Republic of Latvia is a country in northeast Europe that is situated on the Baltic Sea. It is bordered by Estonia to its north, Lithuania to the south, and the Russian Federation and Belarus to the east. The country had about 2 million inhabitants in 2014 (Central Statistical Bureau of Latvia, 2015) in four historical and cultural regions: Kurzeme, Zemgale, Vidzeme and Latgale. About one-third of the population reside in Latvia's capital city, Riga, and one-third in rural areas. Latvia became a member of the European Union (EU) and the North Atlantic Treaty Organization (NATO) in 2004.

Latvia is a parliamentary republic established in 1918 which regained its independence from the Soviet Union in 1991. Legislative power is in the hands of the Saeima, a single-chamber parliament with 100 deputies. The head of the state is the president, who is elected by the parliament for a period of four years. The president signs laws, nominates the prime minister (who leads the government) and performs representative functions. After elections, the Cabinet of Ministers, the highest executive body, adopts a Declaration of Intended Activities which is then transformed into the government's Action Plan. This plan defines the main results to be delivered by the respective ministries, including the Ministry of Education and Science (MoES).

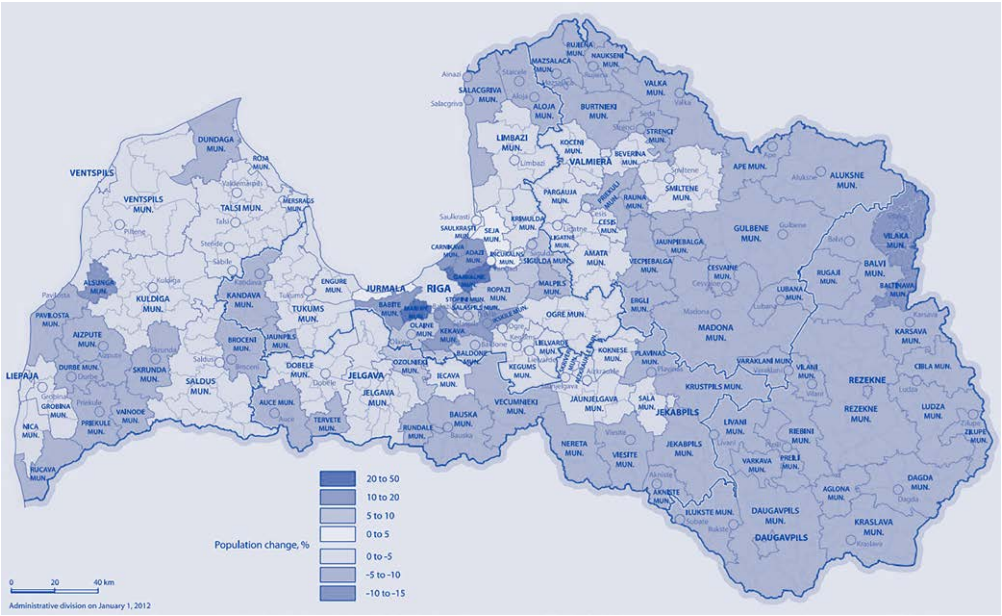
Latvia's 110 local governments (*novadi*) and 9 large "republican cities" (*republikas pilsētas*) have their own council and administration. Each of these 119 municipalities has significant responsibility and autonomy for public service delivery. They vary considerably in size, ranging from Riga, with about 643 600 residents, to the municipality (*novads*) of Baltinava with about 1 200 residents. The current administrative structure is the result of a territorial reform in 2009 in which the number of municipalities was reduced from over 500 through amalgamation.

The Latvian population is composed of several ethnic groups. In 2014, it consisted of 61.4% Latvians and 26.0% ethnic Russians with smaller minorities of Belarusians (3.4%), Ukrainians (2.3%), Poles (2.2%), and other small minorities (4.7%) (Central Statistical Bureau of Latvia, 2015). While Latvia has always had a multi-ethnic society, Latvians have always been the largest ethnic group over the past century, and the proportion of Latvians has considerably increased during the past two decades. This is due to large-scale emigration of Russians, Ukrainians and Belarusians whose numbers almost halved between 1989 and 2011 (Hazans, 2013; OECD, 2014a).

For several decades Latvia has experienced a constant decline in population. By 2013 it had lost 276 000 residents since 2003 (14%) and 562 000 since 1992 (22%). This development is due to several factors: an ageing population, low fertility rate (1.52 children per woman in 2013) which for many years has been considerably below the replacement level (Eurostat, 2015a) and fierce emigration which was fuelled by the economic

recession of 2008-10. Of the adult emigrants that left between 2000 and 2011 three-quarters were younger than 35 at the time of their departure, including many who were relatively well educated (Hazans, 2013). According to government forecasts, the decline will continue in the years to come, especially among working-age residents. Only since 2011 have migration indicators started to improve, with emigration rates falling, coupled with an increase in immigrants. Latvia is also experiencing internal migration (Figure 1.1), mostly from rural to urban areas with approximately 40% of the flow going to the city of Riga (Krišjāne and Lāce, 2012). These changing demographics have considerable implications for the planning of public services in Latvia.

Figure 1.1. **Internal migration in Latvia (2007-12)**



Source: State Regional Development Agency (2012), *Development of Regions in Latvia 2011,* State Regional Development Agency, Riga, www.vraa.gov.lv/uploads/regionu%20parskats/Regionu%20attistiba%20Latvija%202011%20ENG_Q_ia%20kartes%20horizontali.pdf.

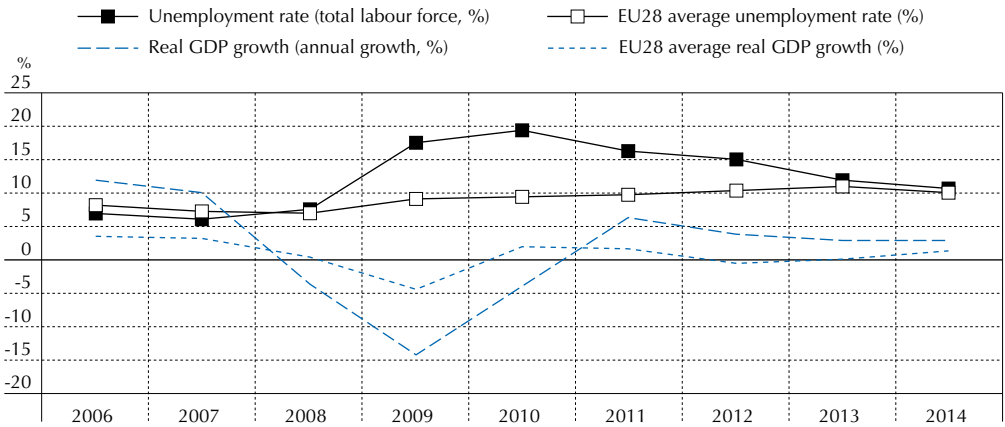
Latvia has experienced a volatile macroeconomic climate in recent years. The economy has rebounded strongly from a deep recession between 2008 and 2010 that followed a boom in real estate and the financial sector in the years before, due in part to EU accession in 2004. Since 2011, its economic growth has been one of the highest in the European Union. The competitiveness of the Latvian economy is underpinned by low labour costs which in 2013 were at 38% of the EU average (Ministry of Economics, 2014a).

Despite a steady increase since 2010, Latvian gross domestic product (GDP) still remains low in international terms both overall and per capita. As of 2013, its GDP per capita was EUR 11 600, just 55% of the best-performing OECD countries (OECD, 2015a). It remains below most EU countries including Estonia and Lithuania, and was less than half of the average of the 28 EU member states (EU-28) (Eurostat, 2015b).

Although the bulk of the country's economic activity is in the service sector, exports recovered strongly following the crisis and have played a major part in Latvia's recovery. In 2013 the export share of tradable sectors (agriculture, forestry, industry and transport) had increased by almost 10% over 2008 levels. By 2012 exports were 51% higher than their pre-recession peak in 2008 and have gained an increasing market share (Vanags, 2013). In 2012, Latvia's most important trading partners were Lithuania (18% of total trade turnover), followed by Estonia, Germany and the Russian Federation (10% each) (LIAA, 2014).

The recent recovery is also reflected in improved labour market indicators. The unemployment rate for the total labour force (aged 15 to 74), which reached a peak of 19.5% in 2010, dropped to 10.8% in 2014 (Eurostat, 2015c) (Figure 1.2). While youth unemployment is also decreasing, it is still higher than in other age groups: 19.6% of 15-24 year-olds were unemployed in 2014 which was higher than the OECD average of 15.0% (OECD, 2015b).

Figure 1.2. **Unemployment rate and real GDP growth in Latvia, compared to EU-28 average, percentage (2006-13)**



Sources: Eurostat (2015c), "Total unemployment rate", *Eurostat database,* http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=tsdec450&plugin=1; Eurostat (2015b), "Real GDP growth rate", *Eurostat database,* http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=tec00115&plugin=1.

In 2012, 86% of 25-64 year-olds with a general tertiary qualification and 92% with a professional tertiary qualification were employed in Latvia. Among adults with just an upper secondary qualification the rate was 66%. For adults with only a lower secondary qualification this percentage was 53% (OECD, 2014b). The educational profile of the unemployed shows that vocational and general upper secondary education graduates represent over 60% of the unemployed, those with basic education another 20%. Among the economically inactive, those with only basic education dominate (OECD, 2015a).

National minorities were hit disproportionally by the economic crisis in terms of employment. The factors behind these outcomes have not yet been fully identified, but work experience and skill sets, including relatively weaker Latvian language ability, are likely to be relevant (OECD, forthcoming, 2015a; Falco et al., 2015a; Lehmann and Zaiceva, 2015).

Despite the improved economic situation in recent years, unemployment rates in Latvia are still above OECD and EU-28 averages despite improvements in recent years, with various sources pointing to emerging skills mismatches (IMF, 2014; OECD, 2015a). A recent OECD report (2015a) concluded that given the low participation of adults in lifelong learning – in 2014 a mere 5.5% of 25-64 year-olds participated in both formal and non-formal education and training – and persistent informality within the Latvian economy, many of the working-age population lack the skills to become more productive.

Poverty and inequality remain major challenges for Latvia. In 2014, 32.7% of the population was at risk of poverty or social exclusion which is considerably lower than three years before (40.1%) but still much higher than the EU-28 average of 24.5% (2013) (Eurostat, 2015d). Income inequality is also high compared with EU and OECD countries (Zasova and Zdanovica, 2014; OECD, 2015a; Eurostat, 2015e). Spending to protect the most vulnerable is low, with social spending amounting to only about 15% of GDP, compared to the EU average of 28%. Relatively low levels of income redistribution and the fact that a number of benefits are universal (state family benefit, childcare benefit, child birth grant) have resulted in a greater proportion of social benefits going to the richest quintile than to the poorest. This suggests the need for better targeting (OECD, 2015a).

Considerable disparities also exist between regions and municipalities. The Latgale region in particular has many disadvantaged municipalities, with high unemployment rates, low tax revenue and negative migration flows. In 1995 the Financial Equalisation Fund was established to address regional inequalities and there is also special state funding for municipalities

with the lowest estimated revenue per inhabitant after financial equalisation. Nevertheless, regional disparities still remain substantial (OECD, 2015a). The government in 2015 adopted a new local government financial equalisation law that will be applied to the local government equalisation calculation for 2016 and subsequent years. The new system is based on revised principles to evaluate demographic criteria, average local-government incomes and proportionate distribution of subsidies from the state budget so as to bring all local governments closer to the level of those with the highest incomes per capita. It also takes into consideration projected personal income tax revenues, property tax revenues and macroeconomic forecasts.

Latvia has also developed a polycentric development policy aimed at strengthening the competitiveness, accessibility and attractiveness of the 30 largest urban areas (Figure 1.3):

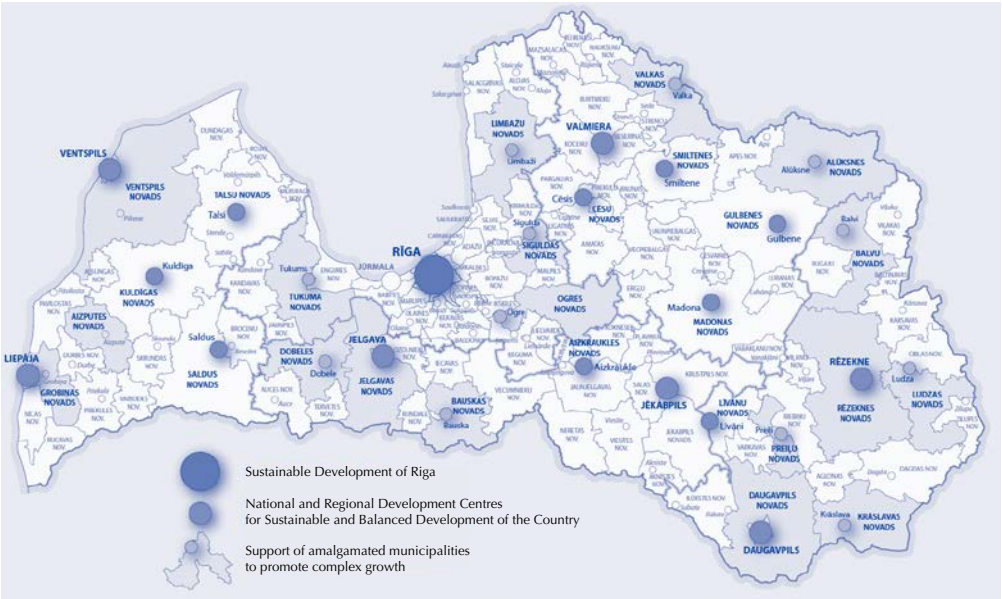
- 9 national development centres – republican cities or urban municipalities (more than 20 thousand inhabitants, of which 5 have more than 50 thousand inhabitants).
- 21 regional development centres – towns in urban-rural municipalities (5 to 20 thousand inhabitants).

This network of centres is intended to provide a territorially balanced distribution of functional urban areas across Latvia, providing jobs and public services to all residents in urban and rural areas, and driving growth in the regions.

Under the polycentric development policy, Latvia has defined a set ("basket") of public services for each level of settlement – national, regional, local development centres and rural areas. Provision of basic services is made as close as possible to the people while other services are concentrated in the 30 largest urban areas. The framework aims to support the rationalisation and amalgamation of services in particular sectors (e.g. health, culture, sports, education and social care) at each level of settlement. The European Union is financially supporting the implementation of the framework (MoES, 2015).

The National Development Plan 2014-2020 (CSCC, 2012) addresses income inequalities through measures which include decreasing the tax burden for low-income households and promoting family support services, as well as fighting youth unemployment. Promoting high-quality vocational education, lifelong learning and tertiary education are key components of Latvia's strategy to reduce inequalities in income and poverty and bring prosperity throughout Latvia.

Figure 1.3. **The Latvian polycentric development structure**



Source: Ministry of Environmental Protection and Regional Development (2010), *Teritoriālā pieeja atbalsta plānošanā un sniegšanā* [Territorial Approach in Planning and Providing Support], Ministry of Environmental Protection and Regional Development, Riga, www.varam.gov.lv/in_site/tools/download.php?file=files/text/publikacijas/publ//TeritPieejaAtbPlanSnieg.pdf.

The Latvian education system – a brief overview

The Latvian education system is relatively small. In the school year 2013/14, there were 423 389 children and students enrolled in the Latvian education system (Table 1.1). This number has decreased considerably in the past decades as a result of ongoing demographic decline and emigration.

Latvia provides a legal entitlement to early childhood education and care (ECEC) for all children from 1.5 years of age throughout the country. ECEC was made compulsory for 5- and 6-year-olds in 2002 and is considered part of general education (Eurypedia, 2015). ECEC in Latvia is commonly referred to as "pre-school education" and is defined holistically, encompassing the cognitive, socio-emotional and health development of the child. In 2013/14, 93 533 children were enrolled in ECEC institutions, with minority-language programmes available in some institutions.

Table 1.1. **The Latvian education system – Overview in numbers**

	Enrolment		Number of teaching/ academic staff	
Educational level	2005/06	2013/14	2005/06	2013/14
Early childhood and care (pre-school)	74 968	93 533	8 211	9 703
General education	298 516	209 130	28 323	23 114
Basic education (Grades 1-9)	217 038	160 400	19 799	16 039
Upper secondary education (Grades 10-12)	57 218	30 375	5 528	4 609
Special education schools	9 691	7 088	1 955	1 773
Evening schools (Grades 1-12)	14 569	11 267	1 041	693
Vocational education	42 737	31 055	3 932	3 329
Higher education and college	131 125	89 671	4 682	4 888

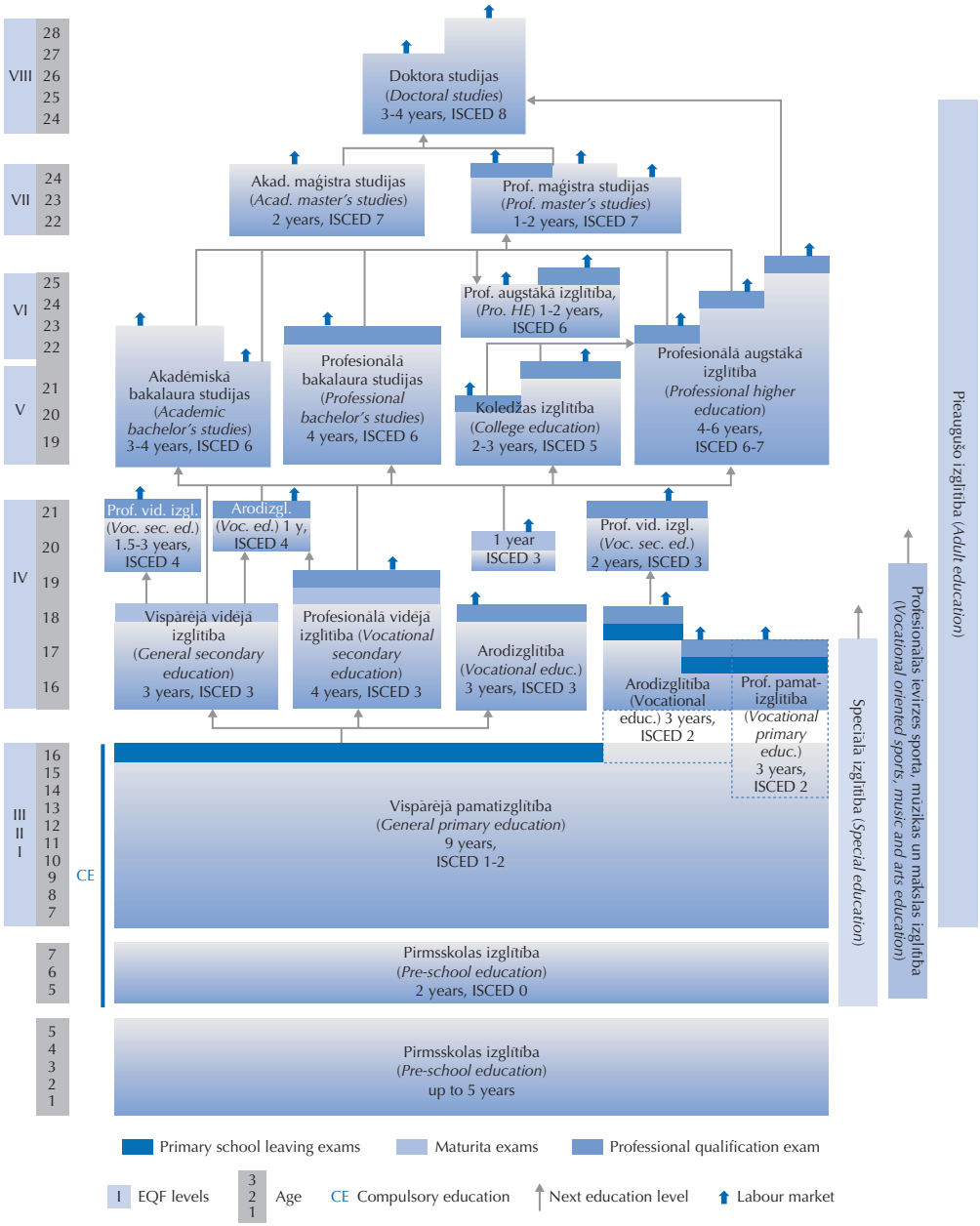
Source: Central Statistical Bureau of Latvia (2015), *Statistical Yearbook Latvia 2014,* Central Statistical Bureau of Latvia, Riga, www.csb.gov.lv/sites/default/files/nr_01_latvijas_statistikas_gadagramata_2014_statistical_yearbook_of_latvia_14_00_lv_en_0.pdf.

Figure 1.4 outlines the structure of education in Latvia. Compulsory single-structure basic education lasts from Grades 1 to 9 (age 7 to 16) and is divided into 6 years of primary education and 3 years of lower secondary education. Transition to the next class takes place automatically as there are no examinations to pass from one class to the next. Basic education ends after Grade 9 with final examinations in students' first language, the Latvian language for students in minority schools, mathematics, Latvian history and a foreign language, leading to the award of a certificate which is needed for entry into upper secondary education.

Although it is not compulsory, most students in Latvia go on to obtain an upper secondary education (Grades 10 to 12). Upper secondary education is provided in general and vocational pathways and on a full-time or part-time basis. Students may choose the most suitable institution for upper secondary schooling.

The various vocational upper secondary education programmes take between two and four years to complete and lead to different qualification levels. Only a few schools offer lower secondary vocational education. Most vocational education programmes start at upper secondary level and are concentrated in the republican cities and larger towns.

Figure 1.4. **The Latvian education system**



Source: ReferNet Latvia (2014), *VET in Europe – Country Report Latvia,* Cedefop (European Centre for the Development of Vocational Training), www.refernet.lv/uploads/Country_Report_LV_2014.pdf.

To improve the attractiveness, quality and labour market relevance of vocational education, in 2009 the government introduced reforms including consolidation of the vocational school network, the introduction of work-based learning and the development of occupational standards (OECD, 2015a). The government aims to equalise participation rates in general and vocational upper secondary education by 2020 (MoES, 2014). In 2013, 39% of upper secondary students were in vocational programmes, which is lower than the 2012 OECD and EU averages of 44% and 50% respectively (OECD, 2014b).

Students in general upper secondary education who pass the final exams are awarded the certificate of general secondary education which they need to enter tertiary education. Vocational upper secondary students who pass the final exams are awarded a diploma of vocational education and a professional qualification. Those students who have completed a three-year vocational education programme first need to successfully complete a fourth year ("bridge year") of study before gaining access to tertiary education.

Latvia has a diverse and comparatively autonomous tertiary education sector and almost two-thirds of upper secondary graduates (62.8% in 2012) go on to tertiary education. Nevertheless student numbers have decreased significantly in the past decade, to fewer than 90 000 in 2013/14 (65 000 of whom were studying full-time). This is a decline of more than 40 000 compared to 8 years before. In the same period however the number of tertiary education institutions and colleges grew from 57 to 60 (Central Statistical Bureau of Latvia, 2015).

In 2013/14, 27% of tertiary students were in private institutions, which is higher than in many OECD countries (the OECD average was 15% in 2012) (OECD, 2014b). The state funds a pre-defined number of free study places (40% in 2014/15), while the majority of students (60%) pay tuition fees. The most popular programmes are social sciences, business and law, followed by engineering.

Teachers and school leaders

In 2013/14, there were 41 034 full-time equivalent teachers and academic personnel in service (see Table 1.1) of which the great majority were women. This represents a drop of approximately 9% from 2005/6. The Latvian government manages the supply of new teachers by forecasting the demand for newly qualified teachers and by setting state-funded study places for teacher students on a yearly basis, taking into consideration budget restraints.

The number of teacher students has decreased during the last decade, but not as quickly as the decline in student numbers.

Latvia has an ageing educational workforce. In 2012, 35% of education staff at the primary level and 45% at the lower and upper secondary level were over 50 (Eurostat, 2014a). The country is unlikely to be faced with drastic shortages of teachers and academic staff, however, due to the projected decline in student numbers in the coming years.

Working in education is generally not considered an attractive career option in Latvia and the sector consequently struggles to attract young talent. Salaries are low and the career structure is flat. The salary of a lower secondary teacher who has been in service for 15 years amounts to just 52% of GDP per capita (corrected for differences in purchasing power parities) while their peers in OECD countries, with similar experience, receive on average 124% of GDP per capita (OECD, 2013a). Further, while teachers and academic staff are considered to be part of the civil service in most OECD countries, this is not the case in Latvia.

The Latvian government has therefore made "raising motivation and professional capacity of teachers and academic personnel" a priority (MoES, 2014). Several measures have been taken recently to help achieve this objective including the piloting of a new teacher remuneration system and the implementation of a teacher appraisal system, which is described in Chapter 3.

Main trends in access, quality and equity

During the last two decades Latvia has made good progress in expanding participation in education. While the number of students decreased considerably in absolute terms as a result of ongoing demographic decline, the share of the population in education has grown considerably since the mid-1990s. Children in Latvia start school young, younger than in many OECD countries, and the majority continue on to tertiary education. In Latvia more than eight out of ten young adults are expected to enter a tertiary-type A programme during the course of their life (OECD, 2014b). National and international data show improvements in average student performance although they still point towards considerable disparities in learning opportunities. Latvia recognises these equity concerns and is committed to implementing its inclusive education policy, targeting two main groups: children and youth at risk of exclusion due to their development, abilities or health condition; and those at risk of exclusion due to social conditions (MoES, 2014).

High levels of access and participation

Following a period of decline in the early 1990s, when a severe recession struck the country after gaining independence, participation in education started to recover in the mid-1990s. Since then Latvia has seen a gradual expansion of participation in education, particularly at those levels where participation had been relatively low.

Participation in ECEC is high and starts early. Between 2000 and 2013, the net enrolment rate in ECEC for 3-6 year-olds increased from 55% to 91% (UNESCO Institute for Statistics, 2015a). In particular, there was a remarkable increase in participation from 2002 when ECEC was made compulsory for 5- and 6-year-olds. In 2013 the average Latvian child entering primary education had enjoyed 3.7 years of ECEC, compared to an OECD average of 2.3 years. This shows that participation in ECEC is high and starts at an early age. Participation rates are above the OECD average for 3- and 4-year-olds. In 2012, 87% of 4-year-olds and 80% of 3-year-olds were enrolled in some form of ECEC, compared to OECD averages of 84% and 70% respectively (OECD, 2014b).

Enrolment in primary and lower secondary education is close to universal and has been for many years. In 2013, the total net enrolment rate was 99% for the primary level and 97% for the lower secondary level (UNESCO Institute for Statistics, 2015b). In 2012, 90% of young people were expected to complete upper secondary education over their lifetime, compared to the OECD average of 84% (OECD, 2014b).

The proportion of 25-64 year-olds who had obtained a tertiary degree in 2013 (31%) was only slightly below the OECD average (32.6%). The proportion of 30-34 year-olds with a tertiary degree has increased steadily over the past decade and by 2013 had surpassed the 40% target set by the Latvian government for 2020 (MoES, 2014). As in most OECD countries, students in tertiary education tend to favour academic tertiary programmes over professional ones. In 2012 84% of young adults were expected to enter an academic tertiary programme tertiary while just 25% of students were entering professional tertiary programmes. Latvia has a lower rate of entry into advanced tertiary education (2.1% in 2012) than the OECD average (2.6%) (OECD, 2014b).

Latvia's school life expectancy from the primary through to tertiary education level increased from 14.2 years to 15.6 years between 2000 and 2013, which is similar to the increase across OECD countries during the same period (from 14.5 years to 16.1 years on average) (World Bank, 2015).

The school system is comprehensive up to the end of lower secondary, with few students repeating grades, high transition rates between lower and upper secondary, and low numbers leaving school early. In 2011/12 for example the share of primary and lower secondary students repeating a

year had fallen to 1.7% from 2.5% the year before. In 2012, 95% of students who completed lower secondary education continued into upper secondary education (MoES, 2015).

Dropping out and early school leaving are more frequent in the vocational pathway, which has been suffering from a lack of attractiveness and quality (MoES, 2014). An analysis of MoES statistics reveals that the average annual non-completion rate of students in general upper secondary programmes was 1.8% in 2012/13. By contrast, average annual dropout rates across vocational education programmes have ranged from 13% to 16% over the last few years. At programme lengths of around three years, this implies that less than two-thirds of students who enrol in a vocational education programme finish the course (OECD, 2015c).

Nonetheless the data also show Latvia has made good progress in reducing the numbers leaving school early. The proportion of early school leavers declined from 14.3% in 2009 to 8.5% in 2014 (Eurostat, 2015f). In addition Latvia has also embarked on a reform of vocational education to improve its attractiveness, quality and relevance. It is believed this reform will contribute to reducing early leaving among vocational education students.

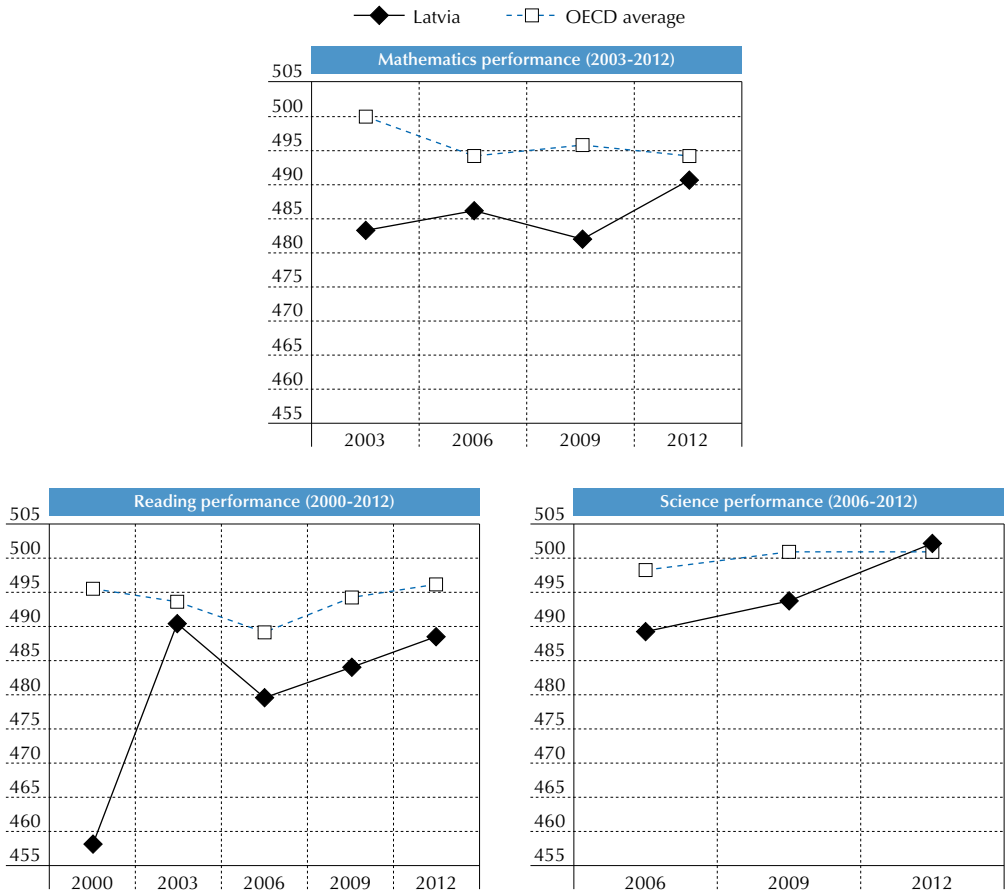
Despite high participation in formal education, lifelong learning is not very well developed in Latvia. In 2013, 6.5% of Latvian adults aged 25 to 64 participated in formal and non-formal lifelong learning, well below the EU average of 10.5% (Eurostat, 2015g). Latvia is expected to face shortages in the coming decades of workers with medium and higher level vocational education and among senior specialists in science and engineering, information and communications technology (ICT), agriculture, forestry, and fisheries. At the same time it will have an oversupply of specialists in human and social sciences. Policy makers are aware of this imbalance and as a response have set in motion a number of reforms (OECD, forthcoming). Promoting lifelong learning plays a key role in addressing the imbalance, but this is an area where much more work remains to be done (see Chapter 4).

Improvements in average student performance

Latvian students perform relatively well in international comparisons. The OECD Programme for International Student Assessment (PISA) provides benchmarks for average student performance across education systems. Latvia has participated in all PISA cycles since the first assessment in 2000. In the assessment in 2012, Latvian students reached the PISA average in science but were below the OECD average in reading and mathematics. Latvia made significant progress between 2000 and 2003 with only a slight improvement observed after that (Figure 1.5). Other international studies, including the Progress in International Reading Literacy Study (PIRLS) in

2001 and 2006, and the Trends in International Mathematics and Science Study (TIMSS) confirm the positive development in the performance of Latvian students since the start of the millennium (OECD, 2014c).

Figure 1.5. **PISA performance across all subjects (2000-12)**



Source: OECD (2014c), *PISA 2012 Results (Volume I, Revised edition, February 2014): What Students Know and Can Do: Student Performance in Mathematics, Reading and Science,* OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264208780-en.

Latvia has a relatively narrow spread in scores in all the three PISA subjects, with fewer top-performing students (proficiency level 5 or 6) and low-performing students (below proficiency level 2) compared to the OECD average (Table 1.2). Although the shares of top performers have not changed much over time, Latvia saw a significant reduction in the shares of low-performing students in reading (between 2000 and 2012) and in science

(between 2006 and 2012). The Latvian government has set policy objectives and targets to further reduce the proportion of low performers and increase the proportion of top performers by the year 2020, with respect to the European Education and Training 2020 Strategy (Table 1.2). Meeting these will require further improvements in teaching and learning (see Chapter 3).

Table 1.2. **Percentage of students at PISA proficiency levels, PISA 2012**

	Low performing students (below level 2)			Top performing students (level 5 or 6)		
	Mathematics	Reading	Science	Mathematics	Reading	Science
Latvia	19.9	17.0	12.4	4.2	17.0	4.4
OECD average	23.0	18.5	17.8	8.5	18.5	8.4
Latvia 2020 targets	**15.0**	**13.0**	**10.0**	**8.0**	**7.0**	**8.0**

Source: OECD (2014c), *PISA 2012 Results (Volume I, Revised edition, February 2014): What Students Know and Can Do: Student Performance in Mathematics, Reading and Science, PISA,* OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264208780-en.

Attainment rates and labour market outcomes give an indication of the ability of an education system to develop individuals who can support their country's social and economic development. Upper secondary attainment has always been high across generations in Latvia but younger adults now have higher tertiary attainment rates than previous generations. In 2012 for example 39% of 25-34 year-olds had attained a tertiary education, compared with 22% of 55-64 year-olds (OECD, 2014b; MoES, 2015).

Though the data on earnings advantages for different levels of education were not available while writing this report, data on employment rates suggest significant labour market advantages from obtaining a tertiary education. Employment rates for tertiary education graduates in Latvia are comparable to the top OECD performers. In 2012, 86% of tertiary-educated Latvian people were employed, against an OECD average of 83%. Yet, graduates of lower levels of education lag behind. The employment rate of Latvian people with an upper secondary or post-secondary non-tertiary education was 67%, below the OECD average of 74%. The employment rate is lower among individuals with general upper secondary education than for individuals with vocational upper secondary education, which is also the case in most OECD countries (OECD, 2014b).

Striving for equity in student performance

The Latvian government is committed to implementing the principle of "inclusive education" which it defines as a process in which the diverse needs of all learners are met by increasing the opportunities for every learner

to participate in the learning process, culture and various communities and reducing the chances of exclusion from education and the educational process (MoES, 2014).

Latvia has implemented a range of initiatives to put these principles into practice and tackle disparities in education access and learning. All children have a legal entitlement to ECEC from 1.5 years of age. Municipalities provide free meals for children from poor families attending ECEC and if the municipality's financial capacity allows for it they provide free meals for all children. Compulsory basic education and upper secondary education is free and costs to households are low due to policies such as free school meals for Grades 1 to 4 and free transport for children in remote areas.

Latvia provides considerable support for ethnic minority languages, education and culture. The aim of Latvia's bilingual education policy is to give all basic education graduates a good knowledge of both Latvian and their own native language. The government has developed and financed its bilingual education model by providing publicly funded education in seven minority languages: Russian, Polish, Hebrew, Belarusian, Ukrainian, Estonian, and Lithuanian.

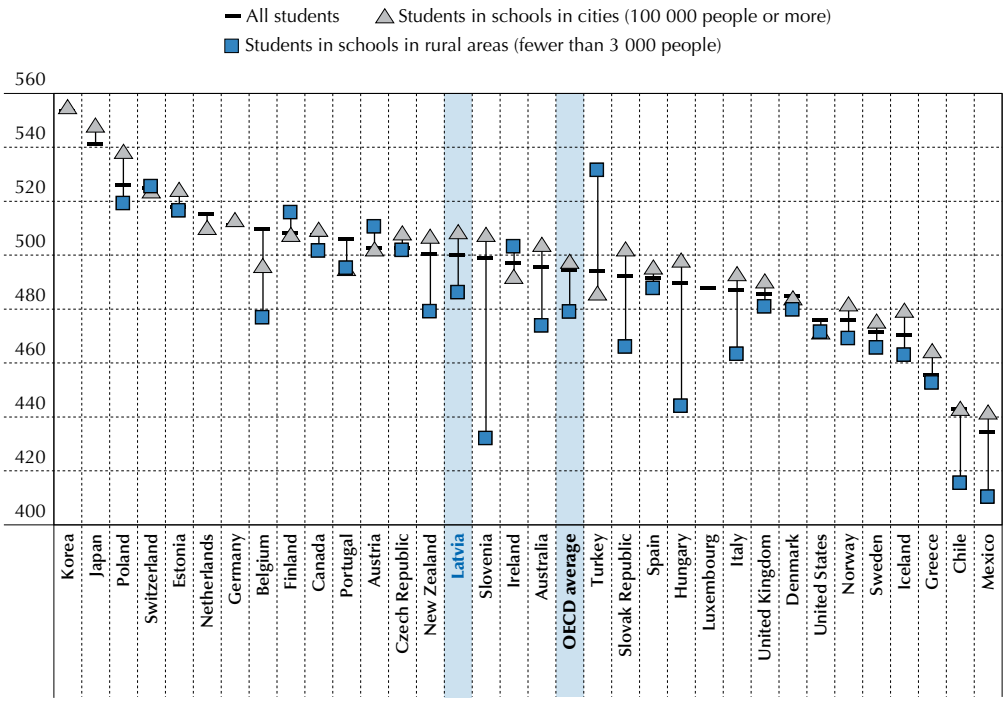
At the basic education level bilingual schools are entitled to determine which subjects are taught in Latvian. The basic education standards provide five different models for combining subjects in Latvian and a minority language. At the upper secondary education level, however, 60% of all subjects are taught in Latvian in the minority language stream (UNESCO, 2015; MoES, 2015).

Despite these and other policy measures, disparities in access to education and performance remain. Although the relationship between students' socio-economic background and performance in PISA 2012 was close to the OECD average, there is a significant performance gap between students in rural and urban areas in Latvia. Urban students outperform rural students by 52 points in mathematics, the equivalent of more than a year of schooling. After accounting for socio-economic status, a significant performance gap of 21 points remains. This suggests that the quality of education is one of the factors contributing to disadvantage. TIMSS and PIRLS showed similarly significant differences in the performance of Grade 4 students in urban and rural areas, and the gap has persisted and widened over time (Johansone, 2010; Geske et al., 2006). This issue is discussed further in Chapter 3.

Low educational attainment is a factor closely associated with being not in employment, education or training (NEET), as in other countries. Some 30% of those who are NEET in Latvia have only attained below upper secondary education (OECD, 2015c). Across the OECD, NEETs tend to come

from disadvantaged families and this is also the case for Latvia. In Latvia, the maximum educational attainment of NEETs' parents is on average 0.4 levels lower, using the International Standard Classification of Education (ISCED) levels, than that of non-NEETs' parents, which is comparable to the situation in OECD countries. Parents' employment status also differs between NEETs and non-NEETs. In Latvia, in 16% of cases where a young NEET lives with their parents, neither of the parents is in work, compared to 10% for non-NEETs.

Figure 1.6. **Mean mathematics performance in PISA 2012, by school location, after accounting for socio-economic status**



Countries are ranked in order of mean performance of all students, after accounting for socio-economic status.

Source: OECD (2013c), *PISA 2012 Results: Excellence through Equity (Volume II): Giving Every Student the Chance to Succeed,* PISA, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264201132-en.

At the tertiary level there are concerns that the merit-based selection process for free study places limits the chances of students from disadvantaged backgrounds continuing their studies. Government-funded

monthly stipends are also awarded to the highest-achieving students in the programme. It is feared that such a purely merit-based funding system exacerbates inequities (World Bank, 2014).

Females tend to outperform males in Latvia on a number of education-related indicators. In PISA 2012, girls performed better than boys in all three of the subjects, particularly in reading and science (OECD, 2014c). There is also a substantial gender gap and regional gap in the number of dropouts from secondary education. Dropout rates remain high for young boys, and early school-leaving rates[1] are about twice as high in rural areas as in urban areas (OECD, 2015c). Tertiary attainment is also generally higher for women, and the difference is larger than the OECD average. The tertiary attainment rate for 25-64 year-olds was 36% for women and 21% for men in 2012, while the OECD averages were 34% and 30% respectively. Among younger adults, the difference was even more marked: tertiary attainment rates for 25-34 year-olds were 51% for women and 26% for men (the OECD averages were 44% and 34% respectively) (OECD, 2014b). Striving for gender equality with a focus on boys and young men may help widen Latvia's talent pool and achieve its inclusive education ambitions and other education objectives.

As with some other OECD and EU countries, child poverty is an important issue for Latvia. Despite good progress in recent years, a sizable proportion of Latvia's youth (children under the age of 18) were still at risk of poverty and social exclusion: 35.3% in 2014, down from 44.1% in 2011. The Latvian government is committed to reducing socio-economic and regional disparities and breaking the cycle of disadvantage. With the support of EU and other funding it is continuing to implement a range of activities to develop the support system and proper education infrastructure necessary to provide these at-risk youth and youth with special education needs with a quality education (MoES, 2014).

For example, for the period 2014-20 the government intends to provide grants and other support to schools to support students in primary education who are identified as at risk of social exclusion. In the previous EU funding period (2007-13) the infrastructure of 36 general education schools and 61 special education schools was customised for children with special needs, including 13 special education schools in 2013 (MoES, 2015).

The evidence however also suggests much more needs to be done to better support the learning of students with special education needs and integrate them into regular classes where possible. The data showed that in 2013/14 fewer than 4 out of 10 students (35%) with special education needs were integrated in regular schools (MoES, 2015).

Cross-cutting issues in Latvia's education system

The Latvian National Development Plan 2014-2020 (CSCC, 2012), determines the medium-term priorities in the field of education and science. Its strategic objectives "Development of Competencies" and "Advanced Research and Innovation and Higher Education" emphasise competence development and improvement of research, innovations, and higher education (Box 1.1). These strategic objectives have been further elaborated in the Educational Development Guidelines 2014-2020 (MoES, 2014) which sets out the overarching goal and sub-goals for the development of the education system to be achieved by 2020.

This section focuses on four system-level factors that will be instrumental in achieving Latvia's goals and ambitions for education: 1) governing a highly decentralised education system; 2) ensuring adequate education financing; 3) realigning system capacity with demographic changes; and 4) using quality data and information for monitoring progress.

Governing a highly decentralised education system

Governance refers to the structures, institutions and dynamics through which education policy is defined and implemented. As in most OECD countries, education governance in Latvia involves a wide range of institutions, which creates a need for policy coherence and accountability. Responsibility for the education system is shared between MoES, its subordinate institutions and municipalities. In addition, branch ministries supervise and finance some vocational schools, gymnasia and tertiary education institutions.

In some municipalities, decentralisation has created opportunities for innovation and leadership, and enabled greater responsiveness to local needs. However, not all parts of the country have been able to benefit equally. Some municipalities, in particular the smaller ones, lack the capacity to effectively manage their local education systems. The evidence also suggests there is a need for rebalancing the high level of autonomy of municipalities with greater public accountability. The same can be said about the tertiary education system where institutional autonomy has to be weighed against quality assurance.

Ensuring an effective governance structure

At national level, the Saeima, the Cabinet of Ministers and MoES are the main decision-making bodies for education policy. MoES is the main body responsible for policy development and implementation in the fields of education, science, sports, state language and youth policy.

Box 1.1. **Latvia's education priorities for the period 2014-20**

According to the Education Development Guidelines 2014-2020, the overarching goal of the education system is to provide its citizens with a "quality and inclusive education for personal development, human welfare and sustainable development of the country". This document sets out the goal and sub-goals for the development of the education system and the directions ("lines of action") for their implementation, as well as the corresponding performance indicators and desired results. The guidelines define three sub-goals in accordance with the analysis of the issues identified in the previous planning period (2007-2013) and future challenges.

1. **Education environment: To increase the quality of the education environment by optimising the content and developing a suitable infrastructure.** The environmental quality of education at all educational levels is determined by its content, promotion of improvement and strengthening of individual knowledge, competences and skills, and professional and competent teaching personnel that pass this educational content to students; a modern educational environment; educational processes that promote comprehension and acquisition of the content; and the embodiment of inclusive education principles envisaging equal opportunities irrespective of needs and abilities, property status, social status, race, nationality, sex, religion and political beliefs, health conditions, place of residence, and occupation of students in an available, respectful, and supportive environment.
2. **Individual skills: To promote development of individual's professional and social skills based on values education for life and competitiveness in the work environment.** Professional and social skills are improved in the most purposeful way when an individual chooses an appropriate professional growth direction for the future, providing support mechanisms for schools and education leavers at the same time, thus increasing the overall education level and employment of Latvian society, while promoting the civic co-responsibility and social activity of students as a result of measures outside formal education, as well as strengthening the principle of lifelong learning.
3. **Effective management: To improve efficiency of resource management by development of institutional excellence and resource consolidation of educational institutions.** Improving resource management efficiency at the national, regional and local level by developing institutional excellence, including the introduction of education quality supervision or monitoring that will enable all interested parties to track, evaluate, and consequently affect education-related processes and results; optimisation of financing models; provision of education availability; and improvement of the international competitiveness of education.

These sub-goals are converted into 12 lines of action. Building on these lines of action, the guidelines include a framework with performance indicators and targets to be achieved by the years 2017 and 2020. MoES monitors and evaluates progress against these indicators.

Source: MoES (2014), *Education Development Guidelines 2014-2020*, Ministry of Education and Science, Riga, http://m.likumi.lv/doc.php?id=266406.

MoES is responsible for the whole education sector, ranging from ECEC to tertiary education. It develops policies and programmes, supervises and monitors the implementation of education policies, and approves the standards for education at basic and upper secondary levels and for teacher training and qualifications. It is also the founder of some government educational institutions with others founded by local governments, private persons or other ministries. MoES allocates state funding and funding from EU structural funds to educational institutions directly or through its subordinate agencies. It also assures the quality of the system (MoES, 2015).

MoES is supported by a number of subordinate agencies, several of them created in 2009 as a result of reorganisation and mergers aimed at reducing the complexity of the system and improving overall efficiency and effectiveness. These mergers took place under pressure from severe budget cuts at the time of the economic crisis. The subordinate agencies are charged with the following tasks:

- The State Education Quality Service (*Izglītības kvalitātes valsts dienests*, IKVD; established in 2009; around 60 employees) supervises education quality and is responsible for inspecting the education system from primary to upper secondary level and tertiary education level, including all public and private education institutions. It registers education institutions, licenses education programmes and carries out school (re)accreditation.
- The National Centre for Education (*Valsts izglītības satura centrs*, VISC; established in 2009; around 100 employees) is involved in development and co-ordination activities. Amongst these are curricula and examinations for pre-school, basic and general secondary education and vocational education, as well as subject standards and sample teaching-learning programmes. VISC acts as a co-ordinator for the development of textbooks, the support system for learners with special needs and teachers' continuing professional development, as well as organising extra-curricular activities.
- The State Education Development Agency (*Valsts izglītības attīstības aģentūra*, VIAA; established in 2012; around 140 employees) has very diverse functions within the sectors of education and science, including international co-operation. It oversees all activities related to EU programmes such as the Lifelong Learning Programme.
- The Latvian Language Agency (*Latviešu valodas aģentūra*; established in 2009; around 20 employees) aims to enhance the status and promote a sustainable development of the Latvian language. The agency implements the state language policy, formulated in the Guidelines of the State Language Policy for 2015-2020.

- The Agency for International Programmes for Youth (*Jaunatnes starptautisko programmu aģentūra*; established in 1999; around 30 employees) promotes youth activities and mobility (e.g. within the EU). The agency implements non-formal learning and information programmes and projects targeted at youth and those working with youth, and supports the link between non-formal learning and lifelong education.
- Two agencies, the Latvian Council of Science (*Latvijas Zinātnes padome*) and the Latvian Academy of Sciences (*Latvijas Zinātņu akadēmija*), fulfil advisory and representative functions with regard to research issues. The council also funds research and development (R&D) projects (MoES, 2015).

Other government actors also play a part in the education system. Branch ministries like the Ministry of Culture and the Ministry of Welfare supervise and finance some vocational schools, gymnasia and tertiary education institutions. The complex governance structure has more than once led to challenges in terms of co-ordination, implementation of policies and optimisation of provision.

For example in 2014/15, 33 of the 63 vocational education schools were under the responsibility of MoES, 14 under the Ministry of Culture, 1 under the Ministry of Welfare, 7 were run by municipalities and 8 were private institutions. This has led to overlap in the offer of programmes, limited labour market relevance and a lack of differentiation between the vocational schools. In a context of declining student numbers and tight public budgets this situation is not sustainable. Therefore as part of a larger reform of vocational education to improve the quality, relevance and attractiveness of vocational education, Latvia has set out to reorganise its vocational school network and has reduced the number of government vocational schools to 30 in 2015 through mergers and closures.

At the tertiary education level the reorganisation of tertiary education institutions is supported through European Structural Funds, through the "Development of Institutional Capacity of Scientific Institutions" activity. We will look into this issue in more detail in Chapter 5.

The need to balance decentralisation with adequate public accountability

From the early 1980s onwards, many countries have devolved decision-making authority to lower levels in the education system as a means of enhancing local responsiveness, encouraging creativity in the use of resources, promoting innovation and creating incentives for quality improvement (Waslander, Pater and van der Weide, 2010); this has also been

the case in Latvia. Since its independence in 1990 the once highly centralised education system has been transformed into one where many decisions on how to actually implement the national regulations and educational policies are made at the municipal and institutional levels.

Between 1990 and 1994 efforts were directed towards the democratisation and decentralisation of the education system. This included "depoliticising" the curriculum, introducing a variety of alternatives within education and decentralising educational management. A network of private educational institutions was established and management functions were devolved from the centre to local governments and, ultimately to individual educational establishments (schools) and their heads (Zarina and Regaise, 2006).

Currently Latvia's 119 municipalities are responsible for providing their children with the ability to acquire a quality education at the school closest to their homes. The municipal administration is shaped by Education Boards that are responsible for the provision of ECEC, basic education, upper secondary education (general and vocational) and non-formal adult education in their territory. Municipalities establish and finance these boards, and appoint the head in co-ordination with MoES. These boards could be the part of the governing body of a municipality, for example in the form of an education department. The board members consist of experts on different educational matters.

The boards' functions include the implementation of local educational policy, the allocation of state grants to schools for the salaries of teaching and other staff, and the organisation of teachers' professional development. Municipalities are also responsible for organising non-formal education and extracurricular activities for children and adults. Public schools in Latvia – within the legal framework – assume full authority over the use of funds as approved by their founding body (municipality) and the employment of teaching staff (OECD, 2014a; Eurydice, 2007). They are responsible for the implementation of education. School boards are set up to ensure stakeholder involvement and fulfil some administrative and advisory tasks.

Local autonomy may be considered both a strength and a weakness, depending on its implementation. Latvian municipalities and schools have the freedom to reallocate state funds (provided on the basis of the teacher remuneration system formula) in accordance with local circumstances, which in theory allows for flexibility and an effective use of resources. However, these redistributive powers currently cause great variation in teacher remuneration for the same tasks, stirring a widespread perception of unfairness.

Furthermore, municipalities support their own local schools and are unwilling to close small schools even if they are no longer viable. Closures must be made in the face of parents' complaints, complicating network

planning. In a sense the decentralisation reforms of the 1990s have given municipalities the tools to act against the government and block reforms (Grīviņš, 2012).

In addition, some municipalities, particularly the smaller ones, lack the capacity to adequately support their local school systems (OECD, 2014a) which raises further questions about the current governance and financing arrangements of the Latvian school system.

Public institutions in Latvia have a higher level of autonomy than institutions in many EU countries (Estermann, Nokkala and Steinel, 2011). Tertiary education institutions are able to determine their internal structure, develop and adopt their own internal codes of conduct and procedures, and establish academic programmes. They also determine the levels of pay for academic staff above governmentally-established minima and set the levels of tuition fees. Checks and balances to counter this high degree of autonomy are weak, however. For example, government funding is currently not linked to performance nor are tertiary education institutions required to publicly account for their balance sheets. Though some data are available there are concerns about accuracy (World Bank, 2014; Civitta, 2014).

Ensuring adequate funding and efficiency in education funding

Latvia's public expenditure for education and per-student funding at all levels are below that of many OECD countries (Table 1.3). Still, despite the relatively low expenditure on education, Latvia has managed to improve its student performance since 2000 and is now performing close to the OECD average on PISA. Latvia aims to continue this positive trend, while aiming for further efficiency gains.

Though there is a risk that the spending allocated to education in the long term will prove inadequate to achieve the desired outcomes of equity and quality, especially given the pressure to invest in other areas such as pensions, social assistance and health, the effectiveness of government spending in education is also clearly an issue. Latvia was ranked low in the institutional quality rankings for its wastefulness of government spending and several reports have pointed to the need for great efficiency in education spending (OECD, 2014a, 2015a; World Bank, 2014). Latvia's ambitions for long-term efficiency gains and better student outcomes depend on the success of the reforms in school funding and tertiary education funding that it has embarked on.

Relatively low expenditure on education

Before the economic crisis, public expenditure on education had grown rapidly. Latvia's schools were overstaffed. After the economic crisis hit Latvia, the contraction in 2009 created a fiscal imperative to

reduce expenditure in the education sector (World Bank, 2010). Education expenditure fell from 5.7% of GDP in 2008 to 5.0% in 2010 although it remained relatively high (5.5%) during 2009 (Eurostat, 2014b; OECD, 2014b). While expenditure on education did not change too substantially as a share of GDP, in absolute terms it was severely affected during the economic crisis (Eurostat, 2015e). As a result, teacher salaries were cut in half and although they have recovered in recent years, salaries remain low compared to national and international standards (OECD, 2014a). In the year 2011, public expenditure for all levels of education had recovered to 5.4% of GDP but this was still below the pre-crisis level and considerably below the OECD average of 6.1%.

Private investment in education in Latvia is lower than in many OECD countries. In 2011 the proportions of private expenditure on educational institutions for all levels of education was 11.7%, compared to the OECD average of 16.1%. As briefly discussed, and covered in subsequent chapters in greater depth, Latvia has implemented a number of policies, like providing free lunches for students in Grades 1 to 3 or free transportation to school, that are intended to keep costs low for households.

A breakdown of investments reveals that public spending per student is one of the lowest among OECD countries (OECD, 2014b). Table 1.3 shows that for all levels of education, expenditure per student is considerably lower than the OECD average. Part of the explanation for this low per-student expenditure lies in the low salaries of teachers and academic staff compared to national and international standards (OECD, 2014a; World Bank, 2014).

Table 1.3. **Expenditure on education by level of education (2011)**

	Education expenditure as a percentage of GDP		Annual expenditure per student (converted USD, 2011)	
	Latvia	OECD average	Latvia	OECD average
ECEC (3-6 year-olds)	**0.8%**	**0.6%**	**4 359**	**7 428**
Basic	**2.1%**	**2.5%**	**-**	**-**
Primary	-	-	4 982	8 296
Lower secondary	-	-	5 019	9 377
Upper secondary	**0.9%**	**1.2%**	**4 983**	**9 506**
Tertiary	**1.5%**	**1.6%**	**7 552**	**13 958**
Academic	1.3%	1.4%	7 578	-
Professional	0.2%	0.2%	7 389	-
Total	**5.4%**	**6.1%**	**5 624**	**9 487**

Source: OECD (2014b), *Education at a Glance 2014: OECD Indicators,* OECD Publishing, Paris, http://dx.doi.org/10.1787/eag-2014-en.

The low salary and very flat pay scale for Latvian teachers and academic staff stand at odds with the government's ambition to raise the motivation and professional capacity of teachers and academic personnel. MoES is therefore at the time of writing piloting a new remuneration system as part of a new school funding model. The aim is to make teachers' pay competitive with other professions. The salaries of academic staff are also planned to rise from 1.5 times the average wage in 2012 to 2.5 times the average wage in 2017 and 2.8 times in 2020 (MoES, 2014). The review team agrees these are important measures for improving the status and attractiveness of the teaching profession but, as will be discussed in following chapters, also propose these should be part of a more strategic approach to reaching this objective.

For years Latvia has been able to benefit from EU support to supplement its education budget. Since its accession to the EU in 2004, Latvia has been one of the largest recipients of structural funds. In the current programming period (2014-20), the country will again receive EU funding from the European Regional Development Fund, European Social Fund and Cohesion Fund (around 2.8% of GDP per year) which it partly uses for education and science projects. Funds are mostly spent on infrastructure, classroom equipment, and research and science activities in tertiary education (MoES, 2015).

Despite EU support, additional measures will be needed to expand the funding base for education and to develop a sustainable and efficient education system. The inefficiency of the tax system and ineffectiveness of the Equalisation Fund are among the major challenges to improving public service delivery in Latvia (OECD, 2015a). The funding base for education could also be increased by strengthening public-private partnerships between vocational schools and tertiary education institutions and the private sector.

Latvia has also been encouraging greater investments by municipalities. While the national education budget consistently surpasses the resources municipalities spend (not counting earmarked state grants for teacher salaries), the gap has narrowed: municipal spending represented 73% of the state budget in 2010 but 90% in 2013. This is due to both a reduction in government budget and an increase in municipalities' spending. This development is likely to have increased differences in spending per student between municipalities which in turn could impact on the quality of education. This shows the complexity of the funding situation. Latvia needs a broader look at improving public service delivery and ensuring municipalities are sufficiently resourced and autonomous. This will require increasing tax revenues, reducing the share of earmarked revenues and improving the equalisation system (OECD, 2015a).

Scope for increasing efficiency of education spending

Increased funding will not necessarily lead to improvements in outcomes; it is how funds are invested that can make a difference (OECD, 2010). It is important to note that Latvia, a country with a relatively low expenditure on education, has in fact managed to improve the performance of its students during the last decade and is now performing close to the OECD average on PISA. Latvia aims to continue this positive trend and further improve the quality and inclusiveness of its education system, while aiming for further efficiency. Several reports have noted that the latter is an issue deserving urgent policy attention (OECD, 2014a, 2015a; World Bank, 2014).

Well-designed funding models can help steer improvements in quality, equity and efficiency (Levačić, 2008; OECD, 2014a). In recent years, Latvia has taken important measures to improve the funding of school education and tertiary education. In 2009 Latvia revised its school funding model with the aim of increasing the efficiency of the system while increasing student achievement (Cabinet of Ministers, 2009). Based on the analysis of a report by the World Bank (2007) the government moved decisively to implement a number of fundamental reforms to contain budget expenditures and improve the efficiency of education provision. Central norms on class size were relaxed and school directors and local education authorities were allowed more flexibility over resource management. In addition to creating incentives for improved efficiency (and improved quality) the basis of financing primary and general secondary education was to be revised to finance students rather than teachers and schools (World Bank, 2010).

The per-student financing model, often referred to as "money follows the student" (Box 1.2) has been in operation since 2009/10. The intention was to bring about greater efficiency and at the same time enhance student achievement (Cabinet of Ministers, 2009). Implementation of the model was managed by the 119 municipalities established as a result of the territorial reform of 2009 (World Bank, 2010). Municipalities could decide how to distribute resources among their schools and supplement them with their own funds.

An OECD report on the Latvian teacher remuneration system noted that the funding model is a relatively transparent budgeting tool; the system takes into account the costs of educating a student and the attendant differences between schools. It also provides incentives to increase class sizes (OECD, 2014a). Several years on, however, it is also clear that Latvia is struggling to make further efficiency gains and several weaknesses of the model have become apparent. These include insufficient sensitivity to children with special education needs and a failure to take account of teachers' experience.

Box 1.2. **Latvia's per-student school funding system**

In 2009/10 the Latvian government implemented school funding reform by introducing a new per-student school funding model for primary, lower secondary and upper secondary education. The economic crisis had provided the imperative to develop this new model. Before the economic crisis expenditure on education had grown rapidly and Latvian schools were found to be overstaffed (World Bank, 2010). The government's aim was to bring about greater efficiency and enhance student performance.

The funding formula consists of two components: 1) a calculation defining the teacher workload that 2) feeds into the calculation of the total budget for salaries. The formula is based on detailed conversion rules to take into account the number of students at each grade, regulations for class size and location of the schools.

The Latvian school funding formula

Student numbers	Student coefficients	Programme coefficient	Density coefficient	Student-teacher ratio	
Number of students in school X	- 0.75 (grades 1-4) -1.00 (grades 1-4 schools with smaller than 100 students) -1.00 (grades 4-9) -1.25 (grades 10-12)	-1.2 (pedagogic and social correction education) -1.8 (special programmes in special schools) -0.81 (long-term patients) -1.1 (gymnasia) -0.8 (evening and distance education) -1.84 (number of students with education needs integrated in common schools) -1.2 (specialised programmes) -1.3 (specialised programmes - music)	X 1.3 = the number of students by applying the students' coefficients	X ratio in small villages: 8.12 or X ratio in republican cities: 10.35	= number of workloads
Number of workloads	X minimum salary	X 1.2359 (social security costs)	X 1.15 (administrative tasks)	X 1.40 (additional duties)	= total budget for teacher salaries

Box 1.2. **Latvia's per-student school funding system** *(continued)*

The basic calculation of workload is widely known as "money follows the student". The number of students in a school forms the starting point for the calculation of the number of teacher workloads. The formula accounts for the education level with a student coefficient that differs according to whether the student is in Grades 1 to 4, Grades 5 to 9 or Grades 10 to 12.

The formula is not entirely driven by numbers of students. It has additional indices intended to promote equity in the face of differences in perceived need. It accounts for the differences in cost of programmes and favours small schools with fewer than 100 students which have a higher per-student coefficient. There is an ideal student-teacher ratio, which is different for schools in small municipalities and those in the nine republican cities. Taking into account all these factors, the calculation produces the number of "workloads" to which a school is entitled. A full-time workload implies 21 hours of teaching.

The second step involves converting the number of workloads into a budgetary amount. The minimum teacher salary per workload (EUR 420 in 2014) is determined by the government through annual cabinet regulations. This amount is multiplied by a number of coefficients. A coefficient of 1.2359 covers social security costs, and a further factor of 1.15 is applied for administration. This is intended to promote more efficient planning by including non-teaching staff salaries as a percentage of the teacher salary grant. Every school can use up to 15% of the total amount for hiring non-teaching staff such as heads, deputy heads and special educational needs teachers who perform administrative tasks.

A factor of 1.4 is added to the budget calculation to account for numerous "additional duties" such as preparing lessons, correcting homework, grading tests and participating in meetings. In other OECD countries many of these additional duties are considered to be part of a teacher's core duties. School leaders can decide how to provide for additional duties. For example, one teacher might receive several hours of extra work per week for additional duties while another might be allocated none. Thus teachers doing the same work in different municipalities might receive different salaries.

Source: OECD (2014a), *Teacher Remuneration in Latvia: An OECD Perspective*, OECD Publishing, Paris, www.oecd.org/edu/OECD%20Review%20of%20Teacher%20Remuneration%20in%20Latvia_OPS_FINAL.pdf.

Moreover, the financial autonomy provided to municipalities has enabled some to reallocate funds to small schools that are no longer viable. Research evidence has also shown there are considerable spending differences between municipalities. Grīviņš (2012) for example reported that 13 municipalities spent more than 40% than the national average per student, whilst 21 municipalities spent between 20% and 60% less.

MoES is currently piloting a revised model for school funding and teacher remuneration responding to several of these issues. For example funds will be distributed to schools directly, and there are stronger incentives to increase class sizes. In addition, as mentioned, there is the intention to make teachers' pay competitive with other professions. Raising teacher salaries to nationally comparable standards without raising class sizes and student-teacher ratios considerably seems unlikely considering the socio-economic and political context. Maintaining a relatively large teaching workforce for a small and shrinking student population is not sustainable or desirable from a quality perspective.

If endorsed, the new model is expected to bring about greater efficiencies while improving quality and equity. MoES should carefully monitor the implementation of the new model, make adjustments where needed (OECD, 2014a) and ensure that the freed-up resources are invested in the quality of teaching.

For tertiary education, efficiency gains in the long run will depend on the success of a planned new funding model to reward quality, strengthen links with labour market needs and research institutions, and avoid fragmentation of budget resources (OECD, 2015a). This new tertiary education funding model will be discussed in greater depth in Chapter 5 but it is expected to lead to efficiency gains as well as a better match of skills to labour market requirements. This reform may prove difficult to implement however as reform attempts undertaken between 2011 and 2013 have met substantial resistance from educational institutions themselves.

Realigning system capacity with demographic changes

Demographic changes have a significant influence on all policy areas including education. Latvia's student population has been declining due to long-term low fertility rates and emigration. The Latvian government has made some effort to optimise the school network although some municipalities have proved unwilling to close small schools. Further policy measures may be needed to promote different ways to rationalise the school network and deal with the challenges of overstaffed schools. The new school funding model discussed above, and the impending retirement of large numbers of teachers may facilitate this process.

Consolidating the network of schools and tertiary education institutions

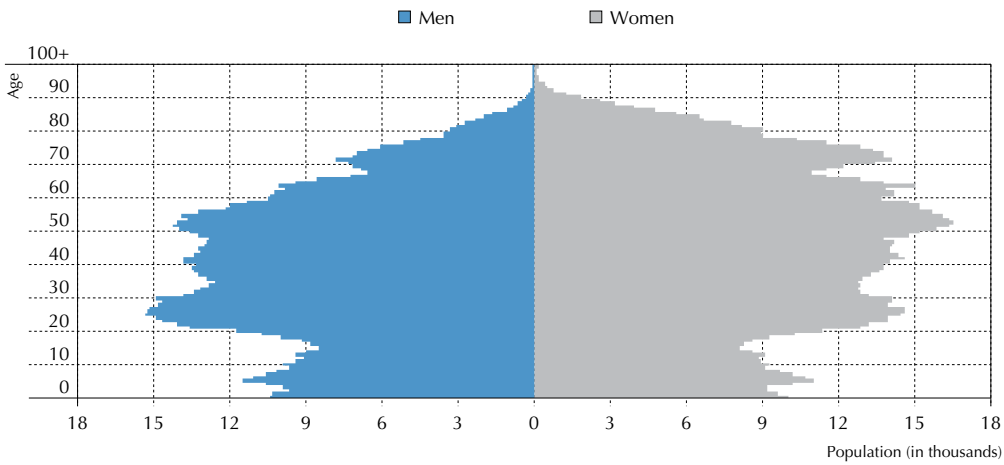
At the beginning of 2014 there were about 2 million people in Latvia, nearly 20% fewer than in 2000. According to the demographic forecasts, the Latvian population will continue to decrease in the coming years due to long-term low

fertility rates and emigration. As noted in the Education Development Guidelines 2014-2020, Latvia expects a severe "demographic shock" in the coming years (MoES, 2014). It is expected that between 2012 and 2020 the number of students in secondary general education will fall by 11 600. At the tertiary level this decline is expected to be even larger; in 2020 80 000 students are expected to be enrolled in tertiary education which is about 15% fewer than in 2012.

Only the basic education level is expected to see an increase in the number of students in the coming years but as Figures 1.7 and 1.8 show, even this increase is likely to be temporary (Hazans, 2013; Krišjāne and Lāce, 2012; Central Statistical Bureau of Latvia, 2013).

These demographic changes call for Latvia's educational capacity to be reviewed, including the numbers of schools and higher education institutions and the people working in them. According to MoES data, for example, in 2013, 30% of Grade 12 classes did not exceed 20 students and 10% had 10 students or fewer. Internationally, in 2012, Latvia had the smallest average class sizes – 16 students in primary and 15 in lower secondary – among OECD and partner countries (the OECD averages are 21 and 24 respectively) (OECD, 2014b).

Figure 1.7. **Number of residents, by age (start of 2014)**

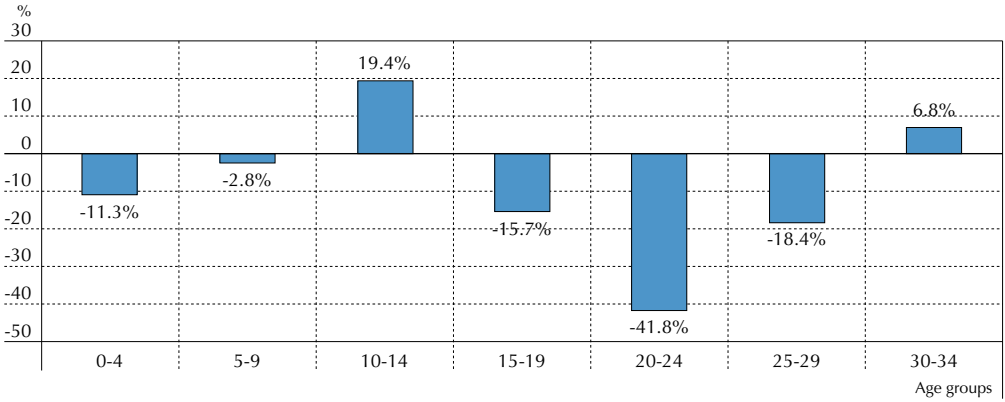


Source: Ministry of Economics (2014a), *Informatīvais Ziņojums par Darba Tirgus Vidēja un Ilgtermiņa Prognozēm* [Informative Note on Mid-term and Long-term Forecast of Labour Market], Ministry of Economics, Riga, www.em.gov.lv/files/tautsaimniecibas_attistiba/EMZino_150814.pdf.

In response to this situation, MoES has formulated a policy that primarily aims to maintain access to ECEC and primary education as close as possible to the place of residence, while concentrating upper secondary education at the regional level. Lower secondary schools (Grades 7 to 9) are expected to meet the specific needs of the local and regional network of schools.

To ensure the effective use of resources, independent lower secondary schools may have to be merged regionally (with upper secondary schools). Alternatively, they may have to become basic education schools (providing primary and lower secondary programmes). The implementation of this policy may be difficult as in practice municipalities support their own local schools and are unwilling to close small secondary schools, as mentioned above. Further policy measures may therefore be needed to promote a variety of means of rationalising the school network, covered in Chapter 3.

Figure 1.8. **Estimated changes in population between 2012 and 2020, by age group**



Source: MoES (2014), *Education Development Guidelines 2014-2020,* Ministry of Education and Science, Riga, http://m.likumi.lv/doc.php?id=266406.

The tertiary education sector will also see a continued decline in student numbers, a trend that started ten years ago. This will put further pressure on the relatively large network of tertiary education institutions in Latvia. Further policy measures may be needed here, as discussed in Chapter 5.

Another challenge Latvia will have to face in the coming years is that many of Latvia's schools are overstaffed. Although the numbers of teachers has fallen during the last decade, it has happened at a much slower rate than the student population. For example between 2003/04 and 2013/14 the number of students in basic education (Grades 1 to 9) fell by about 35% while the number of teachers (full-time equivalents) fell by a mere 12%. This development has resulted in very low student-teacher ratios. In 2012 the average lower secondary student-teacher ratio was 7.9, compared with an OECD average of 13.5 (OECD, 2014b).

As noted in a recent OECD report (2014a) these very low ratios are neither sustainable nor desirable from a quality perspective. Continuing demographic decline, coupled with a tight public budget for education, has fuelled calls for efficiency gains and, as discussed above, the new school

funding model under pilot should promote larger class sizes. The seemingly difficult trade-off between the quantity and quality of teachers may be less of an issue, however, considering many teachers are to retire in the near future.

At the tertiary level the number of part-time staff grew rapidly, outnumbering full-time staff since 2007. This was a deliberate choice by institutions facing budget constraints fuelled by the economic crisis. The large number of part-time staff may change as many academic staff are nearing retirement age and institutions may struggle to draw in young academic talent to replace them. MoES is carefully monitoring this development.

Using data and research for evidence based policy making

The effective monitoring and evaluation of education systems is central to informing policy plans for improvement while at the same time providing public accountability. High-quality and timely quantitative and qualitative data, and the capacity to use such data, are essential for accountability, efficiency, quality assurance and other aspects of good governance that ensure the desired results are achieved (OECD, 2013b). To support these efforts many countries have established education management information systems. These systems aim to inform the various actors and partners about the state of the sector, its internal and external efficiency, its pedagogical and institutional operation, and its performance, shortcomings and needs (Carrizo, Sauvageot and Bella, 2003; OECD, 2013b).

This review and earlier reports (e.g. European Commission, 2015; MoES, 2014) identified Latvia's education information system as a challenge to effective evidence-based policy making. Latvia has recognised these and other limitations of the current system and intends to develop a comprehensive quality monitoring system, but not until 2023. Apart from considering implementing this system earlier, Latvia should not overlook the need to improve the reliability of data and contextual information to support further analysis, as well as build the capacity of MoES staff to use data and research.

Improving the education information system

In 2009 Latvia established the State Education Information System (SEIS), a database holding information about educational institutions, licensed and accredited educational programmes, students, teachers, education documents, and national statistics. The Educational Institution Register, Teacher Register, Educational Programmes Register, State Unified Database of Children of Mandatory Education Age and the Academic Staff Register are all components of the SEIS. The system aims to provide users[2] with comprehensive information about students, including children in ECEC, teaching staff and the performance rating of teachers.

This review has identified a number of weaknesses of the SEIS which limit its usefulness for evidence-based policy making in Latvia, however. It found reason to be concerned about the reliability of the data collected and stored in the SEIS. On more than one occasion data drawn from the system turned out to be outdated, conflicting with other data sources or simply faulty. This suggests there is much scope to improve the data quality assurance processes.

Further, the administrative datasets (e.g. registers of schools, teachers, students) and national assessments contain limited contextual information, such as the socio-economic background of students. This is an obstacle to the accurate interpretation of data and research, and thus to the design of more effective and equitable policies.

In addition, national student assessments are often intended to serve several purposes. As with countries like Estonia and Poland, national assessments in Latvia are used both to award certificates and monitor the education system (EACEA, 2009; MoES, 2014). In Latvia, however, information systems and student reports do not track students' performance or pathways, which limit their usefulness for monitoring students' progress throughout their education. Information about student performance and development over time can enable potential learning difficulties to be identified and addressed early on and can be a powerful means of reducing numbers dropping out.

These and other challenges identified in other reports (European Commission, 2015; MoES, 2014) have made MoES decide to strengthen the SEIS. The Education Development Guidelines 2014-2020 call for the need to develop a comprehensive quality monitoring system: "an all-level education quality and implementation monitoring system which should enhance the capacity for education policy analysis in public administration". The guidelines also state that such a monitoring system should enable the systemic analysis of problematic issues, for example the lower achievements of boys. However, MoES plans only to put the system in place by 2023. It should consider putting this system in place as soon as possible in order to enhance its capacity for evidence-based policy making and as such help Latvia achieve its education ambitions for the year 2020 (see Box 1.1).

Ensuring adequate capacity for using data and research

When developing this improved education information system, Latvia should not overlook the capacities of the people who are to use and contribute to it. Research evidence shows that the development of an effective education management information system involves considerable investment in developing competences and skills for evaluation and assessment at all levels of the system. All too often data and information are primarily seen as a tool for accountability with less attention being paid to how to actually use them in daily practice (Fazekas and Burns, 2012; OECD, 2013b; Cassidy, 2006).

Apart from a possible underdeveloped "culture" within MoES of using data and research evidence for policy-making purposes, the root problem seems to be capacity constraints. The evidence suggests there is considerable scope for strengthening the capacity of MoES for data collection and analysis.

Furthermore, this review points to a number of issues that MoES should consider investigating through research to help inform and strengthen its reform agenda. Vocational education and tertiary education have benefited greatly in recent years from a series of important research reports that have acted as a catalyst for education reforms. Apart from possibly the OECD review of teacher remuneration (2014b), other parts of the education system have had few such prominent studies.

In addition, MoES could consider establishing an independent research institution to expand its research and evaluation capacity, possibly by investing in a national body with specialist expertise in the area or alternatively through Latvia's universities. Latvia could look to the example of Austria, which established the Austrian Institute for Education Research, Innovation and Development in Schooling in 2008 as an independent legal entity with clear roles and responsibilities. This represented a significant increase in the volume and quality of education research activities in Austria. Its mission statement is as follows: "A country's future prospects are inextricably linked to the quality of the education system. To further improve the Austrian education system, it is necessary to take stock of the current situation, to implement effective reforms and then to evaluate these. The basis for this is the development of evidence-based education policy and systematic school development" (OECD, 2013c).

Annex 1.A1

Key indicators

#	Key indicators	Latvia	OECD average or total	Min OECD	Max OECD
	Background information				
	Economy				
1	GDP per capita, 2011, in equivalent USD converted using PPPs (OECD, 2014a)	19 984	n/a	17 125	88 668
2	GDP growth 2013 (OECD, 2015d)	3.0%	1.2%	-4.0%	4.4%
	Society				
3	Population density, inhab/km2, 2011 (Eurostat, 2015h; OECD, 2013)	33	34	2.9	498
4	Population aged less than 15 as a percentage of total population, 2012 (Eurostat, 2015i; OECD, 2015e)	14.3%	18.3%	12.8%	28.8%
	Education inputs				
5	Starting age of compulsory education (OECD, 2014a)	5	6	4	7
6	Ending age of compulsory education (OECD, 2014a)	16	16	14	18
7	Enrolment rates of 3-4 year-olds in early childhood education and primary education as a percentage of the population of the same age group, 2012 (OECD, 2014a)	83%	76%	12%	99%
8	First age of selection in the education system (OECD, 2013a)	16	14	10	16
9	% of students reporting that they have repeated at least a grade in primary, lower secondary or upper secondary schools (OECD, 2013a)	8.5%	12.4%	0.0%	36.1%

#	Key indicators		Latvia	OECD average or total	Min OECD	Max OECD
10	Percentage of lower secondary education principals who report that they use student performance and student evaluation results (including national/ international assessments) to develop the school's educational goals and programmes (OECD, 2014d)		94.4%	88.8%	58.5%	99.5%
11	% of students whose school principals reported that assessments are used for the following purposes (OECD, 2013a)	To make decisions about students' retention or promotion	97%	77%	1%	98%
		To monitor the school's progress from year to year	100%	81%	48%	100%
		To make judgements about teachers' effectiveness	93%	50%	14%	88%
		To identify aspects of instruction or the curriculum that could be improved	100%	80%	49%	99%
12	Public expenditure on education as a percentage of GDP, 2011 (OECD, 2014a)		4.9%	5.6%	3.8%	8.7%
13	Annual expenditure per student by educational institutions, for all services, in equivalent USD converted using PPPs for GDP, 2011 (OECD, 2014a)	Pre-primary education	4 359	7 428	2 412	25 074
		Primary education	4 982	8 296	2 218	23 871
		Secondary education	4 998	9 280	2 736	16 182
		Tertiary education	7 552	13 958	7 868	26 021
14	Relative proportions of public and private expenditure on educational institutions, 2011 (OECD, 2014a)	Public sources	88.3%	83.9%	59.9%	97.6%
		All private sources	11.7%	16.1%	2.4%	40.1%
	Education outcomes					
15	Mean performance in mathematics (OECD, 2014c)		491	494	413	554
16	Annualised change in mathematics performance across PISA assessments (OECD, 2014c)		0.5	-0.3	-3.3	4.2
17	Annualised change in reading performance across PISA assessments (OECD, 2014c)		1.9	0.3	-2.8	4.1
18	Annualised change in science performance across PISA assessments (OECD, 2014c)		2.0	0.5	-3.1	6.4

#	Key indicators		Latvia	OECD average or total	Min OECD	Max OECD
19	Students performing below Level 2 in mathematics (%), (OECD, 2014c)		20%	23%	9.1%	54.7%
20	Score difference in mathematics performance in PISA between students in city schools and rural schools AFTER adjusting for socio-economic status (city – rural) (OECD, 2013c)		21	13	-46	58
21	Score differences between boys and girls in mathematics (boys - girls) (OECD, 2013c)		-4	11	-6	25
22	Upper secondary graduation rates in %, 2012 (OECD, 2014a)		90%	84%	47%	96%
23	First-time graduation rates by programme of orientation, 2012 (OECD, 2014a)	Graduation rate tertiary-type A (general programme)	43%	39%	9%	65%
		Graduation rate tertiary-type B (technical programme)	12%	11%	1%	30%
24	% of 15-29 year-olds not in education, employment or training, 2012 (OECD, 2014a)		19.1%	15.2%	6.7%	29.2%
25	% of 25-64 year-olds whose highest level of attainment is lower secondary education or below, 2012 (OECD, 2014a)		11%	24%	8%	66%
26	% of 25-34 year-olds whose highest level of attainment is at least upper secondary education, 2012 (OECD, 2014a)		85%	82%	46%	98%
27	% of 25-34 year-olds whose highest level of attainment is tertiary education, 2012 (OECD, 2014a)		39%	39%	21%	66%
28	Unemployment rates of 25-64 year-olds by educational attainment, 2012 (OECD, 2014a)	Below upper secondary	22.9%	13.6%	2.6%	41.5%
		Upper secondary and post-secondary non-tertiary	16.7%	7.8%	2.3%	24.4%
		Tertiary education	6.2%	5.0%	1.6%	17.0%

Sources: Eurostat (2015h), "Population density", *Eurostat database*, Eurostat, http://ec.europa.eu/eurostat/web/products-datasets/-/tps00003 (accessed 15 July 2015); Eurostat (2015i) "Population by age group", *Eurostat database*, Eurostat, http://ec.europa.eu/eurostat/web/products-datasets/-/tps00010 (accessed 15 July 2015); OECD (2015d), "Economic outlook No. 98 – November 2015", *OECD Economic Outlook* (database), OECD, https://stats.oecd.org/index.aspx?queryid=51396 (accessed 9 November 2015); OECD (2015e), "Labour Force Statistics: Summary tables", *OECD Employment and Labour Market Statistics* (database), http://dx.doi.org/10.1787/data-00286-en (accessed 15 July 2015); OECD (2014a), *Education at a*

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Notes

1. Early school leavers are people aged 18-24 who have only lower secondary education or less and are no longer in education or training (European Council, 2003).

2. Access to the State Education Information System is given to employees of the State Education Quality Service, municipalities, education institutions (including ECEC institutions), professional education institutions, interest-related education institutions or professional orientation education institutions (irrespective of its legal status) if access is needed for work-related duties.

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Chapter 2

Early childhood education and care in Latvia

This chapter reviews early childhood education and care (ECEC) in Latvia. All children are entitled to an ECEC place from 1.5 years old, and participation is compulsory for children aged five and six. It is provided and funded largely by municipalities, but private provision has grown in recent years, particularly in larger cities. Latvia spends a relatively large share of its GDP on ECEC compared with OECD countries. Barriers exist however for developing a high-quality and motivated ECEC profession and municipalities vary in their capacity to fund, deliver and monitor provision.

Latvia should continue to expand ECEC, particularly for younger children and those in rural areas; take a more strategic approach to improving the quality and status of the profession; strengthen data collection, monitoring and the use of research in policy making; and review the governance and funding arrangements for ECEC to support the achievement of national policy goals.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Introduction

High-quality early childhood education and care is positively associated with the cognitive, social and emotional development of children, and achievement among all children (OECD, 2006; Heckmann and Masterov, 2007; Heckman, 2012). In Latvia early childhood education and care (ECEC) covers all institutional arrangements providing care and education for children under primary school age – 1 to 7 years of age. Some countries make a distinction between "child care" – looking after children while their parents are at work – and "early education" – enhancing child development and preparing children for formal schooling. In practice, the division is not clear, as there are opportunities to learn in settings labelled "care", and "educational" settings provide care for children. The use of the term ECEC supports an integrated and coherent approach to policy and provision which is inclusive of all children and all parents, regardless of their employment or socio-economic status (OECD, 2001, 2006; Bennett, 2008a). Although ECEC in Latvia is often referred to as "pre-school education", which would suggest a primary focus on early education, it recognises that ECEC arrangements fulfil a wide range of objectives, including care, learning and social support.

Most of today's rising generation in Latvia will have spent part of their early childhood in some form of ECEC programme. After a period of contraction in the early 1990s, service provision began to recover later that decade and the recovery has continued ever since. Nowadays around 90% of 5- and 6-year-olds are enrolled in ECEC (OECD, 2014a). Still, the transition to universal enrolment is incomplete as participation in ECEC, especially for children under the age of three, remains relatively low and unequal throughout the country. There are calls for greater investment in the quality of the ECEC workforce and better monitoring of educational quality in general. Current governance and financing arrangements also hamper equal access to high-quality ECEC.

This chapter starts with an overview of the ECEC provision in Latvia, followed by a detailed analysis of the key policy issues it faces. It concludes by presenting concrete policy recommendations for strengthening ECEC provision throughout Latvia.

Context and main features

Governance and financing

In Latvia, ECEC is an autonomous function of local governments. The central government has at its disposal powerful steering mechanisms, such as legislation and discretionary funding, to motivate and enable local authorities

to deliver agreed outcomes. The legal foundations for ECEC institutions, whether public or private, are laid down in the Education Law, the General Education Law, the Law on Local Governments and the regulations approved by the institution's founder, as well as various other regulatory enactments regarding health and safety that are also used for external evaluation purposes (Eurypedia, 2015).

To ensure a certain length of participation in ECEC programmes, many countries provide legal entitlements to ensure access to affordable, high-quality ECEC. Since 2011, all children in Latvia have had a legal entitlement to ECEC from 1.5 years of age. Latvia thus belongs to a small group of EU countries in which children have a legal entitlement to ECEC from a very early age, although in countries like Denmark, Finland and Sweden, entitlement starts earlier: from their first year onwards. In addition, since 2002 the last two years of ECEC, i.e. for children aged 5 and 6, have been compulsory in Latvia.

In Latvia, ECEC is defined comprehensively, encompassing the cognitive, socio-emotional and health development of the child. The Education Law of Latvia, for example, states that ECEC, or "pre-school education" as it is often referred to in Latvia, is "an educational level in which multi-dimensional development of the child as an individual, in the strengthening of health and preparation for the acquisition of primary education takes place" (Eurypedia, 2015). The central government has defined the main objectives and tasks of ECEC in the State Pre-school Education Guidelines (Box 2.1).

Box 2.1. **Objectives and primary tasks of ECEC ("pre-school education") in Latvia**

The State Pre-school Education Guidelines define the objective of ECEC as follows:

The objective of ECEC is the promotion of the comprehensive and harmonious development of a child, observing his or her development patterns and needs, knowledge, skills and attitudes required for an individual and social life, thereby purposefully ensuring the child has the chance to prepare for the acquisition of basic education.

The guidelines stipulate that the primary tasks of ECEC shall be:

- to promote the development of physical skills and movements of a child
- to promote the development of self-esteem, awareness of abilities and interests, development of feelings and will of a child
- to promote the development of cognition and curiosity of a child, ensuring the acquisition of knowledge and skills
- to promote the development of communication and co-operation skills of a child

Box 2.1. **Objectives and primary tasks of ECEC ("pre-school education") in Latvia** *(continued)*

- to promote the forming of a child's positive attitude towards himself or herself, other persons, the environment and the State of Latvia
- to promote the development of safe and healthy lifestyle skills of a child.

In addition the guidelines include a description of the pedagogical process, the content and learning outcomes, and how the evaluation process is organised.

Source: Cabinet of Ministers (2010), *Regulations Regarding the Guidelines for the State Pre-school Education*, Regulation No. 709, adopted 3 August 2010, Cabinet of Ministers, Republic of Latvia, Riga.

In Latvia, municipalities are obliged to ensure that children who have declared residence in the administrative territory of the municipality are able to access ECEC in the institution closest to their home. ECEC is largely the responsibility of municipalities.

The founders of public ECEC institutions are municipalities, while private institutions can be founded by people or legal entities such as foundations and non-governmental organisations (NGOs). Municipalities may establish an ECEC institution upon the request of parents of at least ten children living in their administrative territory. In case of children with special needs this number is eight. Children are enrolled when parents have submitted all necessary documents, and if there is a place available. Entrance tests are prohibited and parents and guardians are in principle free to choose among different types of ECEC institutions, i.e. those offering general programmes, programmes in minority languages (e.g. Russian or Polish), programmes for children with special education needs, and programmes for children with both special education needs and in minority languages.

In reality, however, the low population density in some parts of the country may limit choices, despite municipalities providing free bus transportation to children in remote areas. In the larger cities, shortage of places similarly limits parents' and guardians' choices.

Each municipality has a Board of Education to perform all education-related functions from ECEC to upper secondary education, including the founding and supervising of ECEC institutions. These municipal boards need to co-ordinate with the Ministry of Education and Science (MoES) on any issues relating to the establishment, reorganisation and closure of these institutions, however. Each board can develop its own

binding regulations, which in turn means that decision-making processes regarding ECEC can differ between municipalities.

As in many OECD countries, both parents and community members play an important role in the governance of ECEC institutions in Latvia, including through participating in school boards. For example, the school boards have a decision-making role in the rules governing the daily life in the ECEC institution, and have a consultative role on issues related to the choosing of educational content, methods and materials (MoES, 2015).

Financing ECEC

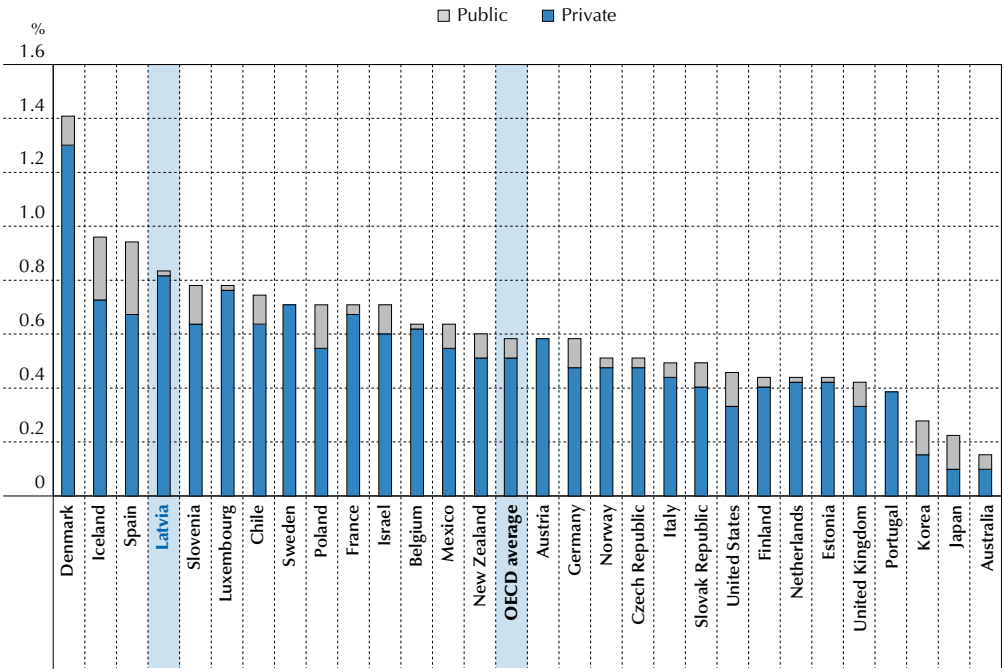
A growing body of research evidence suggests the need for significant public financial investment supporting a sustainable and equitable ECEC system (OECD, 2006; Bennett, 2008b; Cleveland and Krashinsky, 2004; UNICEF, 2008). Latvia's public commitment to ECEC is demonstrated by its relatively high expenditure on ECEC as a percentage of gross domestic product (GDP) and the large share of public funding.

In 2011, Latvia spent 0.83% of its GDP on early childhood education for children aged 3 or older. This was above the OECD average (0.57%) and among the highest for the OECD and partner countries with available data. Of these countries only Denmark (1.41%), Iceland (0.96%) and Spain (0.93%) had higher expenditures (Figure 2.1). The greatest share of spending for this age group came from public sources (98.2%), with only a very small proportion originating from private sources (1.8%), mostly from private households (OECD, 2014a).

Public funding comes from municipalities, apart from the salaries of teachers working in compulsory ECEC programmes, i.e. for 5- and 6-year-olds, which come from central government grants. These grants amounted to EUR 23 791 537 in 2015, which is about 7% of the total earmarked grants provided by the central government to municipalities (MoES, 2015).

Parents have to pay fees to cover children's meals. Meals are provided three times a day (breakfast, lunch and afternoon snacks) at a low cost, about EUR 44 per month. Some charges may be made for additional services, for instance, foreign language teaching for children. Municipalities may reduce the fees for meals for children from low-income families, and most of those in rural areas do (Eurypedia, 2015; European Commission/EACEA/Eurydice/Eurostat, 2014; MoES, 2015). Since 2013, the central and local government have financed learning tools such as different training materials, books and workbooks. Parents pay only for items children use personally such as pencils, crayons and paper. The learning materials for 5- and 6-year-olds are financed from central and local government budgets, but those for 1.5-4 year-olds from the local government budget.

Figure 2.1. **Expenditure on pre-primary education (for children 3 years and older) as a percentage of GDP, by source of funding (2011)**



Countries are ranked in descending order of public and private expenditure on educational institutions.

Source: OECD (2014a), *Education at a Glance 2014: OECD Indicators,* OECD Publishing, Paris, http://dx.doi.org/10.1787/eag-2014-en.

Private, fee-based ECEC institutions have grown in numbers in recent years as a response to shortages of public ECEC places. These institutions are mostly found in the larger cities where these shortages are acute. The high cost of private ECEC services and the lack of municipal support have limited access to ECEC until recently. When access to ECEC became a legal entitlement from the age of 1.5 in 2011, the various policy measures that followed have aimed to expand and diversify the ECEC services available (financially and territorially) to families in all parts of the country (Ivanovs, 2013).

As a result, parents who are forced to enrol their children in private ECEC due to a shortage of public places can obtain co-financing from the local government and/or central government (MoES, 2015). Since the beginning of 2013, municipalities which are unable to provide children in their administrative territory with a place in a public ECEC institution, are required to partly fund a private ECEC place. Parents are provided with an allowance

ranging from EUR 70 to a maximum of EUR 260 per month, with the higher range mostly paid in city areas like Riga where private ECEC fees are higher.

In 2013 the government also initiated a pilot project giving parents financial support from the central government to enrol their children in private ECEC (Box 2.2) (Ivanovs, 2013; MoES, 2015).

Box 2.2. **"Childcare support and child-minder service" pilot project**

On 1 September 2013 the Latvian government started a pilot project to provide financial support for parents who need child care support for their children aged 1.5-4 years who are not benefiting from public childcare (from the age of 5, municipalities have a legal obligation to provide pre-school education to children). The financing will be provided until the end of 2015 in order to solve the problem of long waiting lists for public kindergarten registration and help parents to return to work at the same time providing safe conditions for the child.

The combined co-funding paid for by the state and by local government to the child should be enough to decrease parents' expenditure on private kindergartens or child-minding services. Central government support for full-time child care is up to EUR 142, with the condition that state and municipal support combined (most municipalities already provide some support addressing such situations) does not exceed a certain limit. For example it cannot exceed EUR 228 per child in Riga planning region and approximately EUR 185 in other regions and rural territories. The state spent close to EUR 8.8 million in 2013 and 2014 and has allocated another EUR 4.8 million for 2015.

Sources: MoES (2015), "Country background report Latvia", unpublished, MoES (Ministry of Education and Science), Riga; European Commission (2013c), "Exchange of good practices on gender equality: Comments paper – Latvia", Parenting in France, 5-6 November 2013, France, http://ec.europa.eu/justice/gender-equality/files/exchange_of_good_practice_fr/lv_comments_paper_fr2013_en.pdf.

Child and family benefits

The question of the appropriate age at which out-of-home childcare will benefit children is one of the most controversial issues in the childcare debate. Some see nothing wrong with out-of-home childcare starting from three months of age – as long as the care is high quality. Others consider that the critical developmental needs of the first year of life demand nothing less than the constant, loving, one-to-one interaction of parental care. For millions of working parents in OECD countries this is a question that must be answered under pressure from career demands and household budgets (OECD, 2007, 2011; UNICEF, 2008). It is therefore a question that is almost inseparable from the issue of parental leave and other child-related benefits.

In Latvia, a number of these benefits, i.e. state family benefit, childcare benefit and childcare grants, are universal benefits provided to parents at the same rate regardless of income, while the country's degree of income redistribution is relatively low (OECD, 2015a). In 2014, Latvia amended the Law on State Social Allowances in 2014, increasing parents' entitlements to child and parental benefits. Women are now entitled to 19 weeks of maternity leave at a rate of 100% of the usual salary. Fathers get two days at a rate of 80% of the usual salary. The amendment also raised child benefit to EUR 171 per month, making it universal for parents whose children have yet to reach the age of 1.5 years. Parents are entitled to this benefit regardless of their employment status (State Social Insurance Agency, 2015).

Some OECD countries provide a prolonged period of paid leave (around two years or more) either as parental leave alone or in conjunction with separate child/home care. For example parents can take prolonged paid leave of around 100 weeks or more in Finland, Hungary, Norway, Poland and the Slovak Republic. In many OECD countries, including Latvia, periods are considerably shorter. Latvian parents are entitled to prolonged parental leave for a period of up to 1 year at a rate of 60% of the beneficiary's average insurance contribution wage, or up to 1.5 years at a rate of 43.75%. There is flexibility in the use of benefits, however, as parents can also continue working and receive parental benefits equal to 30% of the granted benefit during the period of prolonged parental leave.

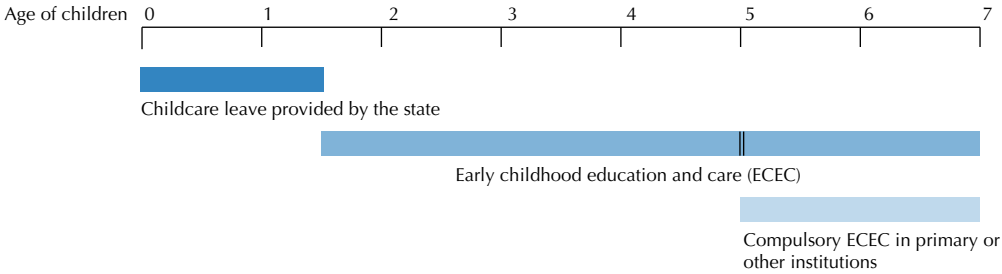
Organisation of ECEC services and learning

In Latvia integrated ECEC settings (*pirmsskolas izglītības iestādes*) are available to children from the age of 1.5 to 7 (Figure 2.2), with no breaks or transfers between ECEC institutions until the start of primary school. All institutions and programmes fall under the responsibility of MoES. Such an integrated approach is rather uncommon among EU and OECD countries, and is mainly found in the Scandinavian countries (European Commission/EACEA/Eurydice/Eurostat, 2014).

There is some distinction between ECEC for very young children (1 to 4 years) and those about to enter primary education. As mentioned, from the age of 5 ECEC is compulsory and children have to follow a specific programme (*pirmsskolas izglītības vadlīnijas*) that is in accordance with the Guidelines for Pre-school Education (Cabinet of Ministers, 2012). The guidelines offer examples of programmes but teachers also have the right to develop their own programmes as long as they are in accordance with the guidelines (European Commission/EACEA/Eurydice/Eurostat, 2014;

MoES, 2015). It is also possible for children to receive their compulsory ECEC outside the integrated setting, for example in a primary school or other type of education centre (*skolas un citas izglītības iestādes*). Other service providers include day nurseries, playgroups, day care centres and institutions of interest-related education that provide activities for children under primary school age.

Figure 2.2. **Overview of ECEC in Latvia**



Source: Adapted from European Commission/EACEA/Eurydice/Eurostat (2015), *Early Childhood Education and Care Systems in Europe: National Information Sheets 2014/15,* Eurydice Facts and Figures, Publications Office of the European Union, Luxembourg, http://eacea.ec.europa.eu/education/eurydice/documents/thematic_reports/191EN.pdf.

ECEC programmes either follow the school model, grouping children together by age, or the family model, grouping children of different ages. It is also possible to group children according to the language of instruction which can be Latvian or a minority language, depending on the demands made by parents. While most minority languages such as Polish play only a minor role in ECEC provision, a considerable share of children are taught in Russian: close to 22 000 children, about 23%, were enrolled in Russian language ECEC institutions in 2013 (Central Statistical Bureau of Latvia, 2015). From the age of five, however, the Latvian language is a compulsory subject for all children in ECEC.

It is also possible for families to provide ECEC at home.[1] For this, parents may receive pedagogical and methodological support at consultative ECEC centres. Municipalities are obliged to provide such support but not all are able to due to budgetary constraints, particularly the smaller ones. They therefore sometimes commission these services from institutions or individual specialists (MoES, 2015). Whether parents' demands for such support are fully met is not known.

Usually, ECEC institutions operate all year round with a break during the summer holidays of one to two months (usually in July and August). In principle, children should also be able to attend ECEC during the summer break on parental request. However, whether or not an institution is open during the summer depends on the provider of the institution.

ECEC outside school hours is not usually a policy priority in OECD countries and this also applies to Latvia. Latvia has a number of ECEC institutions that offer all-day childcare usually from 7.00 or 7.30 a.m. until 6.00 or 6.30 p.m., except on Saturdays and Sundays. More than 9 out of 10 children attend ECEC for more than 30 hours per week (European Commission/EACEA/Eurydice/Eurostat, 2014). Some ECEC institutions (65 in 2013) even have one or more 24-hour groups where it is possible for children to stay overnight. However, only a very small minority of children (about 2%) make use of these services (MoES, 2015).

Network of early childhood education and care institutions

The number of ECEC institutions has gradually increased, from 550 in 2003/04 to 617 in 2013/14. This increase has mainly occurred in urban areas; in rural areas the number has not grown substantially. ECEC provision is particularly limited in the thinly populated south and southeast of the country (Central Statistical Bureau of Latvia, 2015; MoES, 2015).

Private institutions play a relatively minor role in Latvia though their numbers have been growing in recent years mostly due to shortages of ECEC places in city areas. Of the 617 ECEC institutions in 2013/14, 526 were municipal (public) and 91 private (Figure 2.3). This translates into 74 128 children enrolled in public ECEC institutions compared with 5 063 in private institutions. The majority of these private institutions are located in the capital city, and there are very few private institutions outside the bigger cities.

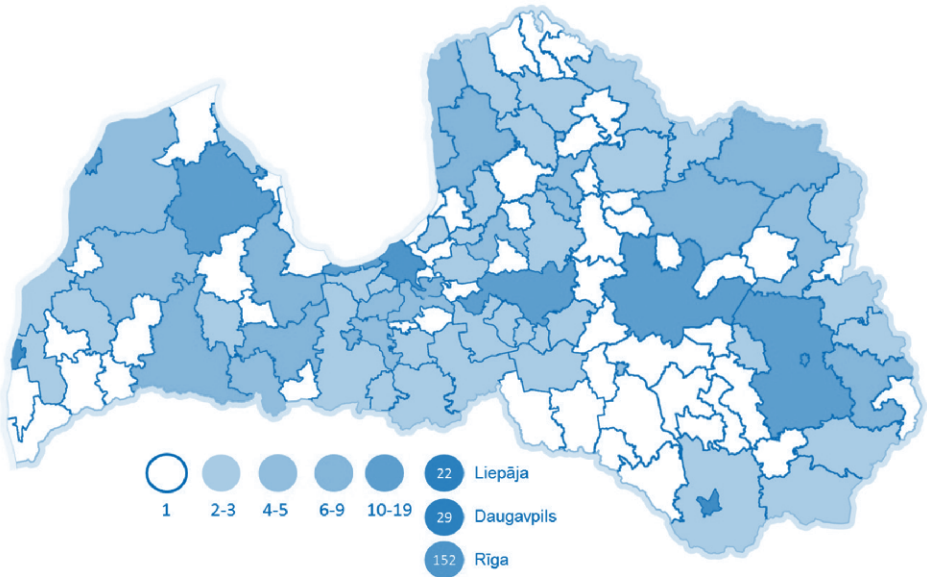
As mentioned, Latvia has faced shortages in ECEC places in recent years. This has been fuelled by internal migration from rural to urban areas. As a result many child development and play centres have been opened by both municipalities and private individuals. The purpose of these centres is to provide childcare services so that parents can access the labour market. As a rule, these centres also provide educational activities for children.

National ECEC curriculum

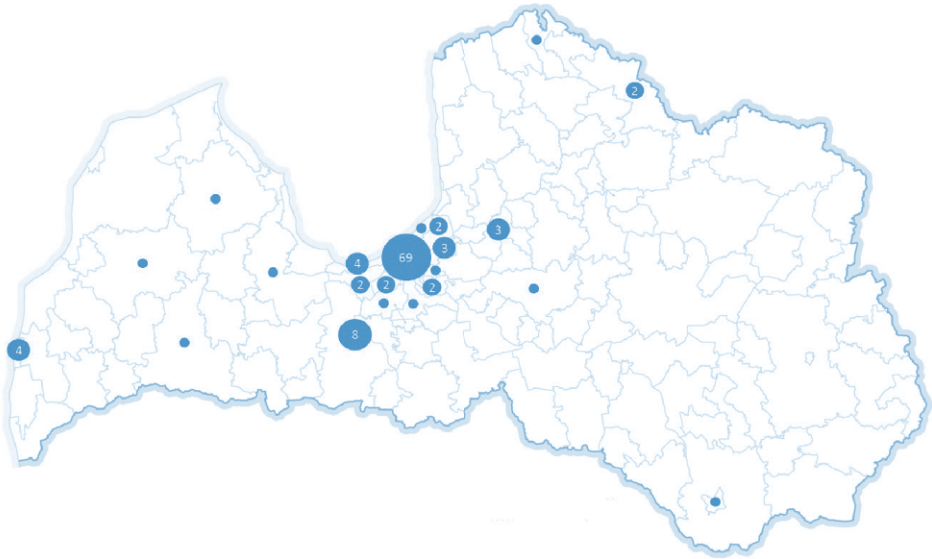
Having an explicit curriculum matters at all stages of education including ECEC. A well-defined curriculum articulates purposes, goals, learning content and approaches to learning, and takes into account the needs of

Figure 2.3. **Latvian network of public and private ECEC institutions (2013)**

Network of municipal pre-school educational institutions



Network of private pre-school educational institutions



Note: Pre-school groups in other institutions are excluded. Special pre-school educational institutions are included.

Source: MoES (2014), *Education Development Guidelines 2014-2020,* Ministry of Education and Science, Riga, http://m.likumi.lv/doc.php?id=266406.

all relevant stakeholders. Critical learning areas for young children include literacy, numeracy, science, information and communications technology (ICT), art and music, and physical and health development (OECD, 2012). Curricula are influenced by many factors, including a society's values, content standards, research findings, community expectations, culture and language.

Latvia has defined the Model Programme for Pre-school Education (2012) which sets out the education plan and curriculum guidelines. The document focuses on play-centred learning and competences and includes elements like the environment, social life, children's native and state language and literature, and mathematics. The list of subjects also includes drawing, needlework, sports and music. Optional activities, such as foreign languages, are also possible depending on the institution, which makes the programme adaptable to local needs. Apart from learning activities, children also spend time outside taking walks and playing freely. Children in full-time ECEC are also provided with meals during the day and the chance to take a nap.

Research highlights the importance of play for children's cognitive and social development (OECD, 2012). It is argued that children learn about the world and environment, develop imagination and creativity, and face a wide range of emotional experiences through play. Latvia pays special attention to play as a basic method of teaching in ECEC. Other methods used include practical elements, verbal methods, modelling and experimenting. Teachers are free to choose from any of these methods, but they are encouraged to use play as the main teaching method, given that various play activities ensure children's physical, intellectual and emotional development (MoES, 2015). OECD countries with similar coherent play-based curricula include the Czech Republic, Finland, New Zealand, Norway and Sweden.

Latvia has no national assessments for monitoring children's developmental outcomes during or at the end of ECEC to inform the government and others on the quality of ECEC throughout the country. Latvia's ECEC curriculum and the Guidelines for Pre-school Education however provide descriptors of the knowledge, skills and attitudes that children are expected to have obtained at the end of ECEC. These are to inform teachers in their observations of children's progress. The teacher is expected to tell children regularly about their achievements emphasising the positive aspects and encouraging the improvement of skills, and regularly consulting with parents on their children's development. Since 2011, ECEC institutions should provide parents or guardians with written information on the achievements, i.e. the knowledge, skills and attitudes regarding the planned curriculum outcomes, of their children upon completion of ECEC (Eurypedia, 2015).

The ECEC workforce

In 2013, there were 9 703 ECEC teachers – often referred to as "pedagogues" in Latvia – working in ECEC institutions in Latvia (Central Statistical Bureau of Latvia, 2015). These included some 1 700 specialist staff: educational methodologists (deputy principals), music teachers, sports teachers, speech therapists, special education teachers, educational psychologists and other educators (MoES, 2015). Almost all ECEC teachers were female (99.5% in 2012), and 14% were less than 30 years old in 2012, while 27% were aged 50 or older (Eurostat, 2014a).

More than 90% of ECEC teachers were working on a full-time basis in 2012, meaning 36 teaching and contact hours per week (Eurostat, 2015a). Administrative data show that the vast majority of compulsory ECEC teachers (for ages 5 and 6) worked in only one institution in 2014 (91%) (OECD, 2014b).

In 2013, the annual average actual gross salary of Latvia's ECEC teachers was EUR 6 697, which is among the lowest across EU-28 countries and considerably lower than the average salaries of their peers at primary and secondary levels (EACEA/Eurydice, 2014). In Latvia, the central government sets teachers' minimum statutory salaries, while municipalities and private providers may offer higher salaries. The minimum statutory salary for a full-time ECEC teacher was set at EUR 4 610 in 2014, rising to a maximum of EUR 4 781, indicating a relatively flat salary scale.

The ratio of students to teaching staff is an important indicator of the resources devoted to ECEC. In 2012 the average student-teacher ratio for ECEC programmes for 3-6 year-olds in Latvia was 11 which is low compared to the OECD average ratio of 14 (OECD, 2014a). Many OECD countries have set standards for class sizes and/or student-staff ratios in order to guarantee the health and safety of children, an effective and equitable learning environment, and adequate working conditions for ECEC staff. In Latvia, it is up to institutions and municipalities to decide on such standards, as central regulations were abolished in 2009 in order to reduce bureaucratic obstacles.

Like many OECD countries Latvia has recognised the importance of having ECEC staff with a high level of formal education. There are many ways of becoming an ECEC teacher in Latvia. To qualify, teachers should obtain a first-level professional tertiary qualification by completing a 3- or 4-year professional study programme (4.5 years if part-time). Those already qualified to teach a different level of education can complete a 2-year full-time study programme (2.5 years if part-time) or a master's level study programme. In addition, those who already work as teachers

in other levels can obtain an ECEC teacher qualification by completing at least 72 hours of in-service training. In 2012/13, 1 740 teachers and 164 leaders and methodologists (deputy principals) completed such pre-school teachers' professional competence development courses (from the "B programme", described in Chapter 3). In 2013, nine out of ten ECEC teachers (90.1%) had obtained the required professional qualification (MoES, 2015).

To help prepare teachers for the profession, initial teacher education programmes include a six-week internship or professional practice in an ECEC institution. Beginner teachers are also supposed to be provided with mentoring support in their first year of working but there is little information at the national level as to whether they actually receive such support.

Government regulations state that a teacher is expected to participate in a professional development programme of at least 36 hours every 3 years. This is shorter than some OECD countries with similar statutory requirements. For example, in Estonia ECEC teachers must take 160 hours of professional development every 5 years. In Finland and Scotland (the United Kingdom) teachers are required to participate in 30 and 35 hours of professional development respectively every year (OECD, 2014a).

In 2013 there were 591 heads managing ECEC institutions in Latvia. To become the head of an ECEC institution, candidates must provide evidence of at least 3 years of professional experience in ECEC and 2 years of administrative experience. There is no additional requirement for training before or after appointment as a head. These requirements are similar to many EU countries where the requirements include 2 to 5 years of professional experience and no compulsory training. In Latvia, heads are in principle not involved in pedagogical activities, which is the case in only a few other EU countries including the Flemish Community of Belgium, Croatia, Estonia, Lithuania and Scotland (European Commission/EACEA/Eurydice/Eurostat, 2014).

Quality assurance

In Latvia, both the central and local governments are responsible for ensuring ECEC services comply with regulations. Like in many OECD countries, compliance with regulations is monitored through two processes: the registration of new ECEC institutions or individual service providers and external evaluations or inspections (OECD, 2012; MoES, 2015). To register an ECEC institution, a person authorised by the founder of the institution needs to submit an application to the State Education Quality Service (SEQS). The SEQS decides whether to register the institution on the Register of Educational Institutions, based on compliance with relevant regulations.

In addition to formal ECEC institutions, Latvia also has family day carers, commonly referred to as "child-minders", who are qualified private persons offering child-minding services. They are registered in the Register of Child-Minder Services that is also managed by the SEQS. Registered child-minders are required to meet certain qualifications (Box 2.3) and are supervised by the State Inspectorate for Protection of Children's Rights, as well as several government agencies including local governments, the State Fire and Rescue Service, the Food and Veterinary Service and the Medical Inspection.

Box 2.3. **Family day carer ("child-minder") qualifications and safety requirements in Latvia**

On 1 September 2013, the Cabinet of Ministers' regulation on family day carer registration, referred to as the "child-minder" register and professional activity organisation, came into force, defining the qualification and safety requirements for family day carers. The regulation stipulates that a person who wishes to work as a family day carer needs to have completed a professional education programme of at least 40 hours in order to be registered, unless the person has received secondary or tertiary pedagogical education or obtained a professional qualification as a family day carer.

In addition, a provider of family day care services (legal person, public or local authority) must meet the following requirements: 1) have the State Fire and Rescue Service's approval that fire safety requirements have been met if the service is provided outside the child's home; 2) have regular health inspections for persons engaged in the supervision of children; 3) have a license from Food and Veterinary Service, if a full-time service is provided outside the child's home, for catering of meals for children; 4) meet the working procedure regulations and regulations on protection of safety at work; and 5) ensure fire safety, labour protection, hygiene and first aid.

Source: Cabinet of Ministers (2013), *Prasības bērnu uzraudzības pakalpojuma sniedzējiem un bērnu uzraudzības pakalpojuma sniedzēju reģistrēšanas kārtība* [Regulation on Family Day Carer Registration], Regulation No. 404, adopted 16 July 2013, Riga, http://likumi.lv/doc.php?id=258873.

Evaluation of the quality of an ECEC setting is often conducted for external or internal accountability purposes. When quality is evaluated for external accountability, for example by the education inspectorate or other government agency, ECEC settings are understood as an instrument for implementation of family, labour market and education policies on national, regional and local levels (Litjens, 2013).

In Latvia, the SEQS has the right to carry out an investigation based on a complaint from a parent or another state institution. These may lead to the initiation of an administrative violation case. In 2014, 3 out of a total

of 31 administrative violation complaints initiated by the SEQS concerned ECEC, all of which led to a prosecution, although they were not initiated by parent complaints. In OECD countries, the responsibility for conducting these external evaluations, often in the form of inspections, varies. There may be a central agency in charge of inspections that may focus on procedural aspects, processes or a combination of both. In Ireland and Norway, for example, inspections are combined with interviews with managers and staff (OECD, 2012).

Latvia has no such central agency responsible for evaluating the quality of ECEC institutions. Instead, as in many OECD countries, responsibility has been decentralised to municipalities (OECD, 2006, 2012). Approaches to monitoring and evaluating the quality of ECEC institutions thus vary across the country, although municipalities must abide by national laws and regulations (Eurypedia, 2015). Concerns have been raised about the capacity of some of the smaller municipalities to effectively manage and support their ECEC institutions and schools (OECD, 2014b).

Responding to children with special education needs

Children with specific education needs such as physical or cognitive impairments are in need of specialised care, including specialised staff, adapted environments or a more flexible group organisation. Yet access to ECEC for these children is often inappropriate in OECD countries (OECD, 2006). In Latvia, children with special needs (including health or development impairments) can attend special education institutions or special education groups at general education institutions, or are integrated into general groups in institutions that offer special ECEC programmes (Eurypedia, 2015).

In 2013/14, there were 4 892 children with special needs enrolled in ECEC institutions. About one-third (1 616) were integrated into regular ECEC institutions leaving the majority in special ECEC institutions. When admitting a child with special needs, a regular ECEC institution can choose to provide a special education programme for several children with the same or similar special needs, or to admit the child and develop an Individual Education Plan to ensure that adequate support is provided.

If a child shows any signs of special needs parents can contact municipality services for information about what kind of support is available and where they can receive it. The Municipal Pedagogical Medical Commission consists of different specialists – special education teachers, speech therapists, psychologists and sometimes doctors and social workers. They assess children and provide them with a “statement”. Most pre-school age children who attend special groups or special ECEC institutions have speech and language

development problems. They are offered special support to develop their linguistic and communication skills, normally by a speech therapist and/or special education teacher (Eurypedia, 2015; MoES, 2015). In 2013 about 10% of children of pre-school age were attending special education programmes, while specialists estimate that around 20% could benefit from additional specialist help (MoES, 2015).

As stated previously, the vast majority of ECEC institutions belong to municipalities and it is their responsibility to provide adequate support for children and their families. In Latvia, as in several other countries like Estonia, Finland, Slovenia and the United Kingdom, the central government provides supplementary funding for children with additional educational needs. To date, this financial support is only provided for those children in special ECEC institutions and not those who are enrolled in regular ECEC institutions, thereby overlooking their special education needs (Calite, 2010; European Commission/EACEA/Eurydice/Eurostat, 2014).

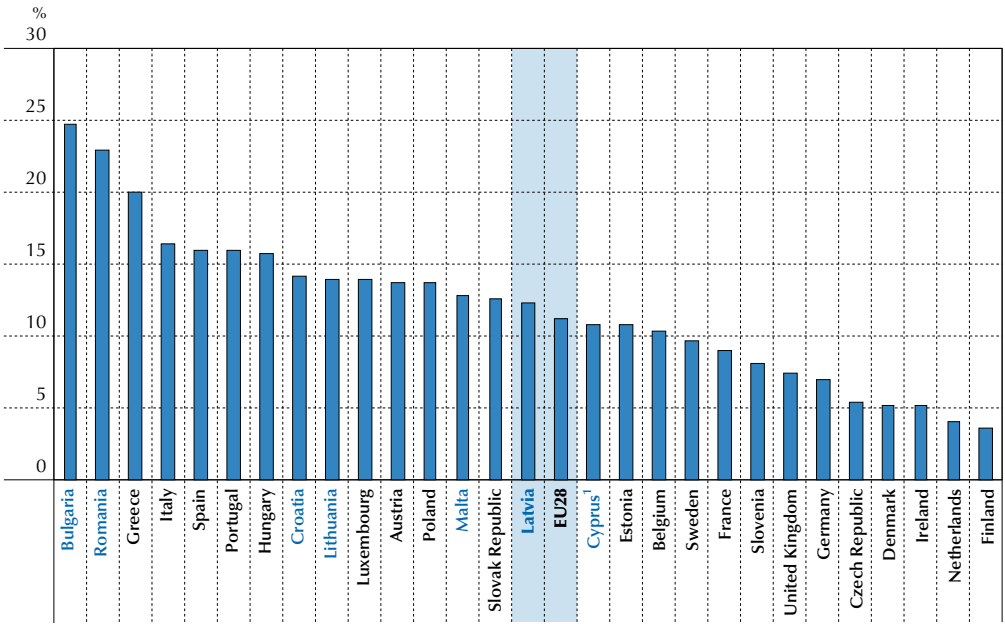
Children living in poverty

As in many OECD and EU countries, child poverty is an important policy issue that may prevent children from breaking the cycle of disadvantage. Children born into severe poverty are disproportionally exposed to factors that impede psycho-motor development, socio-emotional growth and cognitive processes (European Commission, 2013b). When combined with deprived or neglectful family backgrounds and poorly educated parents, poverty becomes the single greatest barrier to educational achievement (Coleman et al., 1966; Duncan et al., 1998; Heckman, 2008; Melhuish et al., 2008; EACEA/Eurydice, 2009; Del Boca, 2010; Ladd, 2012).

In 2013, 12.3% of children under the age of 6 were living in poverty in Latvia, which is slightly higher than many OECD and EU countries (Figure 2.4). Though it has dropped considerably since 2010, when it was as high as 19.6%, the data still show a sizable proportion of young children at risk of social exclusion who may need specific measures to support their educational and other developmental needs.

Unlike education, where high spending does not always ensure learning achievement, government spending on family and social benefits is strongly correlated with the reduction of child poverty rates (Bennett, 2008a). The effects of child poverty can be lessened through family support and children's services, but governments also need to tackle family poverty upstream through energetic social, housing and labour policies including income transfers to low-income groups, comprehensive social and family policies, and supportive employment schemes and work training (Bennett, 2008a; OECD, 2006, 2011).

Figure 2.4. **Child poverty among children under the age of six (2013)**



Notes: Non-OECD countries are shown in blue.

Poverty thresholds are set at 50% of the median equalised disposable income of the entire population.

1. Note by Turkey: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".

Note by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

Countries are ranked in descending order of at risk of poverty rate among children under age 6.

Source: Eurostat (2015b), "At-risk-of-poverty rate by poverty threshold, age and sex (source: SILC)", *Eurostat database*, Eurostat, http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_li02&lang=en (accessed 14 August 2015).

The Latvian government has implemented a number of policies in these areas. These include the amendment of the Law on State Social Allowances increasing child and parental benefits and the co-funding of ECEC places and family day care services, mentioned above. Free meals are also offered to children from very poor families attending ECEC, and several projects have

been implemented to improve the larger social support system for children and their families (see Box 2.4 for one example). These various policy initiatives, although not always co-ordinated or implemented in a coherent manner, seem to have contributed to mitigating the effects of socio-economic disadvantage and enhancing the chances of Latvia's youngest children enjoying an early education (and care).

Box 2.4. **"Hand-in-Hand for Child Support" – responding to equity challenges in Latvia**

The major cause of children not completing primary school education, which is compulsory in Latvia, include family troubles and insufficient family support networks. A pilot project in the Latvian city of Cesis aimed to reduce dropout rates and improve the social support system for families and children. Through this project, "Hand-in-hand for child support", 28 people were trained to work directly with parents in ECEC institutions and primary schools. The overall objective of the project, which began in 2008 and ended in 2010, was to develop mechanisms that detect when support for students and their families is needed – and to ensure that these students and families receive timely, relevant assistance. The project worked to improve co-operation between students, parents, schools and other local government institutions in order to solve various everyday issues regarding children and their families. It also helped educators cultivate a positive environment for co-operation within the family context.

Source: European Commission (2013a), *Barcelona Objectives: The Development of Childcare Facilities for Young Children in Europe with a View to Sustainable and Inclusive Growth*, Publications Office of the European Union, Luxembourg, http://ec.europa.eu/justice/gender-equality/files/documents/130531_barcelona_en.pdf.

Key policy issues

Policy issue 1: Despite good progress, enrolment of the youngest children is relatively low and unequal across Latvia

Enrolling young children in ECEC does not just benefit children's development. It can also contribute to ensuring a supply of workers, equality of opportunity for women, family well-being and social inclusion. OECD countries have been expanding ECEC in tandem with the change in women's participation in the labour force due to a mix of economic pressures requiring women to work and women claiming their equal rights in the workplace and in society at large. Above all, research shows ECEC offers an opportunity for societies to attempt a significant reduction in poverty, inequality and disadvantage. An increasingly competitive, knowledge-based global economy is helping to convince both governments and parents that ECEC is a worthy

investment: an investment in the future academic success and employment prospects of the next generation (OECD, 2006; UNICEF, 2008).

During the last two decades Latvia has made considerable progress in increasing ECEC enrolments, particularly for 5- and 6-year-olds. This corresponds with Latvia's relatively high and increasing female labour force participation. Nevertheless, despite the good progress made, enrolments for children under age 3 are still relatively low compared to many OECD countries. Shortages of places, high costs for private ECEC and an insufficiently diversified ECEC system have played their part; all issues which the Latvian authorities have aimed to resolve in recent years.

Steady progress towards universal enrolment among children aged 3 years old and older

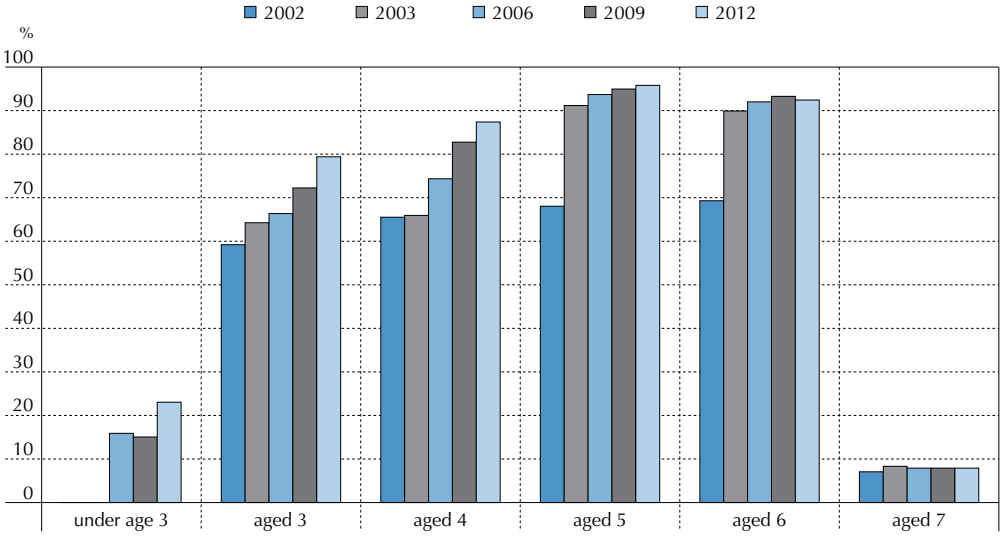
Latvia has had a long tradition of public ECEC dating back to the time when it was still part of the Soviet Union (USSR). This however all changed at the onset of the collapse of the USSR. The years that followed 1991, when Latvia regained independence, were characterised by a transition to a market economy. In this period the country also experienced a pronounced economic recession. With tight public budgets, priority was given to financing basic education over ECEC. A large share of ECEC facilities were closed down as a result. This left many parents with the sole responsibility for the early education and care of their young children and for preparing their children for school, often without alternative support systems in place. As a result enrolments of 3-6 year-olds drastically dropped to a low of 28.4% in 1992 which was almost half that of 3 years before. Enrolments gradually rose as the country climbed out of economic recession.

The year 2002 was an important turning point. An amendment to the General Education Law made ECEC for 5- and 6-year-olds compulsory. Although the economic crisis that struck the country in 2008/09 almost made it optional again, the (financial) commitment of the central government kept it mandatory (Eurydice, 2010). Figure 2.5 shows the result of this commitment, with about 96% of 5-year-olds and 92% of 6-year-olds enrolled in ECEC in 2012.

The figure also shows the considerable proportion of children still enrolled in ECEC at the age of 7 (7.8% in 2012), which is higher than other EU countries with a school starting age of 7. For example, in Estonia, Finland and Sweden, where it is also possible to defer admission to primary school, the proportions of 7-year-olds enrolled in ECEC were much smaller (1.8%, 1.5% and 1.4% respectively) (Eurostat, 2014b). The review team considers this an issue deserving further policy attention, given that late enrolment may limit children's opportunities. Although holding a child back

or delaying the start of ECEC may reduce the ability range in the class, it simultaneously increases the age range, which poses other challenges to the social fabric of the classroom. This may also be an issue of equality of opportunity if certain groups are over-represented among children who start school later (such as children who are relatively young within the age-group, boys and children from ethnic minority backgrounds). Whether this is the case in Latvia is not known.

Figure 2.5. **Net enrolment rate of children up to 7 years of age (2002-12)**



Sources: Age 3 to 7 – OECD (2014a), *Education at a Glance 2014: OECD Indicators*, OECD Publishing, Paris, http://dx.doi.org/10.1787/eag-2014-en; under age 3 (from 2006 to 2012) – Eurostat (2015c), "Formal childcare by age group and duration - % over the population of each age group (source: SILC)", *Eurostat database*, Eurostat, http://ec.europa.eu/eurostat/product?code=ilc_caindformal&language=en&mode=view (accessed 15 May 2015).

There is also the possibility that a child's lack of school "readiness" is caused by special needs that would be better addressed in other ways (Sharp, 2002), but whether this is the case is also unknown. MoES should therefore investigate who these children are and the reasons for their delayed entry into school.

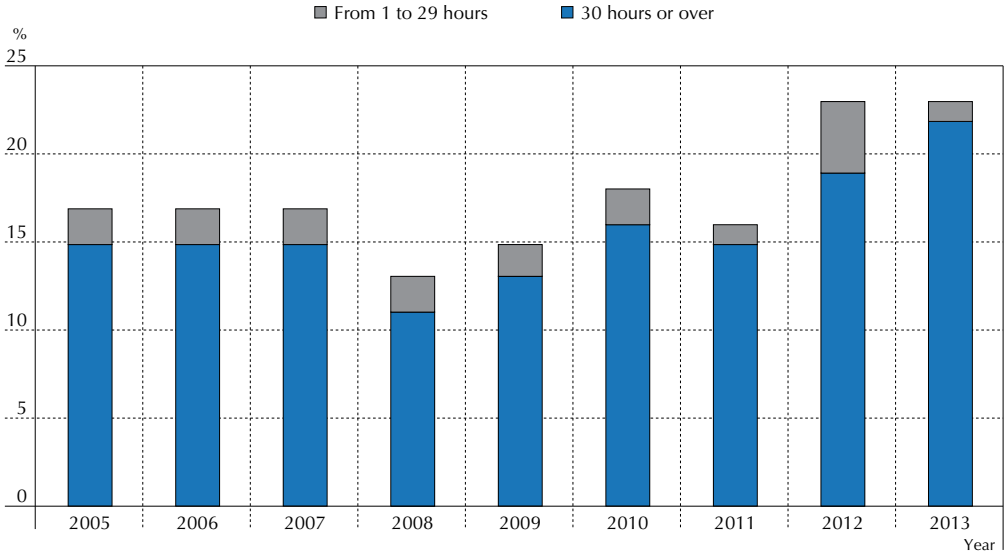
For children aged 4 years and younger, enrolment rates have also increased in the last decade, despite the economic hardships caused by the crisis. In 2012, 87% of 4-year-olds were enrolled in ECEC which was above the OECD average of 84%. With 93.3% of 4- to 6-year-olds enrolled in ECEC in 2012, Latvia is already nearing the EU 2020 benchmark (95% of children from

age 4 to compulsory primary school age), only just below the EU-28 average of 93.9% (European Commission, 2014a). In addition, Figure 2.5 shows the steady progress made during the last decade of increasing enrolments for 3-year-olds. In 2012, 80% of 3-year-olds were enrolled in ECEC which was considerably above the OECD average of 70% and about 20% more than a decade before.

Continue efforts to resolve waiting lists and expand participation among children under the age of 3

The ECEC enrolment of children under 3 has also increased during the last decade, particularly since the amendment of the law in 2011 which entitled children to ECEC from the age of 1.5. Figure 2.6 shows the positive impact this amendment and other policy efforts have had on enrolments of children under the age of 3.

Figure 2.6. **Percentage of children under 3 in formal ECEC, hours per week (2005-13)**



Source: Eurostat (2015c), "Formal childcare by age group and duration - % over the population of each age group (source: SILC)", *Eurostat database*, Eurostat, http://ec.europa.eu/eurostat/product?code=ilc_caindformal&language=en&mode=view (accessed 15 May 2015).

Despite this progress however, participation rates are still relatively low compared to many OECD countries. In 2012 almost one in four children (23%) under the age of 3 were enrolled in formal ECEC, which is below

the OECD average (33% in 2010). Some municipalities have struggled to adequately respond to the (growing) demand for such services. Shortages of facilities were fuelled by intensive regional migration towards mostly city areas. As a result parents and guardians in some municipalities, particularly in Riga and other large cities, have faced long waiting lists in recent years (MoES, 2015).

In response Latvia has implemented a range of policies and programmes to expand and diversify ECEC services, including by modernising its ECEC network. For example since 2009 the Latvian government has built or expanded 17 public ECEC institutions. An additional 61 were renovated by June 2014 through the EU-funded "Infrastructure and Services" programme (MoES, 2015).

Other policy measures aimed at expanding access have used the public funding for children in private ECEC institutions. For example, in 2013 the Riga City Council was persuaded by parents to make funding rules for ECEC institutions more liberal, allowing private institutions to apply for municipal funding per child on the same basis as municipal ECEC institution. Another example is the earlier mentioned "Childcare support and child-minder service" pilot project that started in 2013 and provides financial support for parents who need child care support for their children aged 1.5-4 years but are not benefiting from public childcare. The combined co-funding paid for by the state and local government to the child should be enough to decrease parents' expenditure on private kindergartens or child-minding services.

On the latter, the Ministry of Welfare in 2013 introduced the Child-minder Service in response to the fact that some municipalities had difficulties in providing every child with a place at an ECEC institution. The service is aimed at ensuring safe, meaningful and useful organisation of childcare, stimulating the child's comprehensive development. Such service is an alternative to organising child-care at an ECEC institution. If the child does not get a place at an ECEC institution financed by the municipality, parents can entrust child care to a child-minder registered on the register of the Child-minder Service (see Box 2.3). Furthermore, the child-minder (family day carer) may receive state aid (EUR 142) and municipal co-financing; thereby partly or fully covering the costs of the service provided to the child (MoES, 2015).

The evidence shows these and other efforts by central government, municipalities and private persons are having their effect. For example in September 2014 there were 11 265 children in Latvia waiting for an ECEC place; a year later this number had dropped to 8 809 (MoES, 2015). MoES should continue to carefully monitor this process as further efforts are likely to be needed to meet the demand for ECEC in urban areas, particularly as migration from rural to urban areas is expected to continue in the years to come.

There has been much policy attention on expanding ECEC services in urban areas in recent years, and for good reasons and with good results although more needs to be done. The children in rural areas should not be overlooked, however. Importantly, as will be discussed in detail in Chapter 3, there are considerable differences in student performance between students in rural and urban areas. Quality ECEC at an early age has the potential to increase children's school readiness and diminish differences in later student performance. Latvia should therefore consider shifting its focus towards strengthening ECEC enrolments in rural areas as long as the services are of good quality.

Increasing enrolment rates in rural areas, especially for the youngest children, may require promoting ECEC among parents. In Norway, for example, outreach programmes and one-stop shops have educated parents about the importance of early child development and kindergarten's role in supporting it. Some municipalities have developed outreach programmes to encourage greater participation by minority-language children in particular (Engel et al., 2015).

Moreover, programmes that involve raising parents' skills and increasing parents' opportunities for work, possibly in conjunction with broader efforts to enhance parental engagement, may increase ECEC participation. In Estonia, within the framework of the Strategy of Children and Families and its associated development plan, parenting programmes have been operating since 2012 covering such topics as child health and development, bullying in ECEC institutions, and children's and parents' rights. Some training courses are provided within ECEC institutions (European Commission/EACEA/Eurydice/Eurostat, 2014).

Parenting programmes are often directed at the most vulnerable groups, as in Ireland and the United Kingdom (Wales and Northern Ireland). In the United Kingdom, for example, many schools have been providing extended services including a range of activities, childcare, parenting support such as family learning, and access to targeted and specialist support services (Carpenter et al., 2010).

Another such example comes from Latvia itself where between 2009 and 2013 the "Change Opportunities for Schools" project was implemented, turning small schools into multifunctional educational, cultural and social support centres. The main goal of this school-based community development project was to deal with the issue of social disintegration due to the economic crisis by offering support to maintain and revive small schools in rural areas, small towns and urban peripheries and to develop them into multifunctional community resource centres. While expanding and improving ECEC provision was one of the main tasks, considerable attention was paid to supporting parents through educational opportunities,

social support, and consultations for job seekers and those wishing to start small businesses (Soros Foundation Latvia, n.d.).

Another policy option to strengthen enrolment among younger children living in rural areas is to lower the compulsory age of participation in ECEC. This is often considered an effective option from an equity point of view, as inequalities are likely to exist before schooling starts and tend to grow as long as school is not compulsory (OECD, 2013b). Latvia for now is not considering further lowering the age of compulsory ECEC to 4, but will actively encourage participation of all 4-year-olds. However, it should not limit its efforts to this age group and should concentrate on those children – and their parents – living in rural areas of the country.

Policy issue 2: Barriers to developing a high-quality and motivated ECEC profession

There is a growing body of research suggesting that having well-qualified staff with the right pedagogical knowledge and the ability to create rich and stimulating learning environments is central to the quality of ECEC and ultimately child outcomes (Litjens, diMattia and Viatte, 2010; Huntsman, 2008; Burchinal et al., 2002; OECD, 2006, 2012). Latvia is faced with an ageing ECEC workforce; close to one in five will retire in the next decade, even as it already faces shortages of qualified ECEC teachers, especially in Riga and other large cities. The high workload and relatively low salaries are the main factors in this shortage.

Little is also known about the quality and effectiveness of initial education and professional development in Latvia. These and other inter-related areas concerning the working conditions and quality of ECEC staff point towards the need for a more strategic approach to ensuring sufficient numbers of motivated and quality ECEC staff in the years to come.

Ensuring attractive working conditions

Research evidence shows that adequate working conditions for staff, for example manageable group sizes and competitive salaries, affect staff job satisfaction and retention, which in turn contributes to the overall quality of the system (OECD, 2012). Competitive wages attract professional staff, increase their job satisfaction and performance, and may result in lower staff turnover rates (CCL, 2006). In Latvia, however, ECEC staff face high workloads and low salaries. These conditions have contributed to ECEC teacher shortages in the larger cities (MoES, 2015) despite several municipalities offering higher wages on top of the minimum salary funded by the state.

Since 2009, the introduction of the Assessment System for Teacher Performance (see Box 3.1, Chapter 3) has enabled ECEC teachers to receive an additional allowance based on their performance. Teachers who have been assessed as performing at Levels 3, 4 or 5 receive an allowance of 8%, 20% and 25% respectively on top of their monthly salary. The evidence from our review suggests that these performance allowances have had a motivating effect on at least some of the ECEC work force.

In addition, as mentioned in Chapter 1, at the time of writing, MoES is piloting a new school funding model that includes increasing salaries of ECEC teachers to EUR 600 per month. The review team considers this to be a positive development that may help attract sufficient numbers of motivated and high-quality graduates to join the profession.

However, the proposed amendments do not resolve the salary differences between ECEC staff and those working at the primary level. Under the new scheme the minimum proposed salary for primary school teachers is EUR 160 higher than that of their peers working in ECEC making it a more attractive career option for those considering education as a profession. Though such differences in pay are common, some OECD countries, like the Flemish Community of Belgium, Portugal and British Colombia (Canada), provide equal salaries to ECEC and primary teaching staff (OECD, 2012). The evidence suggests there is good reason for such measures. For example a research study demonstrated that giving fully qualified ECEC teachers' salaries equivalent to their primary education colleagues resulted in student performance that was two or more times better in literacy and maths (Pianta et al., 2009).

Investing in and guiding the professional development of ECEC staff

Apart from salaries, municipalities and headmasters can play an important role in providing good working conditions for their staff by facilitating professional development and further training. In Latvia municipalities are responsible for funding the professional development of ECEC staff. There is no clear overview at the national level of the actual investments made by municipalities and institutions in the professional development of their staff.

Furthermore, the minimum requirement to participate in 36 hours professional development every 3 years is low compared with several OECD countries with available data (OECD, 2014a) and is possibly too little. Municipalities are also expected to organise further education courses for ECEC staff but little is known at the central level about the actual participation of staff in such courses nor about their quality.

Latvia has the benefit of an experienced ECEC workforce, but this also means that many left initial education a long time ago. In order for staff to maintain their professional quality, they need to engage in ongoing professional

development (OECD, 2012). The reform of the ECEC curriculum that will follow the implementation of the competency-based curriculum in basic education (see Chapter 3) is likely to increase the need for professional development.

In addition, the evidence shows there is a need to enhance teachers' capacities and change their attitudes to working with children with special education needs (Calite, 2010; Kaša, Liepina and Tuna, 2012; Nimante and Tubele, 2010; AC Konsultācijas, 2007). This issue is of particular importance considering the notable proportion of pre-school aged children that have not been formally diagnosed with special needs, but who have been recognised as actually needing special support in their learning, with estimates ranging from 10-20% (Kaša, Liepina and Tuna, 2012; MoES, 2015).

The key to effective professional development is identifying the right training strategies to help ECEC staff stay up to date with scientifically based methods and curriculum subject knowledge so as to be able to apply this knowledge in their work (Litjens and Taguma, 2010). It also should continue over a longer period of time with staff having regular or long-term opportunities for training (Sheridan, 2001; Urban et al., 2011). Only when learning experiences are targeted on the needs of staff and offer tangible development opportunities can professional development have favourable outcomes (Mitchell and Cubey, 2003).

Again, at the national level there is limited information available on the actual training needs of ECEC staff. The review team was informed that ECEC staff choose professional development courses based on their own preferences, rather than an assessment of their performance and identification of further professional development needs. In Latvia there is also no mandatory requirement to capture the developmental needs identified in professional development plans (MoES, 2015) that could serve as a guidance for professional development planning.

Part of the challenge would seem to lie in the fact that there are no national standards for ECEC professionals to inspire, assess and guide staff in their professional development. Instead founders or heads of ECEC institutions are required to develop their own quality criteria for the purpose of assessing the quality of the work of teachers. A unified understanding of what high-quality ECEC entails in Latvia is lacking.

The five "key areas" of the new Assessment System for Teacher Performance give an indication of the desired competences of Latvian teachers (see Chapter 1). ECEC teachers are also entitled to participate in the system and many have done so since it was introduced in 2009. It enables ECEC teachers to be recognised for their performance and obtain a supplement to their salary depending on their assessed performance level. However, the key areas fail to capture the full range of competences

ECEC staff require for their daily work. They are therefore not suitable for informing ECEC professional development.

Latvia should therefore consider developing national standards for ECEC staff, as well as ensuring that heads of ECEC institutions are adequately trained in using them to evaluate the performance of staff to help identify further learning needs. To do this, Latvia may look towards countries like England (the United Kingdom) or Portugal. England for example introduced the Early Years Teacher Status (EYTS) programme in 2013 to recognise graduate-level staff who had demonstrated that they had met a set of national professional standards (Box 2.5).

Box 2.5. **ECEC teacher standards – examples from England and Portugal**

In **England**, the Department for Education introduced the Early Years Teacher Status (EYTS) programme in 2013, building upon the strengths of the Early Years Professional Status programme launched in 2007. With this programme, teachers and trainee teachers who meet the Early Years Teachers' Standards are awarded EYTS that demonstrate that they are specialists in early childhood development. The teachers awarded EYTS are expected to be accountable for achieving the highest possible standard in their professional practice and conduct.

The eight Early Years Teachers' Standards are as follows:

1. Set high expectations which inspire, motivate and challenge all children.
2. Promote good progress and outcomes by children.
3. Demonstrate good knowledge of early learning and Early Years Foundation Stage.
4. Plan education and care taking account of the needs of all children.
5. Adapt education and care to respond to the strengths and needs of all children.
6. Make accurate and productive use of assessment.
7. Safeguard and promote the welfare of children, and provide a safe learning environment.
8. Fulfil wider professional responsibilities.

In 1998, the Ministry of Education in **Portugal** acquired the copyright to the Effective Early Learning Project, initiated in the United Kingdom. The *Desenvolvendo a Qualidade em Parcerias* (DQP), the Portuguese version of this project, focuses on the implementation of a model for assessment and for quality development in pre-school institutions. It can be used in pre-school teacher training, as well as in the monitoring and review of teaching practice in kindergartens. One of the instruments of the DQP is the *Adult Engagement Scale,* which is used by pre-school teachers to evaluate their own practices, and to monitor the process quality of their colleagues in peer reviews. This scale assesses the effectiveness of the teaching-learning process in kindergartens, and the quality of adult intervention.

Box 2.5. **ECEC teacher standards – examples from England and Portugal** *(Continued)*

The scale focuses on the types of interactions between the practitioner and the child, and the interactions are classified into three areas:

- **Sensitivity** refers to the attention paid by the practitioner to the child's feelings and emotional well-being. Indicators for sensitivity include empathy, sincerity and authenticity. The observations focus on the way the pre-school teacher responds to the diversity of needs of the children, including conveying to the child the feeling that they are valued and accepted; listening to the child, recognising children's need to receive attention; recognising and responding to children's insecurities and uncertainties; treating children with loving care; and praising and supporting the child.
- **Stimulation** focuses on how the adult stimulates the child's learning and development process. The observations focus on the following actions staff initiate: proposing an activity; providing information; and supporting the development of an activity to stimulate action, reasoning or communication.
- **Autonomy** is the degree of freedom that the practitioner gives to the child, to experiment, give opinions, choose activities, and to express his or her ideas. It also refers to how the adult supports conflict resolution and the establishment of rules and behavioural management. The observation of autonomy focuses on the following aspects: the degree of freedom a child has to choose an activity; the opportunities a child gets to experiment; the freedom to choose and decide how to carry out activities; the respect of staff for the work, ideas and views of the child; the opportunity for children to independently solve problems and conflicts; and the involvement of the children in the making of and compliance with rules.

The results of the engagement scale can be used to discuss, analyse and improve a practitioner's own practice or those of a colleague in an open dialogue. Pre-school teachers are trained on the use of DQP and the Adult Engagement Scale during pre-service education and professional development, and a DQP handbook has been developed to support staff.

Sources: National College for Teaching and Leadership (2013), *Teachers' Standards (Early Years), National College for Teaching and Leadership*, www.gov.uk/government/uploads/system/uploads/attachment_data/file/211646/Early_Years_Teachers__Standards.pdf; OECD (2015b), *Starting Strong IV: Monitoring Quality in Early Childhood Education and Care*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264233515-en.

Ensuring quality and selective initial teacher education

Research evidence points towards the importance of having high-quality initial teacher education to shape teachers' quality of teaching practice and care for children, as well as their later professional development. Although many OECD countries have recognised the importance of a high level of initial teacher education at the tertiary level, they have shaped their initial teacher education in quite different ways. The duration varies widely across

OECD countries, for example (OECD, 2014a). Among countries considered to have quality ECEC systems are Sweden and Norway, where initial teacher education lasts 3 and 3.5 years respectively.

Initial ECEC teacher training in Latvia lasts 2 years – leading to a first level higher education and preschool teacher qualification – or 4 years if leading to a second level higher pedagogical education and preschool teacher qualification. These programmes, like those in the majority of the OECD countries, include a practicum, meaning practical modules or internships in front of students in schools. The goal of these practical field experiences is to familiarise students with classrooms, and to avoid them having a "reality-shock" at the beginning of their teaching career (Musset, 2009). In Latvia, student teachers undergo a practical period of 6 weeks. Though the practicum periods of initial teacher education programmes varies greatly among countries (European Commission/EACEA/Eurydice, 2013; Musset, 2009), the evidence recommends an extended school practice (at least 30 weeks), interwoven with coursework and careful mentoring (Darling-Hammond, 2006).

In addition to the two initial teacher education programmes mentioned above teachers with a teaching qualification for primary education can also become a qualified ECEC teacher after a programme lasting just 72 hours (MoES, 2015). Whether this alternative pathway is too short and risks the quality of these teachers is not known. This is something MoES should consider investigating.

Some OECD countries like Austria, Denmark, Finland and Germany have competitive examinations to enter initial teacher education in an effort to raise standards and draw in the best graduates. Latvia, like Belgium, Estonia, the Netherlands and Poland, has none and once they have completed initial teacher education programmes, candidates face no further requirements to test their quality and motivation before entering the profession, unlike in France, Japan and Korea (OECD, 2014a).

The need for a more strategic approach to developing the ECEC workforce

These inter-related areas concerning the working conditions and quality of ECEC teachers deserve immediate coherent and strategic policy attention in order to ensure the conditions for a high-quality and motivated workforce. Latvia's Education Development Guidelines 2014-2020 recognise this issue as one of the key education objectives.

The development of the ECEC workforce is currently left too much to municipalities who vary in their capacity to take on this responsibility. Stronger support and steering by the central government seems needed. The proposed national standards for ECEC staff are a case in point.

In addition more than a quarter of the ECEC workforce (27%) were aged 50 or older in 2012 (Eurostat, 2014a). Demographic decline is likely to diminish the demand for new ECEC staff to some degree, especially in some areas of the country, but the supply of new high-quality ECEC staff will still need a national solution. The recruitment of sufficient numbers of quality ECEC staff and the essential transfer of knowledge and skills by experienced staff to the new generation is something deserving strategic consideration.

Policy issue 3: Strengthening the systematic data collection, monitoring and use of data on ECEC

As the benefits of ECEC are increasingly recognised and investment grows, it is becoming critical to know whether ECEC systems are delivering high-quality services. Moreover, understanding how an ECEC system performs is not only important for accountability, but also to improve policy design and implementation and inform parents about the quality of what is available (Levitt, Janta and Wegrich, 2008).

The mere existence of ECEC is not itself a guarantor of quality. Good ECEC has an enormous potential for giving children the best possible start in life, limiting early disadvantage, advancing equal opportunities for women, boosting educational achievement and investing in citizenship. Poor-quality ECEC, on the other hand, has the potential for both immediate and long-term harm (OECD, 2012; UNICEF, 2008) – making monitoring of quality essential.

At present little is known about the quality of ECEC at the national level, although some data suggest there is reason for concern. There is no systematic approach to monitoring at the system level, including an underdeveloped use of research to inform policy and practice. At the local level, Latvia has no uniform monitoring approaches and limited upwards reporting.

Underdeveloped system-level monitoring of ECEC

The quality of ECEC is a multi-faceted concept (Box 2.6) and its interpretations vary across countries, making this a complex policy area. Developing adequate monitoring tools is becoming an increasingly vital issue as they would provide much-needed information on system performance. In order to use them to full effect, governments need to define the purpose and scope of their monitoring efforts; this may include assessing needs for staff training or mentoring, making funding decisions, adjusting curricula or policy changes.

Most often, countries monitor minimum standards or child outcomes (the latter predominantly in Anglo-Saxon countries; OECD, 2006). The tools

available include programme records, structured child observations and learning outcomes, but they need to be chosen carefully as they each provide different information.

Box 2.6. **Quality of ECEC: A multi-faceted concept**

The 2006 *Starting Strong II* report offers a coherent framework to understand the different aspects of quality from the perspective of overall ECEC governance. It has seven inter-related elements:

Orientation quality: the type and level of attention that a government brings to early childhood policy, e.g. through national legislation, regulations and policy initiatives.

Structural quality: the overarching structures needed to ensure quality in ECEC, which is ensured by the clear formulation and enforcement of legislation or regulations. These may include the quality of the physical environment, staff training levels, etc.

Educational concept and practice: centres' educational concepts and practice are generally guided by the national curriculum framework which sets out the key goals of the early childhood system.

Interaction or process quality: the warmth and quality of the pedagogical relationship between educators and children, the quality of interaction between children themselves, and the quality of relationships within the educator team figure among the progress goals most frequently cited.

Operational quality: operational quality is maintained by leadership that motivates and encourages working as a team and information sharing. It includes regular planning at centre and classroom level, opportunities for staff to engage in continuous professional and career development and time allowed for child observation.

Child-outcome quality or performance standards: ECEC services are provided not only to facilitate the labour market or other aims but above all to improve the present and future well-being of children.

Standards pertaining to parent/community outreach and involvement: this area is mentioned less than other quality standards in national regulations and curricula, but can emerge strongly in the requirements for targeted and local ECEC programmes.

Source: OECD (2006), *Starting Strong II: Early Childhood Education and Care*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264035461-en.

In recent years, Latvia has tried to improve its system-level monitoring of ECEC. Since 2009 the State Education Information System has collected data about the children in ECEC institutions, as well as information on the staff working there. In January 2015 the Childcare Register was incorporated into the system to gain a more coherent overview of the full ECEC system (MoES, 2015).

Despite these recent efforts, the data collection, monitoring, and use of data and research for policy making all require considerable improvement, particularly in certain areas. For example, Calite (2010) noted the lack of accurate data about the number of children with disabilities in ECEC.

Furthermore, very little is known about the actual quality of ECEC in Latvia. The State Pre-school Education Guidelines (2012) as mentioned describe the pedagogical process, content and learning outcomes of ECEC programmes, and how the evaluation process is to be organised. There are no national-level data available on the learning outcomes of children in ECEC, however, which one can argue leaves the country guessing about the quality and effectiveness of ECEC provision. In Latvia, the monitoring of children's development is done solely by municipalities, whose approaches tend to vary (MoES, 2015), due to the absence of any national assessment instrument.

The evidence suggests this is an issue of concern. According to the PISA 2012 results, in most countries with available data, students who reported having attended ECEC for more than one year performed better in mathematics than those who reported they had not, even after accounting for students' socio-economic status. Latvia was one of the few exceptions where such a relationship was not observed (OECD, 2013a). Though one can argue these data only provide an insight into the quality of Latvian ECEC in the early 2000s, the lack of national data sources makes it hard to dispute these findings.

Monitoring of child developmental and learning outcomes is crucial to informing ECEC staff and families about children's skills and development. Such knowledge can improve staff interactions with children and facilitate the adaptation of curricula and standards to meet their needs (Litjens, 2013). In addition, the monitoring of ECEC can show how effective ECEC interventions or programmes have been.

The literature urges caution, however, and notes the importance of ensuring monitoring tools are developmentally appropriate (Copple and Bredekamp, 2009; Gestwicki, 2011; Kostelnik et al., 2011; Meisels and Atkins-Burnett, 2000; Sattler, 1998; Saracho and Spodek, 2013). The tools should be designed to identify children's learning needs, abilities and skills according to their age groups. The best tool will vary according to the knowledge and skills children have or are expected to have at different developmental stages. For instance, young children are usually not able to complete a paper-and-pencil test. Children's comprehensive development is also not just reflected in and affected by academic knowledge and cognitive skills, but also by physical well-being, motor development, social and emotional development, and approaches towards learning (Barblett and Maloney, 2010; Raver and Knitzer, 2002; Snow, 2007).

The review team learned that Latvia is in fact considering a pilot project (to be funded through the European Social Fund) to systematically monitor child development and outcomes. We agree this pilot initiative is important for exploring a suitable approach for monitoring the developmental outcomes of children in ECEC. The Early Development Index (EDI) may serve as a source of inspiration for this effort. The EDI is a population-level measure of children's development or well-being which was originally developed in Ontario, Canada. Other countries have since developed their own EDI according to their cultural and societal needs. For instance, Australia developed the Australian Early Development Index. The EDI consists of a checklist on children's development which is completed by teachers. The results are aggregated at the group level (school, neighbourhood, city, etc.) to provide a population-based measure of community, and across the country (if implemented at country level). The checklist measures five key domains of early childhood development: 1) physical health and well-being; 2) social competence; 3) emotional maturity; 4) language and cognitive skills (school-based); and 5) communication skills and general knowledge. The data are not reported at the child or class level which means they are not used as a diagnostic tool for individual children or to assess their school readiness. The results of the EDI do allow local authorities, communities or providers to assess how local children are developing relative to other children (Litjens, 2013).

Strengthening the links between research, policy and practice

MoES has made good use of research to inform policy making at other levels of education (see Chapters 4 and 5). It should expand this good practice to the field of ECEC, which could benefit greatly from a stronger use of research to inform policy and practices. Budget constraints have obviously been a key factor in the recent past, but the review team formed the impression that within MoES the "culture" of using research as an instrument for policy making is also not well developed. It would seem key for MoES to develop its own analytical capacity to use research and other evaluation results to improve its policies.

In addition, MoES should consider increasing its investment in researching the quality and equity of ECEC. A strategic approach could allow efforts and resources to be focused and support the use of research findings in the policy-making process. An example to follow might be Norway which adopted an overall strategy for educational research in 2008, including an extensive research programme on ECEC (Box 2.7). That strategy directed the strengthening of educational research on ECEC in Norway, an effort that continues to this day.

Box 2.7. **Strategic use of research on ECEC in Norway**

In 2008, the Norwegian Ministry of Education and Research adopted an overall strategy for educational research, including research on and for *barnehager* (kindergartens). The strategy pointed out that, previously, research on ECEC tended to address questions relating to accessibility, distribution and the cash-for-care benefit rather than questions relating to the quality, content and tasks of *barnehager*. The strategies Kunnskap for Kvalitet (2008–2013) (Knowledge for Quality) and Kvalitet og Relevans (2014–2019) (Quality and Relevance) directed the work of strengthening educational research.

The goals are:

- to strengthen the expert communities that conduct research on education
- to raise the quality and relevance of the research
- to stimulate innovation and closer co-operation between research communities in Scandinavia, Europe and worldwide
- to facilitate the use of knowledge and research results in governance, administration and practice in the education sector.

Norway also carries out surveys of parents' opinions and consults them on a regular basis about any difficulties and wishes they have about ECEC services. These play a critical role in maintaining quality, affordability and transparency in the spending of budgets. National surveys and parent consultations provide information about ease of access, opening hours, the administration and distribution of places, family background, quality standards, parents' perception of the well-being of children, and the provision of meals and healthcare for children.

Source: Norwegian Ministry of Education and Research (2015), *Background Report from Norway 2014: OECD – Thematic Review of Early Childhood Education and Care Policy 2014*, Norwegian Ministry of Education and Research, Oslo.

Moving towards a unified approach to monitoring service quality

Evaluating the quality of an ECEC setting (referred to as service quality) is often conducted for accountability purposes. These purposes can be for external or internal accountability (Adams and Kirst, 1999; Levitt, Janta and Wegrich, 2008). The latter focuses on internal staff processes and practices. OECD countries differ as to where the responsibility for monitoring service quality lies: some have a central authority, in others responsibility is devolved to lower levels of government, as is the case in the Scandinavian countries for example.

In Latvia, the responsibility for evaluating service quality is devolved to municipalities. Municipalities are also expected to evaluate and supervise the work of ECEC institutions and help resolve any issues, but there is no requirement in law for them to actually do this.

Furthermore, as mentioned, there are no state regulations on the organisation of day-to-day activities in ECEC which are instead defined by the founder of the ECEC institution. There are common recommendations on the organisation of early education included in the State Pre-school Education Guidelines. Despite these and other guidelines and regulations approaches to evaluating service quality among municipalities vary, with little guidance provided by the central government as to how this should be done.

There is also no requirement to report upwards. As a result, little is known about service quality at the national level and this, importantly, also includes the quality of staff. Our conclusion therefore is that stronger accountability to and supervision by the central government should be considered, especially if concerns about the quality of ECEC are supported by further evidence.

ECEC institutions, like any other type of organisation, need feedback on their performance to help them identify how to improve. Some countries like Denmark, Scotland and Sweden have promoted internal evaluations or self-assessments to provide the basis for external evaluations as well as to help institutions reflect on the quality of their pedagogical staff, care environment and other structural aspects (Litjens, 2013). In Sweden, for example, each ECEC setting is expected to prepare an annual evaluation report based on an internal assessment exercise (OECD, 2012).

Scotland provides us with another example. Its Inspectorate of Education developed "The Child at the Centre: Self-Evaluation in the Early Years" (Her Majesty's Inspectorate of Education, 2007), a resource document to support ECEC institutions in the self-assessment process. At the centre of the self-evaluation process is a framework of quality indicators arranged around six questions which the Inspectorate of Education, and other agencies, have adopted for evaluation purposes: 1) what outcomes have we achieved?; 2) How well do we meet the needs of our centre community?; 3) How good is the education we provide?; 4) How good is our management?; 5) How good is our leadership?; 6) What is our capacity for improvement?

Latvia should consider following these examples and promoting internal evaluations. It should require ECEC institutions to develop and publish self-evaluation reports, as it already does for schools (see Chapter 3). Providing resource documents and training on how to use them will be key to the successful implementation of such a policy measure.

Further, we would like to note there would seem to be much to gain from improving the systematic identification and dissemination of "good practices" and innovations. There are some, if not many, examples of good practices or innovations in Latvia that could inform and support ECEC practitioners working in other parts of the country. However at present these are often not (well) known beyond the municipality border, partly as a result

of the absence of a national policy to deliberately identify and disseminate such practices throughout the Latvian ECEC system and beyond.

Policy issue 4: Governance and financing hamper equal access to quality ECEC

Can a decentralised system guarantee reasonably equal treatment of all children across a country? This is a key question posed in the OECD *Starting Strong II* publication, and one that many countries which have devolved responsibilities for ECEC are struggling with. It is also a significant challenge faced by many of Latvia's municipalities, in particular the smaller ones. Concerns have been raised in recent years about their (financial) capacity to effectively manage their local education systems, as well as other social services (OECD, 2014b, 2015a). In addition, the evidence suggests family and child benefits are not sufficiently targeted towards low-income families (OECD, 2015a).

The need to review governance and funding of ECEC services

Latvia's local government reform in 2009 aimed to establish administrative territories (regions) capable of promoting economic development in association with local governments and to ensure high-quality provision of services. This has resulted in a consolidation of municipal governments and created an intermediate level of government. Yet the disparity in local government sizes still poses challenges in terms of capacity and resources (OECD, 2015a) which in turn risks affecting the quality of ECEC services provided.

In principle, variations in municipal funding capacity should be evened out, at least to some extent. For example the government has rules on the minimum spending per child per year on ECEC overall (Kaša, Liepina and Tuna, 2012), and the local government equalisation fund and/or the transfer of social benefits to parents and guardians should also even out funding. The evidence however shows that inequality remains, partly due to the inadequacy of the country's equalisation fund, and because social benefits are not properly targeted (OECD, 2015a). Less than 20% of all social benefits go to the poorest quintile, while the richest quintile receives almost 27%. In addition, municipalities vary considerably in the generosity of their social security, with Riga being the most generous.

Latvia is planned to review the local government equalisation fund which indeed would seem essential to help to diminishing disparities in funding capacity between municipalities. A more targeted approach to the provision of child and family benefits may also be needed to diminish family and child poverty (OECD, 2015a), and enhance access to ECEC for children from the poorest families.

At present equal access to high-quality ECEC services partly depends on local financial capacity as well as on the political will to invest. This

is particularly an issue for ECEC provision for children under five, where central government does not fund the salaries of ECEC staff. Staff working in poorer municipalities may also have less opportunity to participate in good quality professional development programmes than their peers in the more prosperous parts of the country, jeopardising children's rights to equal quality ECEC.

Young children with special education needs and their families are another example. While central government funding is provided for special ECEC institutions for all ages from 1 to 7 years old, no such funding is provided for children with special needs below the age of five who are enrolled in regular institutions. These institutions instead depend solely on the municipal budget, which varies considerably among municipalities (MoES, 2015; OECD, 2015a), affecting their capacity to provide additional support to those children that need it most. Such a situation is critical as early intervention is crucial for mitigating and overcoming developmental disorders (EADSNE, 2010). In response to this situation MoES intends to review funding arrangements to facilitate the integration of children with special education needs into regular schools. The review team agrees this is an important measure to ensure equal access to ECEC throughout Latvia.

In addition, there would seem to be scope for further collaboration between municipalities, or a reduction in their number through mergers. The review team learned that some municipalities have established collaborations with others to enhance their capacity which is a positive development that should be encouraged. Others however are unlikely to do so unless motivated by the central government for example through financial incentives.

Latvia may also look towards the examples of some OECD countries that have clustered certain numbers of ECEC institutions and schools – sometimes deliberately crossing municipal boundaries – as a means to overcome professional isolation and pool resources and expertise, and to establish best practice in curriculum and planning implementation (Ares Abalde, 2014). For example in Portugal the government has been reorganising its public school network around school clusters since 2006. A typical school cluster consists of five to ten pre-schools and primary schools with one secondary school. This reorganisation aims to facilitate transitions across education levels, as well as to overcome geographical isolation and social exclusion. In 2012, a quarter of all pre-schools, primary and secondary schools were in clusters. Central to the implementation process has been widespread consultation with key partners including central, regional and local government, school clusters, and executive boards and unions. Financial incentives for municipalities have also played their part (Santiago, 2012; Matthews et al., 2008).

Recommendations

The following policy recommendations can help the Latvian government meet the challenges presented above and advance its policy agenda for ensuring equal access to a quality early childhood education and care for all of Latvia's youngest children.

Recommendation 1: Continue expanding ECEC services, in particular in rural areas and for the youngest children

During the last two decades Latvia has made good progress in expanding access to ECEC. A range of policy measures by the central government and municipalities have helped ensure that the vast majority of Latvian children from the age of three onwards nowadays participate in ECEC, with participation rates surpassing those of many OECD countries.

Good progress has also been made in recent years to resolve the waiting lists in Riga and some other larger cities and expand access to ECEC services. These efforts by the central government and municipalities should be continued and particular attention should be paid to expanding access to ECEC services for children aged three and younger. Latvia should carefully monitor the impact of these efforts and ensure services are of quality; and take action where found needed.

In addition, Latvia should consider shifting its policy attention to children living in rural areas. Though Latvia does not intend to lower the age of compulsory ECEC to 4 years in the near future, it should consider this an option for the longer term. The government has indicated it will encourage the participation in ECEC among 4-year-olds, but should not limit efforts to this age group. In particular, efforts to enhance participation should focus on those young children – and their parents – living in rural areas of the country. Outreach programmes informed by those of Norway or Latvia's own "Change Opportunities for Schools" project could be considered for this.

Furthermore, Latvia should investigate the make up of the relatively large group of 7-year-olds still in ECEC, and the reasons for their delayed entry into primary school. Informed policy actions should follow this investigation.

With a longer-term perspective in mind, Latvia should carefully monitor whether current and future needs for ECEC services are being met. In a context of rapidly changing demographics this should not be considered a one-time exercise but instead should be regularly repeated and fed into an ongoing national dialogue on the future size and quality of the country's ECEC services.

Recommendation 2: Take a strategic approach to improving the quality and motivation of ECEC staff

Despite efforts to improve the working conditions and quality of ECEC staff in recent years, the human resource development of ECEC staff remains a fragmented and underdeveloped area of policy that is shared between the central government and municipalities. Although less so than other levels of education, Latvia's ECEC work force is ageing and together with a decline in the numbers of children these conditions call for a more strategic and national approach to human resource development of ECEC staff. The recruitment of sufficient numbers of quality ECEC staff and the essential transfer of knowledge and skills by experienced staff to the new generation is also something deserving strategic consideration.

Such a strategic approach depends on the careful planning and monitoring of the workforce. Projections and regular discussions between MoES and municipalities should form the basis for strategic workforce planning.

A well-designed career structure for ECEC staff should be central to Latvia's strategic approach to human resource development. This requires also looking into the salary structure of staff. While writing this report Latvia is considering increasing the salaries of ECEC teachers. This may indeed help in drawing the best graduates into the profession and further motivate those already working in it.

Latvia currently lacks national professional standards for ECEC staff, leaving room for variable interpretations of what ECEC staff should know and be able to do. Such standards, outlining the professional expectations at all stages – from the beginning of their career to advanced levels – should be developed to inform appraisals, guide the professional development of staff and form the basis of well-designed career structure. Head teachers' capacity to assess staff, including providing effective feedback and coaching to support professional development, should not be overlooked. Latvia should also consider making professional development plans for ECEC staff mandatory. Such plans can help ensure that the professional development and growth of staff is linked to that of the ECEC institution and ultimately that of the children in it.

Furthermore, entry into initial education and the profession should become more selective, which is also an issue for other levels of education (see Chapter 3). Such a measure may help raise the status of the profession and further test the quality and motivation of aspiring ECEC staff. Lastly, Latvia should consider investigating the quality of initial teacher education and professional development programmes, which again is also an issue for other levels of education (see Chapter 3). For example, there is an apparent need to strengthen teachers' preparation for identifying and working with children with special needs.

Recommendation 3: Strengthen data collection, monitoring and use of research

Despite efforts to improve the monitoring and evaluation of ECEC in recent years, little is known about the quality of ECEC in Latvia, although some data suggest there is reason for concern. Latvia should therefore further strengthen its data collection at a national level, and its monitoring and use of data and research evidence on ECEC.

An in-depth understanding of the quality and effectiveness of ECEC programmes and dissemination of good practices and innovations, requires the systematic monitoring of developmental outcomes of children in ECEC, as well as the quality of staff working in it. At present little information is available on either at the national level. MoES is considering a pilot project to systematically monitor child development and outcomes of ECEC. The review team agrees this pilot initiative is important for exploring a suitable approach for monitoring child development and outcomes of ECEC. Similarly Latvia should consider monitoring the quality of its ECEC staff. The proposed national standards for ECEC staff are to serve as a key input of such an effort.

In addition, MoES should promote and provide clearer guidance to municipalities and ECEC institutions on how to conduct self-evaluations. Experiences from other countries show the value of developing resource documents including frameworks of quality indicators for this purpose.

Furthermore, MoES should consider expanding the SEQS's mandate to include evaluating ECEC programmes, or at least the compulsory programmes for 5- and 6-year-olds initially. It should increase its efforts to collect and disseminate good practice to enhance peer learning and motivate the ECEC profession throughout the system, perhaps through printed materials and websites. Both MoES and the SEQS are well placed to do this.

To help implement these recommendations, MoES should consider developing a well-resourced research programme to investigate the conditions that lead to improvements in the quality and equity of ECEC services. It should pursue a comprehensive, multi-disciplinary approach to research, prioritising those topics which need immediate policy attention, such as disadvantaged children and children with special needs.

The review team found considerable scope to enhance the quality of the data collected, enabling MoES make greater use of educational data and research to monitor and evaluate policy initiatives. Investing in the assessment and evaluation capacity of MoES staff is also essential. To supplement its research capacity, MoES could consider supporting the establishment of an autonomous national agency or institute with responsibility for conducting research in ECEC and other educational topics. It should also have responsibility for disseminating research findings.

Recommendation 4: Review the governance and financing arrangements of ECEC

During the last two decades Latvia has decentralised social services and reformed its administrative structure, among others, with the aim of ensuring high-quality provision of services. Despite these efforts some municipalities, especially the smaller ones, lack the capacity and resources to deliver on this aim. This is particularly an issue for ECEC services for children under five, where central government does not fund the salaries of ECEC staff.

Latvia should therefore review the current governance and funding arrangements for ECEC. In particular it should use funding to promote the integration of children with special education needs in regular ECEC institutions. In addition, it should ensure that ECEC staff working in poorer municipalities have equal access to quality professional development opportunities. This could be done through various means including discretionary funding or targeted programmes. The proposed measures to monitor system and service quality (Recommendation 3) are also important for strengthening public accountability and ensuring children's rights to equal quality ECEC.

In addition, the revision of the local government equalisation fund is essential to diminishing disparities in funding capacity between municipalities. Combined with a more targeted approach to the provision of child and family benefits, as already recommended by the OECD (OECD, 2015a), family and child poverty could be reduced, and access to ECEC for children from the poorest families enhanced. Further, Latvia should consider giving municipalities incentives to collaborate to enhance their capacity, or even amalgamate with other municipalities, which apart from improving the quality and equity of ECEC services could bring efficiency savings.

Note

1. The Education Law states that education can be provided at home until Grade 4.

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Chapter 3

Primary and lower secondary education in Latvia

This chapter reviews primary and lower secondary education. Here spending is relatively low as a share of GDP, mainly due to the low teacher salaries. Student performance is below average by international standards, with rural schools performing particularly poorly. Latvia has also struggled to offer a truly inclusive education to students with special education needs or disadvantaged backgrounds.

The ageing teaching workforce and falling student numbers offer an opportunity to make the teaching profession more respected and competitive. This requires higher salaries and better training and career-long development. Latvia should focus on improving the quality of rural schools, freeing up resources by consolidating smaller schools and promoting greater collaboration between them, and on improving teachers' ability to identify and support children at risk of exclusion. Finally, Latvia needs a comprehensive system of assessment at all levels and needs to improve the effectiveness of municipalises at supporting their schools.

Introduction

In Latvia, primary and lower secondary education is expected to provide students with the foundation for acquiring the basic knowledge and skills for life and further education, and developing their value orientations (MoES, 2015). The primary and lower secondary levels are organised in a single structure and often referred to in Latvia as "basic education". Basic education consists of nine years of compulsory schooling: 6 years of primary education (Grades 1 to 6) and 3 years of lower secondary education (Grades 7 to 9). Children start Grade 1 at the age of 7 and are expected to complete compulsory school by the age of 16, and most succeed in this. In 2013/14, 97.5% of Grade 9 students obtained their certificate of basic education (MoES, 2015).

Enrolment in basic education is close to universal and has been for many years. In 2013, the total net enrolment rate was 98.5% at primary level and 97.0% at lower secondary level (UNESCO Institute for Statistics, 2015). Although Latvia performed below average in reading and mathematics in the Programme for International Student Assessment (PISA) in 2012, it has made considerable progress since it first participated in 2000 and has managed to raise its students' performance in science to the PISA average.

Equity in education is one of Latvia's main policy concerns. It faces large differences in performance between students in rural and urban schools, and students at risk of social exclusion and those with special education needs are not benefitting from the same quality of learning opportunities as their peers. Latvia cannot afford – socially or economically – to leave large numbers of students behind so in recent years it has put greater emphasis on monitoring education quality. In addition, Latvia has a relatively large and ageing teaching workforce, many of whom will retire in the next decade. This has put further pressure on the need to invest in a high-quality teaching profession at a time when low salaries mean teaching is not regarded as an attractive career choice; an issue that has dominated much of the policy debate in recent years. Another fiercely debated issue is the need to make the school system more efficient. The size of the school network and the teaching workforce are becoming increasingly disproportionate as student populations fall.

This chapter starts by providing an overview of basic education in Latvia. It continues with an in-depth discussion of a selection of key policy issues for basic education and provides concrete policy recommendations for Latvia to consider.

Context and main features

Governance and financing

In Latvia the Ministry of Education and Science (MoES) is the leading government institution in the field of education and science. The main responsibility of MoES is to define national regulations, policy documents and goals on behalf of the government; supervise their implementation; and evaluate the results of the system. MoES is supported in these functions by several specialised agencies (see Chapter 1). These include the National Centre for Education, which develops proposals for the regulation of basic school curricula and subject standards, administers national exams, and co-ordinates teachers' professional development, and the State Education Quality Service which accredits and evaluates education programmes and schools and reports on the quality of basic education.

Municipalities are responsible for providing children living in their area with a place at the nearest basic education institution to their home. Municipal Boards of Education are responsible for the provision of education in their territory from early childhood education and care (ECEC) to upper secondary education. Municipalities are also responsible for organising non-formal education for children and adults.

The vast majority of schools in Latvia are public municipal schools. They are relatively independent in developing and implementing education programmes, hiring staff, and school management. PISA 2012 found the level of autonomy of Latvian schools, as reported by school principals, was similar to the OECD average overall, but much higher in certain areas. For example, Latvian schools enjoy considerable freedom in the area of teacher recruitment: 92% of school principals reported that they (and/or teachers) had the authority to hire teachers, which is similar to countries like the Czech Republic and the Netherlands, but considerably above the OECD average of 49% (OECD, 2013a). Moreover, schools define their own goals, the organisation of the education process, internal regulations, and programmes to be implemented within the framework of the General Education Law. Within the National Standards for Basic Education, teachers have discretion in developing or selecting the subjects of study or course programmes in agreement with the school principal.

Schools should also establish a school board that includes staff, parents, students and representatives from the municipality or the school founder in the case of a private school. The board is consulted over the drafting of the school development plan, organises school social activities, manages donations and decides on the use of these funds.

Latvia's expenditure on basic education as a share of GDP is relatively low compared with many OECD countries. In 2011, Latvia spent 2.1% of its GDP on basic education, a similar share to its neighbour Estonia (2.0%), but lower than Poland (2.4%), the Netherlands (2.7%) and the OECD average (2.5%). Annual expenditure per student on basic education is also considerably below the OECD average. For example, in 2011 the expenditure per primary student was USD 4 982 in purchasing power parity (PPP) terms, compared with an OECD average of USD 8 296 (OECD, 2014a). These differences in expenditure partly result from the low salaries Latvian teachers and school leaders receive by national and international standards. A recent report by the OECD (2014b) noted the importance of raising teacher salaries to nationally and – in time – internationally comparable levels. The same report also highlighted the need for further efficiency gains for school education in Latvia with clear challenges ahead over the size of the school network and its relatively large teacher workforce in the context of a shrinking student population.

Compulsory basic education is free in Latvia. School funding is shared between the national government and municipalities. Central funds are transferred to municipalities and private schools through a grant to pay for the salaries of teachers and other education staff. The national government also provides free school meals to all students in Grades 1 to 4 in all schools including special education schools and private schools (Table 3.1).

Municipalities finance the salaries of non-teaching staff and capital investments, maintenance and utility costs from their own revenue. They may also opt to increase teacher salaries and provide students with greater financial support, for example school meals, subsidised transport and additional allowances for education materials.[1] Municipalities and schools are also able to apply for EU structural funds. Many of Latvia's schools have been refurbished in recent years using this funding option. The majority of schools also participate in the School Fruit Scheme and School Milk Scheme co-financed by EU structural funds and schools. These schemes provide children with fruit, vegetables and dairy products to encourage good eating habits and promote healthy lifestyles.

The current funding system for primary, lower secondary and upper secondary education in Latvia was implemented in 2009/10. It is based on a per-student school funding model, often referred to as "money follows the student" (see Box 1.3 in Chapter 1). The aim of the funding model was to bring about greater efficiency while enhancing student achievement (Cabinet of Ministers, 2009). Implementation of the model was managed by the 119 newly created municipalities as a result of the Territorial Reform in 2009 (World Bank, 2010). Municipalities can decide how to distribute resources among schools and can also supplement them with other funds.

Table 3.1. **Overview funding of costs items, basic education, by source of funding**

	Provision of basic education in municipal schools	Provision of basic education in private schools	Provision of special education programmes
State grant	• Salaries of teachers • Lunch for Grade 1-4 students • Study materials	• Salaries of teachers • Lunch for Grade 1-3 students • Study materials (scope stated by Education Law)	• Salaries of teachers • Lunch for Grade 1-3 students • Maintenance of buildings and utilities • Study materials
Municipal budget	• Supplement for teachers' salaries • Maintenance and utilities cost • Study materials (scope stated by Education Law)		• Study materials (scope stated by Education Law)
EU structural funds	• Infrastructure, study aids • Teacher training, and individual support measures for student talent development • Career education and individual support measures for students with special education needs (2014-20)		• Infrastructure • Teacher training

Source: MoES (2015), "Country background report Latvia", unpublished, Ministry of Education and Science, Riga.

While Latvia's intergovernmental fiscal arrangements are outside the scope of this review, it is important to note that the financial autonomy of municipalities has been questioned due to their limited capacity for revenue-raising and the limited impact of financial equalisation arrangements (OECD, 2015a). The public administration reform meant that those responsible for implementing the new school funding model at the local level were often inexperienced. Some have questioned whether some municipalities, in particular the smaller ones, have the capacity to effectively manage their local education systems (OECD, 2014b).

Characteristics of schools and the school network

Parents have the right to enrol their children in a public or private school of their choice as long as places are available. Schools cannot apply selective admission criteria, although those who live near the school are

prioritised when demand exceeds the places available. Gymnasia[2] providing lower secondary education (Grades 7 to 9) are allowed to use entrance tests, however.

A distinctive feature of the Latvian school system is the variety of combinations of education levels and grades provided in schools. In the 2013/14 school year, there were 832 schools offering basic education, with 169 485 students in total (Table 3.2). These included primary schools (*sākumskolas*) offering Grades 1 to 6, or in some cases only Grades 1 to 4, basic education schools (*pamatskolas*) offering Grades 1 to 9, and schools offering basic education and upper secondary education (*vidusskola*), i.e. Grades 1 to 12.

The 832 schools include state gymnasia (*valsts ģimnāzija*) of which there were 26 in 2013/14 catering for 4 726 students in Grades 7 to 9 and 6 451 students in Grades 10 to 12. In addition, there were over 72 boarding schools, some of which were special education schools. There are also home schooling arrangements available.

Table 3.2. **Students, staff and school numbers in Latvian basic education (2005/06 and 2013/14)**

	2005/06	2013/14					
	Total	Total	Primary and secondary schools (Grades 1-12)	Basic schools (Grades 1-9)	Primary schools (Grades 1-6 or 1-4)	Special education schools	Evening schools (Grades 7-9)
Students	229 016	169 485	111 733	39 019	10 480	5 783	1 421
Teachers	21 661	18 207	13 965	5 786	897	1 773	131
School leaders		3 002	1 692	848	137	230	95
Support staff		13 074	6 662	3 880	620	1 789	123
Schools	1 074	832	358	334	54	61	25

Sources: Central Statistical Bureau of Latvia (2015), *Statistical Yearbook of Latvia 2014*, Central Statistical Bureau of Latvia, Riga, www.csb.gov.lv/sites/default/files/nr_01_latvijas_statistikas_gadagramata_2014_statistical_yearbook_of_latvia_l4_00_lv_en_0.pdf; MoES (2015), "Country background report Latvia", unpublished, Ministry of Education and Science, Riga.

Students have to stay in school until they complete lower secondary or turn 18, but those who fail to complete lower secondary education can move to evening and vocational education schools. Students with special needs who do not attend mainstream schools are catered for in 61 special education schools.

A very small proportion of students (1%) attend one of the 48 private schools, mostly located in the capital city, which can set tuition fees and can receive public funding to cover the costs of teaching staff (OECD, 2014a; MoES, 2015).

As discussed earlier a considerable proportion of Latvian public schools teach in languages other than Latvian in order to cater for the country's minority language communities. Latvia's bilingual education model ensures publicly funded education in seven minority languages: Russian, Polish, Hebrew, Belarusian, Ukrainian, Estonian, and Lithuanian. In 2014/15, 99 primary to upper secondary schools used Russian as language of instruction – alongside the Latvian language, 4 used Polish, 1 Ukrainian, 1 Belarusian, 1 Latvian and Lithuanian, and 1 Latvian and Estonian. In addition, 75 schools had both Latvian and minority language programmes (MoES, 2015).

During the last decade considerable investments have been made in the modernisation of school infrastructure, equipment and the integration of information and communications technology (ICT) into the learning process in Latvia (MoES, 2015). PISA 2012 found that only 3.5% of 15-year-old students were in schools whose principals reported that instruction was hindered by inadequate buildings or grounds, 2.4% by heating or lighting problems, and 1.6% by shortage of instructional space (OECD, 2013a). Likewise, according to their principals, few schools in 2012 suffered from a shortage of laboratory equipment, instructional materials, computers and software or library materials.

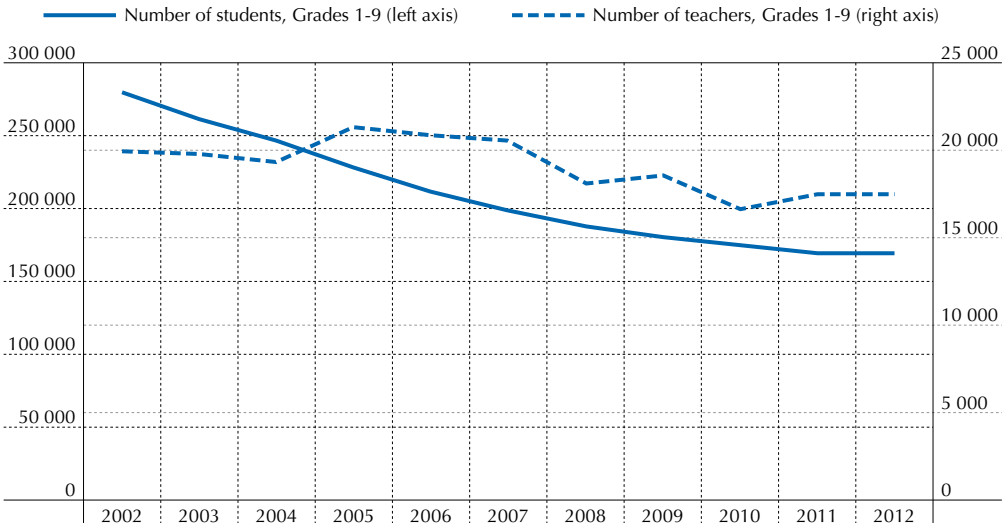
The size of the school system

Latvia is committed to ensuring access to quality basic education throughout the country and as close as possible to children's homes. Population dispersion and decline make this challenging and expensive. Like Estonia, Iceland, Norway and Poland, Latvia has many small schools catering to small rural communities (OECD, 2014c). In 2013/14, 313 primary and secondary schools had 100 or fewer students and 122 had 50 or fewer students. As the majority of the students go to school in urban areas, school sizes vary significantly according to location, ranging from an average size of 657 students in Riga to 115 students in schools in rural parts of the country (OECD, 2014b).

Between 2003 and 2012, the number of students in basic education fell by about 35%, while the number of schools and teachers only fell by about 12% each (Figure 3.1). By 2020, it is expected that the number of 0-4 year-olds will fall by 11.3% and the number of 5-9 year-olds by 2.8%, while the number of 10-14 year-olds will increase by 19.4% compared to 2012 (MoES, 2014). This latter is only a temporary upswing in student numbers, however. The decline in numbers, coupled with the economic recession, led to a minor reorganisation of the school network and placed efficiency and

staffing issues at the forefront of the educational debate (Grīviņš, 2012). The Education Development Guidelines 2014-2020 note that primary education should be provided as close as possible to the place of residence and near local motor roads for easy access. Upper secondary schools should be provided at the regional level, whilst lower secondary schools should fit in around the existing network of primary and upper secondary schools (MoES, 2014).

Figure 3.1. **Changes in student and teacher numbers in basic education (2003-12)**



Note: The number of teachers refers to the number of full-time equivalent positions.

Sources: Central Statistical Bureau of Latvia (2015), *Statistical Yearbook of Latvia 2014,* Central Statistical Bureau of Latvia, Riga, www.csb.gov.lv/sites/default/files/nr_01_latvijas_statistikas_gadagramata_2014_statistical_yearbook_of_latvia_14_00_lv_en_0.pdf; Eurostat (2015), "Teachers (ISCED 0-4) and academic staff (ISCED 5-6) by employment status (full-time, part-time, full-time equivalence) and sex", *Eurostat database*, Eurostat, http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=educ_pers1t&lang=en (accessed 9 September 2015).

The school funding model plays an important role in promoting the reorganisation of the school network. As discussed in Chapter 1, the model implemented in 2009 has succeeded in reducing state expenditure as intended, and contributed to reducing the size of the school network from 858 institutions in 2010/11. It has struggled to improve efficiency further, however, with some municipalities reallocating scarce resources to very

small schools that are no longer viable. This seems to be a particular issue for small lower secondary schools (Grades 7 to 9); in the 3 years following the school year 2010/11, their number fell by only 9 to 358 in 2013/14 (Central Statistical Bureau of Latvia, 2015). These schools are seemingly protected from closure or consolidation. This issue has been the subject of repeated political debate in Latvia (OECD, 2014b).

At the time of writing, Latvia is piloting a revised school funding model that aims to further enhance educational quality for all students, while striving for efficiency gains. Low teacher salaries, as well as the need to make school financing more transparent and efficient, have served as key drivers for the revision of the funding model.

Classes and student-teacher ratios

Classes are generally made up of students of the same age, except if a student has repeated a year or if a school has to group students together because of low enrolment. Central regulations on the minimum and maximum number of students in a class were abolished in 2009, and responsibility for this now rests with schools and municipalities. As discussed in Chapter 1, class sizes and student-teacher ratios are too small to be either financially sustainable or desirable. The likely retirement of many teachers in the near future may provide an opportunity to tackle the difficult trade-off between the quantity and quality of staff.

Organisation of learning in schools

The current basic education curriculum was implemented in 2005 and is defined through national standards which determine the aims, content and time allocated to each subject. The basic education curriculum aims to develop students' academic knowledge, provide a base for further learning, and foster social skills and personality development. Every student is supposed to acquire an understanding of language and mathematics; the ability to use ICT; an understanding of nature, society and history; ethical values; and communication skills (MoES, 2015).

Each school prepares its own curriculum taking into consideration the standard requirements, teachers' qualifications and students' interests. It can also offer subjects not included in the curriculum for which it establishes its own quality standards (UNESCO International Bureau of Education, 2011). Teachers and schools have discretion over the textbooks used and some develop their own. Although there were some concerns about the quality of textbooks in the initial years after independence, notable improvements in quality have been reported since the start of the millennium (Geske and Geske, 2010).

As the curriculum was nearing its 10th anniversary it was felt it needed updating. The reform currently underway will replace the largely knowledge-based curriculum with a competency-based one. The new curriculum is expected to be gradually piloted from the academic year 2015/16 onwards and introduced in 2018/19, starting in Grades 1-6. It is to include a focus on student-centred teaching, foreign language acquisition from Grade 1 onwards, and competences such as entrepreneurial spirit, a healthy lifestyle, financial literacy and civic education (MoES, 2015).

Latvian students in basic education have fewer hours of instruction than many of their peers in OECD countries. The compulsory instruction time for students in municipal schools is 592 hours per year in primary and 794 hours in lower secondary, considerably below the OECD averages for similar public schools of 794 and 905 hours respectively (OECD, 2014a). Instruction time in basic education varies by grade but in general students are taught 170 days a year with the exception of Grade 1 (165 days) and Grade 9 (180 days). Days are divided into 40 or 45 minute lessons, depending on the decisions of the school head. Lessons can be combined in order to have more uninterrupted time for a subject.

Official instruction time is usually complemented by after-school activities. PISA 2012 showed that 44% of 15-year-old students spent time at school for after-school lessons in mathematics, 27% for lessons in the language of instruction, 18% for science and 51% for other subjects, compared with OECD averages of 38%, 27%, 26% and 37% respectively (OECD, 2013a). In addition to after-school curricular activities Latvian schools also place great importance on extracurricular activities such as dance, music, art, theatre, folklore, environmental or technical activities and sports (MoES, 2015).

A growing body of international research points towards the potential benefits of participating in well-structured extracurricular activities such as higher grades, student engagement with school and learning, and a decrease in disciplinary and truancy issues. In contrast, poorly structured or too many extracurricular activities can have no or even negative effects (Fredericks and Eccles, 2006, 2010; Bohnert et al., 2010). Though it is assumed that Latvian students benefit from their extracurricular activities, there is no strong evidence to support this. MoES should investigate this issue, considering it finances these activities through payment of the salaries of the teachers involved.

Support for students with additional and special education needs

Specific types of education are offered to students with additional and special education needs. Schools can offer “pedagogical correction” classes to those children who need additional support in their learning. In addition,

many municipalities and schools in Latvia have multidimensional teams consisting of speech therapists, psychologists and social pedagogues to respond to students with additional learning needs.

Students with special education needs due to mental or physical disabilities can attend special schools (which often specialise in certain types of disabilities), special classes in a mainstream school, or mainstream classes. They can take part in separate study programmes or be fully integrated in mainstream education programmes.

In addition, in recent years the national government has taken a range of measures to improve the situation of students with special education needs and other students at risk of social exclusion and is committed to continuing these efforts (MoES, 2014). For example, during 2007-13 it has adapted the infrastructure of a total of 36 general education institutions and 61 special education institutions for children with special needs (MoES, 2015).

The government plans further measures for the period 2014-20, including the provision of additional support for the inclusion of students with special education needs in regular schools. It also aims to identify children with special education needs earlier at all levels of the system (excluding higher education), develop teaching and methodological tools, and invest in the skills of teachers to better respond to students' special education needs (MoES, 2014; Table 3.3.).

Table 3.3. **Selection of targets regarding children with special needs**

Performance indicators	Base year	2017	2020
Proportion of children and youth with special needs (including with disabilities) who continue education after having obtained compulsory education.	- (2012)	+ 0.1%	+ 0.2%
Proportion of special needs and learning difficulties diagnosed early enough to make timely prevention and adjustment work.	10% (2012)	20%	20%

Source: MoES (2014), *Education Development Guidelines 2014-2020*, Ministry of Education and Science, Riga, http://m.likumi.lv/doc.php?id=266406.

The evidence suggests these efforts are much needed. In 2013/14 only 35% of students with special education needs were integrated into regular schools, with the majority attending one of the 61 special education schools (MoES, 2015). These proportions contrast with OECD countries like Sweden and Finland where the majority of children with special education needs are in mainstream schools. In Finland, for example, only about 13% of students with special education needs were in segregated special education schools in 2010/11 (EADSNE, 2012).

Financing of special education has been a factor: the current school funding model doesn't provide municipalities and private providers with additional resources to cover the extra costs of integrating a child with special education needs in mainstream schools.

Assessment of student learning

The National Standards of Compulsory Education (Cabinet of Ministers, 2014) state that "to evaluate student achievement in a manner that is both comprehensive and provides maximum objectivity, assessment tools must specify the scope of knowledge and skills acquired, students' attitudes towards learning, as well as the dynamics of development that characterise each individual". They prescribe assessment procedures including self- and peer-evaluation, teacher evaluation, and national examinations (Table 3.4). Continuous assessment of student progress is carried out by teachers. Continuous assessment, tests and state examinations (with the exception of those that are centrally marked) are reported on a ten-point scale ranging from 1 (fail) to 10 (outstanding).

Table 3.4. **Assessment and centralised examinations in basic education**

Stage of education	Assessments and examinations required
End of Grade 3	Diagnostic assessment in "combined learning content" (i.e. multi-subject) taken in the student's first language. Diagnostic assessment in Latvian language for students in schools implementing national minority education programmes.
End of Grade 6	Diagnostic assessment in the student's first language and mathematics. Diagnostic assessment in Latvian language for students in schools implementing national minority education programmes. Diagnostic assessment in natural sciences.
End of Grade 9 (certificate of basic education)	An examination in the student's first language (set centrally, but marked locally). An examination in mathematics (set centrally but marked locally). An examination in Latvian language for students in schools implementing national minority education programmes (centrally marked). An examination in Latvian history (set centrally, but marked locally). An examination in first foreign language (set centrally, but marked locally).

Sources: Bethell, G. and G. Kaufmane (2005), "Assessment and centralized examinations in Latvia", *Assessment in Education*, Vol. 12/3, pp. 301-314, www.tandfonline.com/doi/pdf/10.1080/09695940500337272; MoES (2015), "Country background report Latvia", unpublished, Ministry of Education and Science, Riga.

A certificate of basic education is awarded to all students who have received a positive assessment in all subjects and national examinations, providing them the right to continue education in any higher-level education

programme. If the student does not receive an assessment in one of the subjects or in one of the final national examinations, or has received a mark below 4 in more than two of them, he or she receives a school report instead. In order to acquire the certificate of basic education, these students may repeat the grade at the same or another education institution, or may complete a pedagogical correction programme, repeating only the subjects they had failed (Eurypedia, 2015).

The proportion of students who repeat a grade has more than halved in the last decade. PISA 2012 found that 8.5% of 15-year-old students reported having repeated a grade at least once, which although considerably below the OECD average of 12.4% may be considered high when compared with other countries with comprehensive school systems like Estonia (3.5%), Sweden (4.0%) or Norway (0.0%) (OECD, 2013a). According to national statistics, 1.7% of the 168 970 students in basic education (i.e. Grades 1 to 9) were repeating a year in 2012/13, down from 2.5% the year before. This decrease can be explained by the introduction in 2012 of a requirement for schools to take measures to support students with learning difficulties (MoES, 2015).

International student assessments

Since it regained independence, Latvia has participated in a number of international student assessments, including PISA[3] (all cycles since 2000); the Progress in International Reading Literacy Study (PIRLS) in 2001 and 2006, and the Trends in International Mathematics and Science Study (TIMSS) in 1995, 1999, 2003 and 2007. Overall, these studies confirm the improvement of Latvian students' performance (OECD, 2014b). In PISA, Latvian students' results in 2000 were below the OECD average, but later editions suggest that learning outcomes are coming closer to the average. Latvia made significant progress between 2000 and 2003, but only slight improvements more recently (see Chapter 1).

Although average performance provides useful comparisons it sometimes hides large variations in learning outcomes. PISA 2012 showed that Latvia has a smaller proportion of students who lack basic skills, i.e. those who are below the PISA proficiency level 2, than the OECD average. This still leaves 17% of students in Latvia without basic reading skills, almost 20% without basic skills in mathematics and around 12% without basic science skills (OECD, 2014a). The share of top-performing students is also smaller in Latvia than the OECD average. In PISA 2012, a mere 8% of Latvian 15-year-olds demonstrated mathematics skills at the highest proficiency levels (level 5 or above), compared to the OECD average of 12.6%. In reading and science the shares of top-performing students were 4.2% and 4.3% respectively, about half the OECD averages (8.5% and 8.4% respectively).

In response, the government has set ambitious targets to reduce the proportion of low performers in reading, mathematics and science to 13%, 15% and 10% respectively by 2020 and to increase the proportion of top performers to 7% in reading, 8% in mathematics, and 8% in science (MoES, 2014). This latter target has already been met for mathematics but further improvement in the quality of teaching and learning will be needed if Latvia is to achieve the targets for reading and science (OECD, 2014b).

PISA 2012 further shows that student socio-economic background explains around 14.7% of the overall variation in mathematics performance, about the same as the OECD average (14.8%). This modest relationship suggests that while there are visible differences among students from different socio-economic backgrounds, the school system at least does not exacerbate them (OECD, 2013b, 2014b). As outlined in Chapter 1, however, the performance gap between rural and urban areas is much larger in Latvia than most OECD countries.

School evaluation

The effective monitoring and evaluation of schools is central to the continuous improvement of student learning. Schools need feedback on their performance to help them identify how to improve their practices, and to allow them to be held accountable for their performance (OECD, 2013c).

In Latvia the State Education Quality Service (SEQS) is responsible for both the legal accreditation and external evaluation of schools (every six years) and their programmes (every two or six years). The accreditation decision is based on an expert commission typically composed of three representatives of the sector (i.e. national government, municipalities and other schools). The expert commission considers multiple sources of evidence such as the school's self-evaluation report, classroom observations, documentation, and surveys against 19 quality criteria that are grouped in the following 7 key areas:

1. curriculum
2. teaching and learning
3. attainment
4. support for students
5. ethos
6. resources
7. management, leadership and quality assurance

Among the 19 quality criteria, 16 are evaluated according to 4 evaluation levels: Level 1 – unsatisfactory, Level 2 – satisfactory, Level 3 – good, and Level 4 – very good. Only a descriptive assessment is provided for the other three quality criteria.

The budget cuts of 2009/10 resulted in a one-off evaluation based on schools' self-evaluation report and student outcomes alone. About 80% of eligible institutions were evaluated based on these self-assessment reports, while the remaining 20% received a visit from an expert commission. Only a small proportion of schools and programmes (4% in 2013) were not accredited (SEQS, 2014).

From 2015 onwards, schools will be expected to undertake a self-evaluation every year resulting in an annual internal evaluation report that is to inform about the school's development. The internal school evaluation results are expected to be made public by the school. The SEQS publishes partial external school evaluation reports on its website, including the names of the experts, the evaluation grading, strengths and recommendations. Evaluation findings may also be consulted on request by parents, students and other stakeholders. In addition, the SEQS aggregates the results of its external evaluations in an annual report that is made publicly available.

System-level monitoring of education quality

Latvia has in recent years aimed to improve its system-level monitoring of the education system. Since 2009 the State Education Information System (SEIS) has collected, stored and generated data and information regarding education institutions and programmes and the staff working in them from ECEC up to upper secondary education.

There are some concerns about the quality and usability of the national-level data in the SEIS. For example the exact number of school leaders, teachers and other educators (e.g. teachers' assistants, speech therapists, psychologists, methodologists) is unknown and there is limited information about them (E-Klase, 2015). Our own experiences with the data provided to us by MoES in support of our school visits corroborate these concerns about data quality. MoES has recognised the need to improve its systematic monitoring of education quality, including the strengthening of the SEIS and better use of research for evidence-based policy making (MoES, 2014).

Teachers and school leaders

Profiles and qualifications

In 2013/14, there were 17 907 teachers working in basic education and a total of 3 002 school leaders – headmasters and vice-headmasters – in basic education and secondary education schools. Latvia has relatively few

teacher shortages: PISA 2012 reported only 3% of students were in schools where instruction was hindered by a lack of qualified mathematics teachers, compared with 17% on average across OECD countries. For science and literacy the figures were 6% and 5% respectively, also smaller than the OECD averages of 17% and 9% (OECD, 2013a).

Latvia has an experienced but ageing teaching workforce. With 22 years of working experience on average, TALIS 2013 found Latvian lower secondary teachers were the most experienced and had worked in a single school the longest (16 years on average) of all the participating countries (OECD, 2014c). Similarly, TALIS found Latvian school principals were the most experienced, with 13 years of experience on average; 69% of them were more than 50 years old (OECD, 2014c).

Latvia also has very low proportions of young teachers. Only 8% of teachers in primary education and 6% in lower secondary education were less than 30 years old in 2012, compared to the OECD averages of 13% and 11% respectively. More than one-third of primary teachers (35%) and 42% of lower secondary teachers were 50 years or older, while the OECD averages were 31% and 34% respectively (Eurostat, 2014; OECD, 2014a). Despite this ageing workforce, the pressure to recruit new teachers will be diminished as a result of the demographic decline among students.

Teaching is also a highly feminised profession. Only 6.5% of Latvian teachers in primary education and 16% in lower secondary were men in 2012, which is lower than the OECD average of 18% and 33% respectively (OECD, 2014a).

Teacher qualifications in Latvia are comparable to those of OECD countries as teachers at all levels are required to have a tertiary degree to be able to teach. Qualifications have improved in recent years. PISA 2012 however showed that across Latvia the average 15-year-old student was in a school where 81% of teachers were certified, compared with an OECD average of 87%. This suggests that a considerable proportion of lower secondary teachers do not have the required qualifications to teach. The review team however was informed that many secondary education teachers have recently taken up professional development courses to provide them with a second specialisation.

Initial preparation and entry into the profession

In 2013/14, there were 5 435 students enrolled in teacher training programmes for all levels, in one of the 6 national teacher training institutions (and one music academy). Most prospective teachers pay for their education: in 2013/14, for instance, 915 out of the 1 379 students admitted to bachelor-level programmes paid fees (MoES, 2015).

Two training routes can be taken. The most common is a professional bachelor's degree programme lasting four years which provides a teaching qualification for a specific level of education (pre-school, primary or secondary) and, for secondary school teachers, a specific subject area. ECEC and primary school teachers are qualified to teach all subjects. The second route requires two stages – a bachelor's degree (three years) in Education Sciences, plus an additional two years of study in a second-level professional programme of studies to qualify as a teacher in a specific level of education and/or subject area. Vocational school teachers generally have a professional diploma in a vocational area with an additional qualification in vocational teaching.

In Latvia most student teachers are enrolled into a programme with at least four years of pedagogical and subject-specific content (Kangro and Kangro, 2012). Universities have considerable autonomy to design their own programmes. In 2000, MoES established that 26 credits out of 160 had to be devoted to field experience, although programmes vary over the extent to which the credits are spent in schools and whether students have access to certified mentors (Odina, 2008; Kangro and Kangro, 2012).

In an effort to draw the best graduates into the profession, some OECD countries including Estonia, Finland, Korea and Norway have established selective criteria for those wanting to enter initial teacher education. Some also have additional requirements for those who have completed initial teacher education before they can enter the profession. For example France, Japan and Korea have competitive exams for those wishing to start primary and secondary teaching while some countries require the passing of a teaching practicum or the successful completion of a probation period or formal induction programme before becoming a fully qualified teacher (OECD, 2013a). Aspiring teachers face no such barriers in Latvia.

Principals are appointed by municipalities upon succeeding at a nationwide competition, and in turn appoint their deputies. No additional qualification is needed to become a school leader but principals can take additional management-related training. Two teacher training institutions in Riga also offer specific master's programmes for future school leaders. School leaders are allowed to combine their leadership responsibilities with up to nine hours per week of teaching or other school activities.

Professional development

No matter how good initial teacher education is, it cannot be expected to prepare teachers for all the challenges they will face throughout their career. Effective induction and mentoring programmes can help new

teachers deal with these challenges and avoid some of the problems that may emerge (European Commission, 2010). Participation in such induction and mentoring programmes is not common in Latvia, however. Latvian lower secondary teachers reported limited support mechanisms for new teachers, with low levels of participation in induction and mentoring programmes in 2013. For example only 36% of Latvian lower secondary teachers reported having participated in a formal induction programme in their first regular employment as a teacher, compared to a TALIS average of 49%. Among teachers with 5 years experience or less, the figure was only 26%, compared to 52% on average in TALIS countries. Only 4% of Latvian teachers reported that they had an assigned mentor to support them, and 7% that they had served as one. These shares are smaller than the averages of 13% and 14% respectively for TALIS countries (OECD, 2014c).

Teachers and school leaders in Latvia are required to undergo at least 36 hours of professional development training every 3 years, which is low compared with many OECD countries. For example, in Estonia lower secondary teachers are required to have a minimum of 160 hours of professional development over 5 years (OECD, 2014a). In Sweden teachers are entitled to 104 hours of professional development during regular working hours every year (OECD, 2015c).

In Latvia, professional development courses are offered in the form of "A" and "B" programmes. The shorter courses, nationally referred to as "A programme" courses, are designed to cover specific training needs (e.g. pedagogical knowledge, use of new technologies) and are offered by various state and non-state providers, in co-ordination with the local government and often also with the teachers' methodological associations.

The government is also attempting to broaden teachers' specialisations through longer university-based professional development programmes, the so-called "B programmes", leading to qualifications in a second subject or education level. Professionals and graduates of other programmes may join the profession through participating in a competitive programme ("Mission Possible") or by acquiring the necessary pedagogical knowledge (MoES, 2015).

Self-reported data from the TALIS 2013 survey shows that almost all lower secondary teachers in Latvia (96%) had undertaken some professional development activities in the 12 months prior to the survey, which was higher than the average of 88% across TALIS countries (OECD, 2014c). Lower secondary teachers most frequently reported participating in courses or workshops: 89% reported that they participated in these activities, compared with 71% on average across TALIS countries. Teachers in Latvia reported spending 8 days on courses and workshops during the 12 months prior to the survey, the same as the average across TALIS countries.

Teachers' professional associations could play an important role in fostering instructional improvement and teacher collaboration within and across schools. Although the review team was informed that many teachers join professional associations where subject teachers come together to share information between themselves, TALIS found that Latvian teachers participate less frequently in collaborative professional development, joint activities and classroom observations within schools than their peers on average in countries participating in TALIS (OECD, 2014c).

There are no specific requirements for school leaders to attend development training before or after taking up their duties and 27% of Latvian lower secondary school principals said they had never participated in a school administration or principal training programme, much more than the TALIS average of 15%. Some higher education institutions have in recent years established specific school leadership programmes, such as the Riga Teacher Training and Education Management Academy or the University of Latvia in Riga.

Further, research shows that professional development needs to go hand in hand with appraisal and feedback practices (OECD, 2005; Schleicher, 2011, 2014). In Latvia this connection seems underdeveloped. Over four out of ten teachers (44%) report that appraisal and feedback has little impact on their teaching in the classroom. This finding may partially result from the Assessment System of Teacher Performance implemented in 2009 which is primarily designed as a performance-based pay system, rather than being geared towards supporting the development of teachers (Box 3.1). In addition, the apparently limited capacity of school leaders to conduct appraisals may be further challenged by the absence of a formal framework of professional standards spelling out what is considered effective teaching and leadership in Latvia.

Box 3.1. **The Assessment System of Teacher Performance in Latvia**

In 2009 MoES implemented a new teacher appraisal system, the Assessment System of Teacher Performance, a performance-based pay system, in the framework of the European Social Fund project Promotion of Educators' Competitiveness within the Optimisation of Educational System. Participation in this scheme is voluntary but most teachers (27 592 by 31 May 2015) from ECEC to upper secondary education have participated in it so far.

Teachers are assessed on five key areas weighted according to their relative importance: 1) teaching and educational work (e.g. planning, student performance), 36%; 2) individual work with students, 17%; 3) contribution to the development of the educational institution, 28%; 4) accumulation and transfer of experience and knowledge, 15%; 5) self-reflection and participation in activities to improve pedagogy, 4%.

Box 3.1. **The Assessment System of Teacher Performance in Latvia** *(continued)*

Teachers receive a grade ranging from 1 to 5, with 5 being highest. Grades 1 to 3 are assessed at the school level, with the decision taken by the principal based on the commission's proposal according to defined criteria within the five key areas. If a teacher performs very well and is judged suitable for grade 4, the case is presented to municipal officials who evaluate the assessment and the salary premium that goes with it. If a teacher performs exceptionally well (grade 5) the case for the award of this grade is brought to MoES. The qualification level is valid for five years, but teachers may ask for their performance to be re-evaluated after three years in order to receive a higher level certification. The different performance levels, evaluating bodies and their financial implications are summarised in the table below.

Performance level	Decision level	Financial reward as percentage of monthly min salary	Amount of monthly bonus as of August 2014 (EUR)	Number of teachers awarded this level between 2009 and 31 May 2015	Percentage of teachers awarded this level between 2009 and 31 May 2015
1	School	---	---	578	2%
2	School	---	---	6 071	22%
3	School	8%	31.87	18 096	66%
4	Municipality	20%	79.68	2 533	9%
5	MoES	25%	99.60	314	1%

Source: OECD (2014a), *Teacher Remuneration in Latvia: An OECD Perspective*, OECD Publishing, Paris, www.oecd.org/edu/OECD%20Review%20of%20Teacher%20Remuneration%20in%20Latvia_OPS_FINAL.pdf.

Remuneration and status of the profession

PISA shows a clear link between student performance and teacher status, with students doing better in school systems that spend more on salaries to attract quality teachers (OECD, 2013a). Being a teacher and working in education in general is not considered an attractive career option in Latvia. Although the vast majority of teachers are permanently employed and are highly experienced by OECD standards, salaries are low in comparison to national and international benchmarks and the salary structure is flat (OECD, 2014a, 2014b). For example, in OECD countries, lower secondary teachers with 15 years of experience are paid on average 124% of GDP per

capita (corrected for differences in purchasing power parities). In Latvia, the salary for such a teacher would amount to just 52% of GDP per capita.

Teacher remuneration is a contentious issue in many countries but particularly so in Latvia. Teacher salaries were halved in 2009 as a result of the economic crisis, and teachers were substantially underpaid even before then (World Bank, 2010; Hazans, 2010). Salaries have recovered but are still lower than those for other public-sector professionals in Latvia, preventing the teaching profession from becoming an attractive career choice (OECD, 2014b). The low minimum statutory salary (EUR 420 per month in 2013/14) is based on a workload equivalent to 21 hours of teaching per week with up to 40% more for what are considered "additional duties" (e.g. marking of tests, preparation) (see Box 1.3, Chapter 1).

The current school funding model provides the basis for calculating and allocating salaries of teachers and other education staff, but does not take into account teachers' seniority. The difference between the minimum and the maximum annual gross statutory salaries in Latvia is only 4%, the lowest increase among all EU countries (EACEA/Eurydice, 2013). This is despite the fact that Latvia has three grades of seniority – less than five years, five to ten years and more than ten years, and one of the most experienced cohorts of teachers among EU and OECD countries.

Low salary often implies low status, and this is the case for Latvia. Many Latvian teachers do not feel their profession is highly valued; 77.2% of teachers were negative about the value that society accords to the teaching profession. Moreover, 32.4% would not choose to work as a teacher if they could decide again, considerably more than the TALIS average of 22.4% (OECD, 2014c).

These findings stand at odds with the government's objective "to raise the motivation and professional capacity of teachers and academic personnel" (MoES, 2014). The Latvian government has recognised the urgency of the situation and has taken several steps to improve the attractiveness of the education profession.

In this context the OECD was invited in 2014 to conduct a review on teacher remuneration in Latvia. The review report noted various weaknesses but also strengths of the current school funding model and provided recommendations for improvement (OECD, 2014b). One of its key recommendations was to raise salaries, but it also noted that raising salaries while maintaining Latvia's low class sizes and teacher-student ratios is simply not sustainable.

Partly in response to the report's recommendations, MoES is currently piloting a revised school funding and teacher remuneration model based on a 36-hour week, in which between 67% and 77% of work time is to be devoted

to teaching and the rest to other activities such as lesson preparation and the grading of tests. To support this effort, MoES established a working group on teacher remuneration, made up of a wide range of stakeholders including Latvia's largest teacher union (Latvian Trade Union of Education and Science Employees), the school leaders' association and representatives from universities.

Key policy issues

Policy issue 1: The need to improve teacher and leadership quality

Research on human and social capital in education shows that in some of the best-performing school systems such as Canada, Finland, Japan and Korea, teachers and school leaders enjoy high status in society and are paid well enough to draw in, or at the very least not deter, academically able people (Schleicher, 2012; OECD, 2014e; Tucker, 2011; Mourshed, Chijioke and Barber, 2010). These countries have built their human resource systems by focusing on attracting, training and supporting good teachers and school leaders throughout their professional lifecycle (Asia Society, 2011; Schleicher, 2011; OECD, 2015c).

Our overarching conclusion is that at present many of the conditions needed to develop an excellent education profession in Latvia are not in place. The Latvian government has recognised the situation and in recent years has taken several important measures to improve the quality of the education profession, many of which we agree are the right ones. However, more will need to be done, and in a more coherent way, if working in education is to be an attractive career option and ultimately to bring about the desired changes in teaching and learning across Latvia's schools.

Low remuneration and low status of the education profession

The current low salaries, flat career structure and other characteristics of the current remuneration system for Latvian teachers and school leaders are at odds with the government's ambition to raise the motivation and professional capacity of teachers and academic personnel (OECD, 2014b). The recent step to pilot a new school funding and teacher remuneration model is a positive development that recognises more fairly their actual work, is likely to increase motivation and is hoped will contribute to improving performance.

A positive feature of the revised model is that, as mentioned above, it is based on a 36-hour weekly workload. The previous understanding of a full-time workload consisted of just 21 teaching hours with additional duties

worth up to 40% more in salary allocated by their school leader – *or not*. This has contributed to a lack of transparency and a growing feeling of discontent among some teachers. Two teachers with the same workload, including a similar package of additional duties, could very well end up with quite different wages (OECD, 2014b; MoES, 2015). This practice is at odds with those in OECD countries and, apart from risking unfair treatment of teachers, fails to recognise that they need time to prepare lessons, grade tests, talk to parents and so on if they are to provide their students with a quality learning experience.

The existing system has also come under increasing pressure through the implementation of the Assessment System of Teacher Performance, which offers a broader and more holistic view of the teaching profession than is reflected in the current remuneration system. Under this system, a teacher's contribution to the development of the institution (Key Area 3) is considered an important part of a teacher's work, but under the current remuneration system this would be considered an additional duty. Some teachers would not have the opportunity to show their competence in the area, simply because they were not allocated the relevant duty by the school leader.

The 36-hour workload that is currently piloted as part of the revised school funding and teacher remuneration model is more transparent and fairer, and recognises that being a teacher is much more than merely teaching. This development is also timely in view of the planned introduction of the new competency-based curriculum. This reform is likely to require considerable additional effort and time from teachers to prepare lessons, develop tests, co-ordinate among teachers and participate in training which, under the piloted model, would be considered part of the regular duties of all teachers.

The revised workload and formal recognition of the full range of tasks good teachers have to perform can also be considered a step towards raising the prestige of the profession in society and making it a more attractive career choice. For this to really happen, however, basic salaries will need to increase in real terms, at least to nationally comparable standards. This could happen as a gradual process but may call for a more ambitious approach. Poland, one of the world's most rapidly improving education systems according to PISA 2012, increased salaries at all levels by 50% on average between 2006 and 2012. The largest increase was for the youngest teachers, to prevent new graduates being put off joining the profession (Jakubowski, 2015).

But retaining effective teachers and school leaders and raising their status goes beyond pay alone (OECD, 2005; Pont, Nusche and Moorman, 2008; Schleicher, 2011). Teachers should benefit from both salary increases and diversified career structures. The revised funding model does not yet tackle

this issue, but may do so in time. The review team strongly suggests Latvia considers bringing greater differentiation in the salaries and functions of education professionals to help better meet school staffing needs and offer teachers more opportunity and recognition for their work. Promotion and new responsibilities may enable jobs to be better matched to individuals' expertise and interest, as well as motivate teachers and encourage further professional growth. This is particularly relevant for those in the middle stages of their careers. Latvia could look to Australia, Estonia, the Netherlands, New Zealand and Singapore, which have developed human resource models with sufficiently attractive salaries and well-designed career structures, including career paths from teaching into school leadership (OECD, 2005, 2014e; Schleicher, 2011) (Box 3.2).

Box 3.2. **Providing greater career diversity in Estonia, New Zealand and Singapore**

In 2013 **Estonia** embarked on an effort to modernise its general education system. A multi-actor working group developed a new continuous professional development system for teachers, driven by teachers' needs for professional development. The new system is based on the Lifelong Learning Strategy 2014-2020 which has as one of its objectives to raise the status of the teaching profession. The new system is expected to start in 2015.

Professional teacher standards, conforming to European Qualifications Framework (EQF) levels, were developed in co-operation with teachers, leaders of educational institutions, employers and government representatives to serve as the basis for a new career model. Staff can progress from teacher (Levels 6, 7.1) to senior teacher (Level 7.2) and master teacher (Level 8). Teachers could apply to obtain these standards from April 2014.

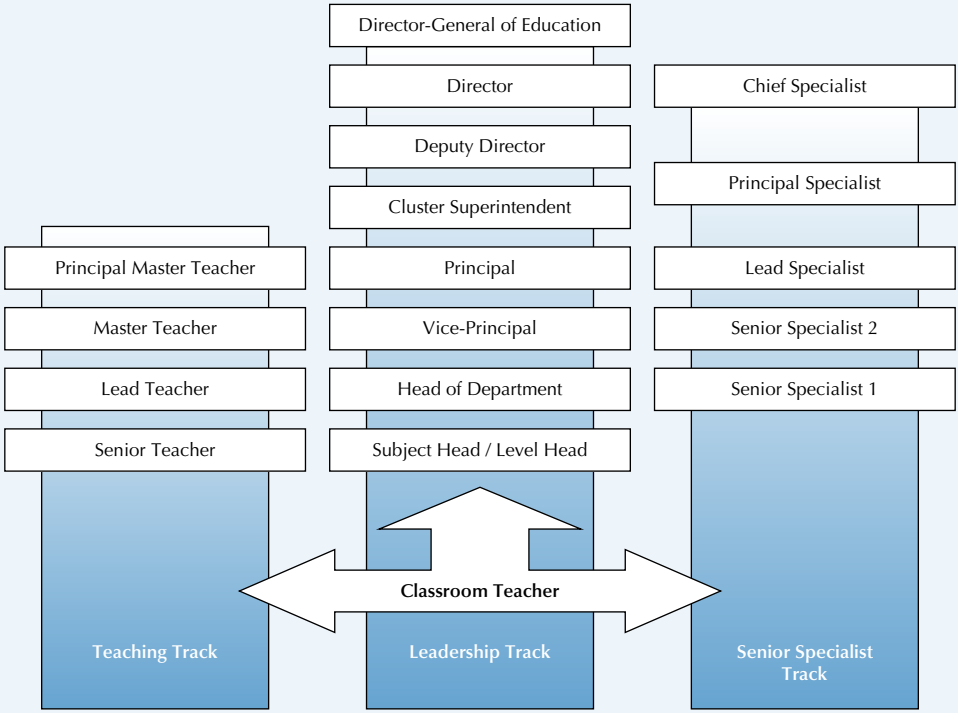
In 2015, **New Zealand** will introduce three new roles within schools with the aim of improving achievement for all students: Community of Schools Leadership Role, Community of Schools Teacher (across community) Role, and Community of Schools Teacher (within school) Role.

- Principals in the community of schools leadership role will work with the principals, boards of trustees and others in their Community of Schools to agree shared student achievement objectives and a plan to meet those objectives, and perform a guiding role in implementing projects in the plan including offering pedagogical leadership. They remain the principals of their own schools, employed solely by the schools' boards of trustees.
- Teachers in the across-community teacher role will work collaboratively across schools with teachers and others to improve teaching practice and student achievement, and work with the Community of Schools Leader role to meet the shared achievement objectives of the Community of Schools.

Box 3.2. **Providing greater career diversity in Estonia, New Zealand and Singapore** *(continued)*

- Teachers in the within-school teacher role will work within their own schools with other teachers from across the Community of Schools by promoting best teaching practice within schools and strengthening the use of the teaching as inquiry approach to teaching and learning.

Singapore is known as one of the best performing countries in the field of education. The high quality of Singapore's teachers is seen as one of the main drivers of this success. The quality of the teacher workforce in Singapore relies on three pillars: 1) recruiting talented students to teacher training; 2) high-quality teachers; and 3) sustained professional development of teachers. This last is encouraged by giving teachers the opportunity to grow throughout their careers. There are three inter-related tracks to promotion and higher pay: a teaching track, a leadership track and a specialist track. Each route has multiple, ascending, positions, with corresponding salaries.



Teachers changing track or position get corresponding training and mentoring support from the National Institute of Education. This usually involves shorter programmes from several weeks to months, after which teachers apply their new knowledge and skills in their school. This training is explicitly linked to positions on the career ladder.

Box 3.2. **Providing greater career diversity in Estonia, New Zealand and Singapore** *(continued)*

These roles will give teachers opportunities for advancement within the classroom and embed a system-wide means of sharing expertise across schools. Each role runs for a fixed term, apart from the within-school teacher role, which is a mix of permanent and fixed-term positions. It attracts significant additional remuneration to help recognise the most effective teachers and principals. The roles are to be underpinned by professional standards. In addition to these new roles, all schools will be given additional funding to provide classroom release time for teachers to work with expert and lead teachers on professional practice.

Sources: Elffers, L. (2015), *De Loopbaanladder van Leraren in Singapore* [*The Career Ladder of Teachers in Singapore*], www.academischewerkplaatsonderwijs.nl/files/2414/2121/7890/De_loopbaanladder_van_leraren_in_Singapore.pdf; Estonian Ministry of Education and Research (2014), *Õpetaja uued kutsestandardid ja nende rakendamine, arengutest õpetaja täienduskoolitussüsteemi* [New Professional Teacher Standards and their Implementation], Ministry of Education and Research, www.tallinn.ee/haridusasutused/Kaspar-Kreegimae; OECD (2015b), *Education Policy Outlook: Making Reforms Happen*, OECD Publishing, Paris; New Zealand Ministry of Education (2014), *Investing in Educational Success: Working Group Report*, New Zealand Ministry of Education, Wellington, www.education.govt.nz/assets/Documents/Ministry/Investing-in-Educational-Success/Investing-in-Educational-Success-Working-Group-Report-3-June-2014.pdf.

The need to make entry into the teaching profession more selective

Teachers in high-performing education systems not only enjoy high status in society, matched by attractive salaries, they have also made it into a highly selective profession (Barber and Mourshed, 2007; OECD, 2014c). In contrast, apart from a probation period of up to three months, specified in the labour laws that schools may decide to include in their internal regulations, Latvia has no selective mechanisms in place to further test the quality and motivation of aspiring teachers (OECD, 2014b).

Latvia's ageing teaching workforce, and continuing decline in student numbers, provides Latvia with an unique opportunity to shape teaching into a highly selective profession. Latvia can be much more selective of its aspiring teachers, for example adopting criteria for those wanting to enter initial teacher education, or establishing additional requirements, or a formal induction programme before they can become fully qualified teachers.

Finland is frequently mentioned as an example to follow. One of the factors used to explain the Finnish success in education is the quality of its teachers. A reform at the end of the 1970s strengthened teacher education and made it highly selective. Teacher education moved from teachers' colleges into universities, and primary school teachers were required to have a master's degree. At present, teacher education is provided by nine universities, of which eight have teacher training schools. According to some evidence, only about 10% of candidates who apply for primary teaching courses are accepted (OECD, 2013d).

The Netherlands is another example to consider. Since 2010, student teachers are required to take a language and a numeracy test in the first year of initial teacher education. The results inform the binding study advice students receive at the end of the first year. They have three chances to pass the tests and cannot continue initial teacher education without them. The preparation and quality of new teachers is perceived to have improved in recent years partly due to this measure (Education Inspectorate, 2015).

Taking a lifecycle approach to professional development

In many countries, the role and function of schools are changing – and so is what is expected of teachers. Schools and the people working in them are now urged to learn faster than ever before in order to deal effectively with these growing pressures. Teachers and school leaders have to become high-level knowledge workers who constantly advance their own professional knowledge as well as that of their profession (Schleicher, 2011, 2012; OECD, 2015c). Professional development and training of teachers and school leaders is most effective when it is embedded in and connected to core practices in teaching and learning, and happens continuously rather than episodically (OECD, 2014e).

In Latvia teachers' and school leaders' professional development is in general not systematic and is not shaped as a continuous endeavour. To start with, despite research evidence showing the positive impact of well-designed induction and mentoring programmes for new teachers (Ingersoll and Strong, 2011; OECD, 2014c) such programmes are not common in Latvia. With a considerable proportion of the profession retiring in the next decade, if the skills and expertise of the older generation of teachers are to be transferred to their younger colleagues, then urgent action will be needed.

Mentoring should not be limited to those new to the profession, but should be considered throughout a teacher's career because of its positive effect on both morale and practice (Thompson et al., 2004). The planned development of the competency-based curriculum, for example, will require teachers to engage in extended learning over a longer period of time. These efforts could benefit from close collaboration with other teachers who have had prior training and/or are particularly skilled in the design of competency-based assessments.

Also, the transition to a competency-based curriculum is a complex exercise (Priestley and Biesta, 2013) but may be particularly challenging when half the teaching force left initial teacher training 20 years ago and has always worked with a largely knowledge-based curriculum. Though more than 95% of teachers feel well or very well prepared to teach (OECD, 2014c) one can question whether 36 hours of professional development every 3 years

is adequate for such a challenging exercise and to achieve the government's objectives to reduce the proportion of low achievers and to increase the proportions of top performers by 2020 (MoES, 2014).

The Latvian government has implemented several EU-funded, large-scale capacity-building projects in recent years. These include the Comprehensive Education Teachers Further Education Project (2010 to 2013) to improve the professional competence of general education teachers and increase teachers' competitiveness in the context of the optimisation of education system. A total of 3 503 teachers have benefited from this project. Such projects are important for building teachers' and school leaders' skills and expertise in certain areas but last a relatively short time and may not fully meet their learning needs.

The review team was further informed that access to and participation in professional development varies considerably across schools and municipalities. For instance, PISA 2012 found only 24% of mathematics teachers in socio-economically disadvantaged schools had participated in professional development courses in mathematics teaching in the three months prior to the survey, significantly less than those in socio-economically average (43.5%) or advantaged schools (33.1%) (OECD, 2013b).

In short, Latvia lacks a lifecycle view of professional development that acknowledges that teachers and school leaders have different needs over the course of their careers. Though participation in professional development is relatively high, there is scope to enhance collaborative learning and working within schools, with mentoring being a case in point. Investment in human resources seems relatively low and varies according to the resource levels and dispositions of schools and municipalities. This may have contributed to the considerable performance differences, particularly between rural and urban areas. This policy issue deserves immediate attention and Latvia should look towards systematically increasing its investment in the quality of its teachers and school leaders, as one of the main drivers of improvement.

Absence of professional teaching and leadership standards

To improve the quality of the education workforce, education systems like those in Australia, the Netherlands, New Zealand and Singapore have used clearly stated, widely distributed and highly publicised national standards for teaching and leadership practice as their point of departure. These standards are typically integrated with national curricula and assessment practices, and are not only used to provide guidance to teacher education programmes, but also to design induction programmes, mentoring and continuing professional development over the whole of teachers' careers (OECD, 2005, 2015c). They can ensure professionals at the beginning,

intermediate and advanced stages of their careers are recognised and sufficiently challenged to continue to give their best.

At the time of writing, Latvia is in the process of developing such professional standards for teachers, with work on standards for school leaders planned to start in 2016/17. These are positive developments that can provide additional support and guidance to Latvia's teachers in their daily practice, and inform their professional development by using these standards as the basis for appraisals and informing a new career structure.

It is important that the professional standards are integrated into initial training and continuing development programmes for teacher and school leaders (OECD, 2005, 2015c). Research evidence has already pointed to the need to modernise the teacher education curricula in Latvia (Webster et al., 2011; Silova et al., 2010). The development of the new standards, combined with the implementation of the competency-based curriculum, makes it even more crucial to review the content, pedagogy and delivery of initial training and continuing professional development. One consideration may be whether there is scope to promote more school-based and/or collaborative learning in networks at the local level.

One critical note is that there are insufficient links between the work on developing the teacher standards and the work on the new curriculum. Latvia's vision and practical understanding of what being a "good" or "excellent" teacher means at various career stages, should be closely linked to its expectations of its youth that the new curriculum should capture.

This seems part of a larger issue that the review team noticed: the lack of a clearly articulated systematic approach to reform. The success of the various measures intended to improve the quality and attractiveness of the education profession depend on adequate sequencing and coherence of reforms. For example, Latvia should consider combining the work on developing leadership standards with the work developing teacher standards, for two reasons. First, developing two sets of standards at different times may not facilitate the development of a comprehensive and diversified career structure that facilitates the transition from teaching into leadership. Second, having strong leadership is essential to the success of reforms as they will depend on school leaders' capacity to create the learning cultures within their schools that are necessary for continuous improvements in teaching and learning.

Policy issue 2: Disparities in equity across the Latvian school system

The highest-performing education systems across OECD countries are those that combine excellence with equity. A thriving education system means that the level of skills and knowledge students attain depends on their ability and drive,

not their social background (OECD, 2012). Latvia is committed to an education system that provides all its citizens with a "quality and inclusive education for personal development, human welfare and sustainable development of the country" (MoES, 2014). The government realises that it cannot afford – socially or economically – to leave large numbers of students behind.

It also recognises that it needs to make further efforts to realise its ambition of truly inclusive education. There are marked differences in student performance between rural and urban schools in Latvia, while students with special education needs and/or at risk of social exclusion do not equally benefit from quality learning opportunities. These complex policy issues may require additional or refined policies and more targeted policy responses than those currently in place. Holding municipalities more accountable for the quality and efficiency of their local school systems would seem key to moving the school system forward.

Large differences in performance between rural and urban schools

The education debate on the school system in Latvia has often focused on the size of the school network and in particular on what to do with small rural schools that are increasingly less viable due to falling student numbers. In contrast, the formidable performance differences between urban and rural schools, which require urgent policy attention, have tended to be largely ignored.

Compared with the OECD average, many more students attend schools in rural areas than in urban ones. Of the 169 485 students in basic education in 2013/14, 44 370 (26%) attended schools in rural areas. As mentioned in Chapter 1, international student assessments have found that students in rural areas lag behind their urban peers. For PISA 2012 the performance gap in mathematics was equivalent to more than one year of schooling, half a year more than the average in OECD countries.[4] Latvian students in towns (3 000 to 100 000 people) or cities (over 100 000 people) have much higher socio-economic status but even after taking students' background into account a substantial performance gap remains, with rural students performing more than 20 points lower than their colleagues in city schools (OECD, 2013b). The gap is 16 points lower in town schools.

The evidence suggests that differences in teaching quality may be one of the main causes behind these differences (OECD, 2013b, 2014a). Small school sizes and class sizes and low student-teacher ratios crowd out investments in other areas, such as the professional development of staff, which in time may have weakened their capacity to respond to the changing demands of their profession. PISA 2012 found that teachers in socio-economically disadvantaged schools, which are mostly found in

rural areas, were less likely to participate in mathematics professional development courses than their peers in socio-economically average and advantaged schools. PISA also showed that the proportion of teachers with a university degree is higher in advantaged schools (55.8%) than in disadvantaged schools (47.5%) (OECD, 2013b).

In addition, the lack of capacity of some municipalities, particularly the smaller ones, to adequately support their local school systems (OECD, 2014b) may have aggravated the situation which raises further questions about the current governance and financing arrangements of the Latvian school system.

There seems ample room to increase class sizes in Latvia without hampering student performance. Research shows that higher teaching quality has a greater impact on student performance than smaller class sizes (Rivkin, Hanushek and Kain, 2005), although smaller sizes might improve outcomes in early grades and for specific groups (e.g. lower-income, disadvantaged or top–performing students). Class sizes are so small in Latvia, however, that there would seem ample scope for change even in the early grades. Country-specific studies in Poland (Jakubowski and Sakowski, 2006), Romania (Porta, 2011) and Ukraine (Coupe et al., 2015), which, like Latvia, have oversized school networks, corroborate the idea that school size and class size do not have a large (positive or negative) effect on student performance.

The school funding model implemented in 2009 has had some effect in reducing the size of the school network but has struggled to bring about further efficiency gains, with municipalities unwilling to close small secondary schools (OECD, 2014b). The new school funding model currently being piloted adjusts the base salary of teachers according to a new scale based on five average class sizes. This is a positive development that, once implemented nationally, will likely trigger further consolidation of the school network and efficiency gains. The Latvian government should continue to monitor the implementation of the new model and make adjustments where necessary, for example by further increasing the class size ranges.

The Latvian government can look to countries like Portugal and Wales (the United Kingdom) who have pro-actively engaged with municipalities to rationalise the school network, defining clear criteria for the closure of schools (Box 3.3). Closure does not have to be the only option considered, however. Approaches to deal with small rural schools can include school collaborations, consolidation and the enhanced use of ICT for remote teaching and learning (Ares Abalde, 2014). Such approaches could be actively promoted by the Latvian government in close collaboration with municipalities.

Box 3.3. **Different approaches to consolidation of small schools – examples from Wales and Portugal**

Wales is a small country with a geographically dispersed population. It has many small schools catering to populations in small communities, with over 400 primary schools with fewer than 100 students.

In recent years, the Welsh government has put increasing pressure on local authorities to address surplus school places in their area which local authorities claimed has led them to develop a policy of school closures. The Welsh Assembly government has emphasised school efficiency and "best value" policies. Local authorities are required to pay particular attention to primary schools with fewer than four teachers, year groups regularly containing less than eight to ten students, head teachers with substantial teaching loads, mixed age classes containing more than two year groups, and schools with more than 25% surplus places.

In recent years local authorities have closed some of the smallest schools that were no longer viable. In 2011/12 there were 29 fewer schools with 100 pupils or less than the year before. Ongoing changes in the age structure, ethnic make-up and mobility of the Welsh population will further challenge the provision of education services and likely lead to further closures of small schools by local authorities in the years to come.

Portugal is an example of a country that went through a thorough process of school restructuring and articulation of school clusters. During the mid-20th century the government increased the number of primary schools, especially in rural areas, and as a result, almost every village in the country had its own school. However, by the late 1980s, these, frequently isolated, schools were badly funded and performing poorly. As a result the government in 1988 decided to close schools with 10 students or fewer.

Further measures were then taken to consolidate the extremely dispersed network of schools. Many of them had higher student repetition rates than the national average. In 2005/06 the first cycle of school reorganisation began, which also entailed the closure of many underperforming schools. In co-ordination with the local government and the school executive boards, the schools to be closed were selected between October 2005 and March 2006. Simultaneously, financial support was provided for local governments to build new school centres and receive students from the closed schools. This reform was intended to rationalise the provision of education in a context of administrative decentralisation, and to eradicate local and regional inequalities.

Following these measures, in 2010 a new resolution prescribed the closure of schools with fewer than 21 students on the grounds that they limit students' academic success" and "present rates of school failure above the national average." It also stated that in these schools, "students and teachers are less likely to succeed and develop; they also offer few opportunities to interact". As a result of these successive policies, the number of primary schools in Portugal fell from 10 800 in 1988 to approximately 5 710 in 2011.

Sources: OECD (2014e), *Improving Schools in Wales: An OECD Perspective*, OECD Publishing, Paris, www.oecd.org/edu/Improving-schools-in-Wales.pdf; Ares Abalde, M. (2014), "School size policies: A literature review", *OECD Education Working Papers*, No. 106, OECD Publishing, Paris, http://dx.doi.org/10.1787/5jxt472ddkjl-en; Godinho, A.S. (2012), "School closures and community revitalisation: the case of Óbidos, Portugal", CELE Exchange 2012/3, OECD Publishing, www.oecd.org/education/Portugal.pdf.

Larger schools and classes do not bring automatic benefits, however. Improvements seem to be linked to instructional practices and the quality of interactions they bring rather than the sizes themselves (OECD, 2012). It is therefore essential that any resources freed up by efficiency gains are invested in improving the quality of teaching, including substantial investments in the professional development of teachers throughout their careers.

Research evidence also shows the benefits of teachers and school leaders engaging in networks or school-to-school collaborations (Paletta, 2011; Senge et al., 2012; OECD, 2013e, 2014e). These can supplement school-based professional development and learning through formal education programmes, and importantly can also help reduce the isolation of largely independently functioning schools. Powerful ICT can provide an additional dimension to these networks, allowing the easy sharing of information and resources, and easy communication at any time (OECD, 2013e).

Teachers' professional associations provide an existing mechanism to encourage such collaborative practices among professionals. Although the evidence suggests these associations are less developed in some parts of the country and for some subject areas, with adequate investment to build their capacity and support their operations, they could serve as a platform to promote networking and school-to-school collaborations among small schools in rural Latvia.

In addition, the Latvian government could consider supporting underperforming schools more directly. Rather than supporting school improvement efforts through the national grants provided to schools – which under the current conditions do not guarantee the actual allocation of funds as planned – or through the professional associations alone, the government could also consider providing more targeted support to underperforming schools in rural areas. The Netherlands and Ontario provide examples of targeted interventions providing additional support to poorly performing schools, with good results (Box 3.4).

The challenge of putting "inclusive education" into practice

In Latvia, as in many OECD countries, the provision of equal access to the same "one size fits all" education is no longer seen as adequate. The focus is increasingly shifting towards providing education that promotes equity by recognising and meeting different educational needs (OECD, 2012). The Latvian government is committed to implementing the principle of "inclusive education" and focuses its efforts on two main target groups: 1) children and youth at risk of exclusion due to their development, abilities or health condition; and 2) youth at risk of exclusion due to social conditions (MoES, 2014). We agree that the concept of inclusive education is of particular relevance for Latvia considering its socio-economic and regional disparities within the country, and that child poverty and youth at risk of social exclusion provide formidable challenges to the country's inclusive education ambitions.

Box 3.4. **Targeted support to weak schools – examples from Ontario (Canada) and the Netherlands**

In **Ontario** (Canada), the Focused Intervention Program (OFIP, since 2006/07) provides targeted support to primary schools that have "experienced particular difficulties in achieving continuous improvement", measured through results in provincial assessments of reading, writing and mathematics at Grades 3 and 6. OFIP funds are used for professional development, additional student and professional learning resources, literacy and numeracy coaches, and teacher-release time for collaboration and additional training. In 2006/07, schools qualified for OFIP support if less than 34% of students reached provincial standard in Grade 3 reading. In addition, since 2009/10, resources from the OFIP program were extended to over 1 100 schools in which less than 75% of students met provincial standards in the Grades 3 and 6 assessments. From 2002/03 to2010/11, the number of schools with fewer than 34% of students achieving at provincial standard in Grade 3 reading was reduced by two-thirds from 19% to 6%, showing significant success in reducing the number of primary schools in which students fail.

The Netherlands has put in place an innovative system to support the improvement of weak and very weak schools as quickly as possible. The Education Inspectorate plays a key role in identifying weak schools based on a number of (output) indicators. Schools that are identified as weak or very weak receive a more intense follow-up inspection and those labelled very weak must improve or be closed down within two years. During these two years, the Inspectorate engages with school boards and monitors the implementation of its recommendations. The role of the Inspectorate during this time is one of supervision as well as advice. Alongside this top-down intervention, which is unique in an otherwise highly decentralised education system, weak schools are given specialised advice and assistance, mostly subsidised by the ministry and carried out by a range of organisations in the field. This system yielded promising results: from 2006 to 2010, the number of very weak schools has been reduced more quickly than the objectives originally set out.

Sources: OECD (2011), *Lessons from PISA for the United States, Strong Performers and Successful Reformers in Education*, OECD Publishing, Paris; van Twist, M. et al. (2013), "Coping with very weak primary schools: Towards smart interventions in Dutch education policy", *OECD Education Working Papers*, No. 98, OECD Publishing, Paris, http://dx.doi.org/10.1787/5k3txnpnhld7-en.

One example of Latvia's efforts to support youth at risk of social exclusion is the "Roma Teachers' Assistants" project started in 2007. Through this project, 20 teachers' assistants of Roma background were trained, as were 30 teachers in schools Roma children attended, to improve their capacity to work in a multicultural environment and apply the principle of inclusive education in practice. Evaluation of the project showed that the teacher assistants contributed to increasing the educational achievement of Roma children and helped change the attitudes of Roma parents towards education (MoES, 2015).

Another example is the creation of eight inclusive education centres that were established throughout the country during 2007-13, six of which still offer assistance to students with functional disorders and train educators.

Despite these and other efforts to promote the integration of students with special education needs, only 35% of students with special education needs were in regular schools, although this proportion is about 20 percentage points higher than five years earlier, which is a considerable improvement (Table 3.5). Latvia realises it needs to do more and has set itself several targets (see Table 3.3), including one to increase the proportion of students with special needs that are integrated into mainstream education. To achieve these targets the government will, among other measures, invest in improving the early identification of children with special education needs at all levels of the system (excluding higher education) which we agree is an important policy measure.

TALIS 2013 found just 12.1% of teachers reported needing further training on teaching students with special needs (OECD, 2014c), but several national studies paint a different picture. They point to teachers' attitudes and lack of skills in working with students with special education needs as the main obstacles for implementing inclusive education in practice (Austers, Golubeva and Strode, 2008; Nimante, 2008; Nimante and Tubele, 2010). They suggest that teacher education programmes in Latvia are not preparing teachers sufficiently to work with special education needs. This message resonates with the call for action by the participants of the "Inclusive Society Starts with Inclusive Education" conference held in Riga on 2 April 2015 who asked for the review of "initial education and continuous education programmes for teachers to ensure the necessary knowledge about inclusive education, to broaden teachers' knowledge about children with special needs, establish an accessible specialist support to consult teachers in order to improve the understanding of children's needs and thus ensure an effective learning process that suits the abilities of the student" (Inclusive Society Starts with Inclusive Education, 2015).

Table 3.5. **Integrating children with special needs in regular schools and classes (Grades 1-12)**

		Students with special needs integrated in mainstream schools and taught by:				
Year	Total number of students with special needs	Mainstream education programme in regular classes	Special education programme in regular classes	Special education programme in special classes	Students in special education schools	Share of students with special needs integrated in regular classes
2013/14	10 865	356	3 421	1 283	5 805	35%
2012/13	11 135	328	2 891	1 179	6 737	29%
2011/12	10 466	187	2 308	1 072	6 899	24%
2010/11	10 026	117	1 474	1 244	7 191	16%
2009/10	9 481	113	462	1 357	7 549	6%
2008/09	10 350	769	821	1 202	7 558	15%

Source: MoES (2015), "Country background report Latvia", unpublished, Ministry of Education and Science, Riga.

Perhaps in agreement, MoES will use EU funding during 2014-20 to invest in building teachers' capacity to respond to the learning needs of students with special education needs (MoES, 2014). The Education Development Guidelines 2014-2020 (MoES, 2014) state that the government aims to develop and implement continuing professional development programmes for specialists (social workers, physiotherapists, etc.), but are less explicit about how initial and continuing teacher education programmes could build teachers' capacity. Once again, the important work currently going on to develop teacher standards should be used to inform and help (re-)shape development programmes. Among other things, these standards should highlight the importance of teachers being able to identify and work with students with special education needs. This is of particular relevance as larger proportions of special education students are integrated into regular classes in the years to come.

The Education Development Guidelines also note that further changes at the community and policy level will be needed to make Latvia's schools and society at large more inclusive. An earlier OECD report (OECD, 2014a) already noted that Latvia's school funding model is not sufficiently sensitive to students' special education needs. The model includes coefficients for students in special educational institutions, special educational classes in mainstream schools and social correction educational programmes. It however fails to adequately integrate the educational and other needs of individual students. Research evidence shows achieving equity in education requires funding strategies responsive to student and school needs. Students and schools have different socio-economic profiles and varying needs, and funding schemes should reflect these (OECD, 2012).

Many countries include needs-based variables in their school funding calculations to account for the additional resource needs of teaching students with learning disabilities or who come from disadvantaged socio-economic backgrounds (Fazekas, 2012). The revised school funding model that Latvia is currently piloting does ensure that additional funds are allocated for students with special needs. The formula includes a coefficient of 1.8 for students in a special education school and 2.0 for students integrated into a mainstream classroom. This differentiation is a positive development as it provides additional incentives for integrating children with special needs into regular classes. Careful monitoring will be needed to show whether this difference in coefficient is enough.

The piloted funding formula does not currently take into account students' socio-economic backgrounds but may do so in time. Latvia could look towards countries like the Netherlands and the French Community of Belgium for examples (Box 3.5). Latvia is also considering providing separate grants to students at risk of social exclusion and may look towards the examples of England (the United Kingdom) or Wales, where a range of funding grants target specific students or schools. The experiences from these countries also show the need to prevent procedures from becoming administratively cumbersome (OECD, 2014e).

Box 3.5. **Different approaches to funding and supporting disadvantaged students and/or those with special education needs**

In **Wales** a range of funding grants target specific students or schools. Special grants are allocated to schools to implement interventions that aim to improve the performance of these different groups of students, particularly low achievers. Among the different grants that local authorities and schools can access are:

- The free school meal entitlement that children and young people attending school on a full-time basis may receive if their parents/guardians receive certain benefits or support payments.
- The Pupil Deprivation Grant (GBP 918 per student in 2014/15, GBP 450 in 2015/16) provides schools with targeted resources to improve achievement of disadvantaged students, i.e. those students that are eligible for free school meals and looked-after children.
- The School Effectiveness Grant, which is linked to the Pupil Deprivation Grant, supports the three main education objectives of the Welsh government i.e. improving student performance in literacy and numeracy, and reducing the impact of deprivation on student performance.
- The Communities First Student Deprivation Grant Match Fund aims to encourage schools in areas of high poverty to form closer links with their communities through grants ranging between GBP 10 000 and GBP 75 000 a year for each Communities First Cluster.

The **Flemish Community of Belgium** allocates a portion of total funding on the basis of four socio-economic indicators: the mother's level of education, the student's qualification for a school allowance, the language spoken at home and the living environment of the student.

In the **Netherlands**, schools receive equal public funding based on the number of students (except for schools fully funded from private sources), as long as they meet certain requirements. Targeted funding provides additional resources to schools. The allocation of budgets varies depending on the level of education but often has a fixed part and a larger variable part. At the primary school level the allocated budget has a relatively small fixed component (5-10%) for school management and a large component based on the number of students, adjusted for the share of students from low-income households and students with disabilities. Schools with a high proportion of disadvantaged students effectively have on average about 58% more teachers per student and also more support staff.

Sources: Ladd, H. F. and E.B. Fiske (2011), "Weighted student funding in the Netherlands: A model for the U.S.?", *Journal of Policy Analysis and Management*, Vol. 30/3, pp. 470-498, http://dx.doi.org/10.1002/pam.20589; OECD (2015c), *Improving Schools in Sweden: An OECD Perspective*, OECD Publishing, Paris, www.oecd.org/edu/school/Improving-Schools-in-Sweden.pdf; OECD (2014e), *Improving Schools in Wales: An OECD Perspective,* OECD Publishing, Paris, www.oecd.org/edu/Improving-schools-in-Wales.pdf.

Although research has shown the effectiveness of using needs-based variables and/or specific grants to distribute resources where they are most needed, it also points towards the importance of allocating funding in accordance with actual policies in order to reach the designated recipients (European Commission/EACEA/Eurydice, 2014; Levačić, 2006). However, in practice this does not always happen, including in Latvia. As already described, some municipalities reallocate funds to small schools that are no longer viable, for instance, and there are considerable spending differences between municipalities. These suggest municipalities should be held more accountable for the efficiency and quality of education they provide.

Partly in response to this issue, the revised funding model will transfer funds directly to schools, in principle preventing municipalities from reallocating funds. This feature of the revised model will very likely limit funding differences between schools and enhance the transparency of how funding is allocated to schools in Latvia.

Policy issue 3: Underdeveloped assessment and evaluation arrangements

Governments and education policy makers in OECD countries increasingly see evaluation and assessment as playing a central strategic role in education. They are indispensable tools for improvement, accountability, educational planning and policy development. Evaluation and assessment are seen as essential for establishing how well students are learning; providing information to parents and society at large about educational performance; and informing the improvement of schools, school leadership and teaching practices. To achieve their full potential, the various assessment and evaluation arrangements should form a coherent whole and serve to advance educational goals and student learning objectives (OECD, 2013c).

In recent years Latvia has taken steps to establish and strengthen each of the key components that make up a comprehensive assessment and evaluation system: assessments of students, teachers and school leaders, schools, and the system. However, they are not equally well developed and lack synergy. There are also concerns about the quality of some of the data collected, and clear challenges over the assessment and evaluation capacity at all levels of the system. These challenges limit Latvia's effective monitoring of educational progress.

The challenge of moving towards competency-based student assessments

Assessment of students is essential to measure their individual progress and performance and plan further steps to improve teaching and learning (OECD, 2013c). High-performing education systems balance

the use of formative student assessments (assessment *for* learning) and summative student assessment (assessment *of* learning) (OECD, 2012). When the pendulum swings too much towards summative assessments there is a risk that tests are perceived to be high stakes. This can lead to negative effects such as summative scores undermining effective formative assessment in the classroom or "teaching to the test" (OECD, 2013c).

There is little evidence to suggest such an imbalance in the Latvian school system. The National Standards of Compulsory Education prescribe the use of various assessment procedures including self- and peer-evaluation, teacher evaluation, and state examinations. They also highlight the importance of continuous assessment of students by teachers through formative and summative assessments. Various recent projects, such as to improve ICT skills (digital competence), foreign language skills (communication in foreign languages) and entrepreneurial skills (sense of initiative and entrepreneurship) have specifically highlighted the importance of using both types of assessments to support the learning of students, providing training for teachers and supporting materials to do so (MoES, 2015).

In Latvia the national student assessment for the certificate of basic education is taken at the end of Grade 9. The exams taken by students in schools which implement minority language programmes are marked centrally while the others are marked in the school by teachers who did not teach the students and in some cases by the class teacher too (EACEA, 2009; MoES, 2015). The National Centre for Education informed us that they have found some evidence of variable marking of these exams by teachers, which reduces their reliability and usefulness for monitoring purposes.

This may be an issue for MoES to investigate further, considering it is about to start the implementation of a new curriculum. The move from a largely knowledge-based curriculum to a competency-based one will be challenging for those teachers not sufficiently familiar with and/or confident about teaching towards and assessing against competency-based learning objectives. Though much training has been provided to promote competency-based teaching approaches in recent years, Latvia has many long-serving teachers, many of whom will have worked for over two decades with a curriculum based on knowledge requirements, and may therefore find the transition challenging.

MoES should not underestimate the complexity of implementing a new curriculum. It should ensure adequate capacity-building support and provide supporting materials to help teachers align their teaching and assessments

of student learning to the new competency-based learning outcomes. Latvia could look to the examples of Finland or Scotland (the United Kingdom) in this area. In Finland, for example, "learning to learn" skills are considered to be central to each student's development. To evaluate and promote the importance of such skills, national sample-based assessments were developed by the Centre of Educational Assessment at the University of Helsinki to evaluate the "learning to learn" skills of students in Grade 3, 6 and 9 of compulsory education (OECD, 2013c).

Scotland's implementation of the Curriculum for Excellence is another example Latvia could learn from. This curriculum typifies many international trends in curricular policy, through its emphasis on generic skills and competences, its focus on pedagogy and its apparent extension of autonomy to teachers as agents of change (Priestley and Minty, 2013). Scotland's approach is often considered to be good practice in how to design and implement a contemporary curriculum (OECD, 2015, forthcoming; Priestley and Minty, 2013), it however expects a great deal of teachers, including its assessment demands (Box 3.6).

Box 3.6. **The design and implementation of Scotland's Curriculum for Excellence**

The implementation of the Scottish Curriculum for Excellence (CfE) for 3-18 year-olds started in 2004 and has been introduced in various forms over the period since then. It has also been adopted as a holistic approach to school improvement, steering the values and dispositions that can motivate students to excel. While specific subjects are an essential feature of the curriculum, particularly in secondary school, the curriculum is more outcome oriented than subject oriented, promoting a comprehensive and interdisciplinary approach.

Since the start of the CfE various stakeholders, such as students, parents and local authorities, have been encouraged to contribute to the curriculum. For example, writing teams were formed for each curriculum area, brought in from the classroom and other posts in education to develop the "experiences and outcomes" that define specific goals of the curriculum. The draft experiences and outcomes were published online and were accompanied by an online questionnaire so that anyone with an interest in education could be part of the feedback and revision process.

The CfE allows schools and local authorities to review and redesign their curriculum through a collaborative process "Building your Curriculum" that involve partners in the school community. Materials have been developed to engage students, parents and school staff in the process, including workshop toolkits, a template for curriculum planning and sample curriculum plans. Also, teachers were provided with numerous exemplars, particularly to support their evaluation and assessment practices. The framework for assessment was developed to provide detailed guidance for practitioners. As a key component of the framework, the National Assessment Resource, an online resource, was launched in 2011 to support assessment approaches by providing assessment materials and examples.

Box 3.6. **The design and implementation of Scotland's Curriculum for Excellence** *(continued)*

On the other hand, research suggests that teachers have different understandings of the purposes and philosophy of the CfE. Many teachers expressed anxiety as they tried to move from the prior prescriptive curriculum to one with greater teacher autonomy, particularly in relation to assessment. These findings point to the importance of raising the capacity of individual teachers through continuing professional development as well as changing the cultural and structural conditions.

Sources: OECD (forthcoming), *Policy Review of Scottish Curriculum for Excellence*, OECD Publishing, Paris; Priestley, M. and S. Minty (2013), "Curriculum for Excellence: 'A brilliant idea, but…'", *Scottish Educational Review*, Vol. 45/1, pp. 39-52; Education Scotland (2010), "What is Curriculum for Excellence?", www.educationscotland.gov.uk/learningandteaching/thecurriculum/whatiscurriculumforexcellence/.

Strengthening teacher and school leader appraisal to foster improvement

The introduction of the Assessment System for Teacher Performance in 2009 can be considered a positive development as it recognises the performance of effective teachers, which may have a positive impact on motivation (a key objective of MoES). Research evidence also shows that education systems benefit from clear and concise profiles of what teachers are expected to know and be able to do in specific subject areas (Schleicher, 2012; OECD, 2013f; Randi and Zeichner, 2004).

The assessment system does go some way to communicate the ministry's expectations of key competences necessary for the development of an effective teacher. Its five key areas (see Box 1.1, Chapter 1) may not sufficiently recognise the complexity of good teaching, however, limiting their usefulness for supporting teachers' career-long quest for better practice. The limited impact of teacher appraisals and feedback on teaching practices, and the fact that less than half (48%) of teachers reported having personal development plans to improve their work (OECD, 2014c), are worrying and suggests there is much scope to strengthen school leaders' capacity to conduct appraisals and use them to inform teachers' professional development.

One positive development is the work that Latvia has started to develop teacher standards. These can form the basis for developing a more comprehensive teacher appraisal system characterised by formal and informal discussions between teachers and school leaders and others. These should take place several times a year to facilitate a continuous cycle of professional growth.

One example Latvia could follow is Ontario (Canada) where each teacher must develop or review and update a professional development plan each year.

This plan includes the teacher's professional growth objectives, proposed action plan and timelines for achieving those objectives. It is teacher-authored and directed and is developed in a consultative and collaborative manner with the principal. Teachers who move from the new to the experienced teacher appraisal process must develop an annual learning plan in their first year as an experienced teacher. Each year thereafter, teachers, in consultation with their principal, must review and update their learning plan as needed from the previous year. They must take into account their learning plan from the previous year, their learning and growth over the year, and the summative report of their most recent performance appraisal. In an evaluation year, the teacher and principal must meet to review and update the teacher's plan as part of the performance appraisal (OECD, 2009).

Latvian school leaders are currently assessed at least once every six years as part of the school accreditation process. A recent amendment to the Law on Education introduced a requirement for the external evaluation of school heads conducted by an institution nominated by MoES. It is planned that the SEQS will be the delegated institution. The school leadership standards to be developed in 2016/17 will form the basis for this revised system. Appraisal results will be used to inform decisions on school heads' performance and salary allowance (European Commission/EACEA/Eurydice, 2015), and should also be used to inform their continuous professional development. This is a positive development that should not be delayed.

Further improving school evaluations

The Latvian school evaluation has drawn on international best practice and was inspired by the Scottish school evaluation system. It is well aligned with several good practices in school evaluation highlighted by a recent OECD Review on Evaluation and Assessment (OECD, 2013c). School evaluation is shaped by mutually reinforcing annual internal assessments and six-yearly external ones. Latvia has also defined national quality criteria that are used for both internal and external evaluations. These ensure alignment between the two which has the advantage of keeping schools systematically focused on core quality criteria, and not just in relation to cycles of external school evaluation.

External school evaluations draw on a broad set of evidence, including the school self-evaluation report, classroom observation and surveys of key stakeholders (e.g. students, teachers and parents). This practice encourages the acceptance of the evaluation results by schools and other stakeholders.

The external evaluation is carried out by trained evaluators who represent key stakeholders, including experienced and recognised educational experts and leaders from other schools. This can have multiple benefits: broadening the expertise of the expert commission doing the evaluation, enhancing its

credibility through the explicit involvement of current practitioners, and building capacity among the educational experts and leaders themselves. They can then use their experience to support their colleagues to better understand external evaluations, and share knowledge on good practices they have seen (OECD, 2013c, 2015c).

Despite these strengths there are also some areas for improvement. First, a lack of funding has without a doubt limited the potential of school evaluation to support school improvements. The 2009/10 budget cuts resulted in a one-off evaluation based on schools' self-evaluation reports and student outcomes alone, with only the 20% of schools considered most at risk receiving a visit from an expert commission in the six years that followed. Latvia now plans to continue this risk-based approach, leaving 80% of schools without the opportunity to benefit from the constructive criticism of the expert commission. Importantly, it also prevents the identification of higher-performing schools and dissemination of good practices. Neither will it challenge any complacency among schools which fall outside the risk-based sample (OECD, 2015c).

In addition, the review team formed the impression that internal and external evaluation processes are not yet really seen as opportunities for improvement. The evidence from our school visits suggest that yearly self-evaluations are not that well established. Moreover, the extent to which other local stakeholders are involved in self-evaluation processes varied according to those interviewed by the review team.

The evidence also suggests the follow-up requirements for external evaluations are rather thin once accreditation is obtained. Schools are simply expected to submit a progress report every year until all recommendations are implemented. Responsibility for this lies with the founding body, usually the municipality. However, as pointed out earlier, some municipalities may not have the capacity to adequately support their schools' improvement efforts. MoES should therefore consider further strengthening its follow-up support to schools. As mentioned earlier, it could look towards the example of the Education Inspectorate of the Netherlands which plays a key role in the identification and intense follow up support provided to weak performing schools (see Box 3.3).

In addition, the current school evaluation system pays insufficient attention to the performance of municipalities, despite concerns about their variable capacity. Therefore, Latvia may consider following the example of a country like Wales dealing with similar capacity challenges at the local level (OECD, 2014e) and provide SEQS with the mandate to more explicitly report on the effectiveness of municipalities at improving the quality of education in their schools.

The need for stronger system-level monitoring

Evaluation at the system level provides the opportunity for education systems to monitor the extent to which progress is being made on their goals. The evidence used typically brings together qualitative and quantitative data from different levels of the system, particularly those related to student outcomes and school evaluations, as well as data from international surveys such as PISA (Campbell and Levin, 2009; Hopkins et al., 2008). However, as outlined in Chapter 1, there are a number of weaknesses in Latvia's system-level monitoring of educational progress and the SEIS and MoES lacks the capacity – and perhaps the "culture" – of using data and research for policy-making purposes.

In sum, although in recent years Latvia has aimed to strengthen the evaluation and assessment of its school system, the individual arrangements are not equally well developed and do not form one coherent whole. In particular the there is scope to strengthen the improvement functions of teacher, school and system-level evaluations. MoES is very much aware of these weaknesses and, with EU financial support, intends to use the coming years to strengthen its assessment and evaluation capacity which we agree is an essential step for moving the system forward.

Recommendations

Recommendation 1: Establish the conditions for a high-quality teaching and leadership profession

Latvia's relatively large and ageing teaching workforce combined with a shrinking student population provide a historical opportunity to reshape and invest in the quality of its education workforce. Although the government has taken several steps to improve "the attractiveness and motivation of teachers and academic personnel" (MoES, 2014), there is a lack of coherence between the various initiatives.

Latvia should consider adopting a more systematic approach to reform with a comprehensive medium- to long-term human resource strategy for the education system that is adequately resourced, ensures coherence and adequately sequences various reform initiatives. This strategy should include raising salaries at least to nationally comparative levels as part of a well-designed career structure that offers teachers a variety of career paths, recognising and challenging them throughout their careers. This will need to go hand in hand with the consolidation of the school network to free up funds for higher salaries and investment in the quality of teaching, particularly in rural schools.

Professional standards for teachers and school leaders provide the foundation of a well-designed career structure, and should inform appraisals and the professional development of staff. The working group on the development of teacher standards should expand its work to include the development of school leadership standards. This work should be seen as a single effort to develop a diversified career structure that facilitates the transition from teaching into leadership positions.

Further, entry into initial teacher education and the profession should be more selective. This will allow for the quality and motivation of aspiring teachers and leaders to be tested, and may help draw the best graduates into the profession and raise the status of the profession in society. Professional development should follow a lifecycle approach based on a solid assessment of developmental needs through regular appraisals. Collaborative learning and working within schools should be enhanced, with induction and mentoring as good starting points. Finally, in light of the demands of the new curriculum, and the development of teaching and leadership standards, Latvia should consider reviewing its initial education and continuing professional development capacity.

Recommendation 2: Promote equity and excellence in education, with a focus on rural schools

Though Latvia has made good progress in expanding access and improving learning outcomes, the data suggest there are marked differences in student performance between rural and urban schools in Latvia, while students with special education needs and/or at risk of social exclusion do not equally benefit from quality learning opportunities. The Latvian government should therefore continue its efforts to ensure that its school system is effective in meeting the learning needs of all its students. It should consider complementary strategies to meet these challenges.

Latvia should continue its efforts to make the school system more efficient and ensure that the freed-up resources are invested in the quality of teaching, in particular in rural schools. MoES and the municipalities could promote different ways of rationalising the school network more directly, including school closures, collaborations, consolidation and the enhanced use of ICT for remote teaching and learning. For example it could consider defining clear criteria for initiating the closing or consolidation of schools, and incentives to promote these processes.

MoES and municipalities should also enhance their efforts to promote networking and school-to-school collaborations to help reduce the isolation of schools and build social capital within and across Latvia's rural schools. Professional associations could be strengthened to enable them to play a role

in facilitating these activities. In addition, MoES should consider providing more targeted support (programmes) to underperforming schools.

Making Latvia's schools more inclusive will require changes at the community and policy level, but also depends on the ability and motivation of teachers and school leaders to identify and work with children with special needs. The proposed review of initial education and continuing professional development should therefore ensure this area is sufficiently covered. The planned professional standards should also reflect the central importance of special education.

The school funding model currently being piloted allocates additional funds for students with special education needs and creates incentives for their integration into mainstream classrooms but does not take students' socio-economic backgrounds into account. In time, Latvia should consider further refining the school funding model to include socio-economic backgrounds. Any use of special grants to support students at risk of social exclusion should be designed to be simple to administer.

Recommendation 3: Develop a coherent assessment and evaluation framework for informing policy and educational practice

In recent years Latvia has taken steps to establish and strengthen each of the key components that make up a comprehensive assessment and evaluation system. It has only partially succeeded with this, however, as the elements are not equally well developed and lack synergy. MoES recognises the situation and plans to strengthen the system's monitoring and evaluation capacity in future years. The review team recommends it adopts a strategic approach rather than focusing on the individual assessment arrangements one by one. It should start by developing a coherent assessment and evaluation framework built around educational goals and improving student learning.

Latvia should invest in teachers' capacity to assess the new curriculum's competency-based learning objectives. MoES should not underestimate the complexity of this transition, which may prove particularly challenging given the teaching workforce's long experience with a largely knowledge-driven curriculum.

The current teacher assessment system should be further developed into one geared towards supporting the professional development of teachers, and expanded to include school leaders. Such a system should be founded on the professional standards currently being developed. These should state the expectations for effective teachers and school leaders at various stages of their careers and inform them in their professional development.

The improvement function of school evaluations should be strengthened. The resources should be found to enable external school evaluations and follow-up support to cover more schools so that they do not miss out on the benefits that can arise from a critical but constructive external evaluation. This will also support the identification of higher-performing schools and dissemination of good practices. Latvia should continue to promote the establishment of strong school self-evaluations, which are not yet fully embedded in schools. A possible way forward might be to hold school leaders more responsible for self-evaluations and for school leadership courses to include a significant element on school evaluation. The SEQS should further strengthen its follow-up support to schools and Latvia should consider expanding its mandate to more explicitly report on the effectiveness of municipalities in supporting their schools. In addition, school leaders should be externally evaluated to support their professional development and school improvements.

Notes

1. As of 2014, out of 96 municipalities with available data, 35 covered lunches for all grades of basic education. Municipalities may also decide to fund meals for specific groups of children like those from large or low-income families and orphans.
2. A gymnasium (*ģimnāzija*) is an institution offering three years of full-time general upper secondary education to students aged 16 to 19. The institution may also offer the last three years of basic education to students aged 13 to 15, thus enabling them to complete basic education (Eurydice, 2014).
3. PISA results are normalised to a mean of 500 for OECD countries. While this average changes slightly across years, it can serve as a useful benchmark.
4. The mean performance of 15-year-olds in mathematics in PISA 2012 was 513 score points in cities in Latvia (over 100 000 people), 493 in towns (between 3 000 and 100 000 people) and 461 in villages (fewer than 3 000 people), compared to the OECD averages of 504, 493, and 468 respectively (OECD, 2013d).

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Chapter 4

Upper secondary general and vocational education in Latvia

This chapter reviews Latvia's upper secondary education system and also parts of its adult education system. Currently there is a stark divide between the general and vocational upper secondary education pathways and spending is low and responsibility for provision quite fragmented. Lifelong learning is underdeveloped in Latvia, with low participation and a lack of employer support for training.

In 2009 a comprehensive reform of vocational education was started aimed at raising its quality and relevance to the labour market, make it more attractive to students and enhance resource efficiency. The Latvian government should continue improving the relevance and quality of vocational education, strengthening the capacity of stakeholders to contribute to the process and closely monitoring its progress; narrow the divide between general and vocational tracks both through organisational changes and curriculum reform; and increase take up of lifelong learning.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Introduction

Upper secondary education is recognised as a major educational stage across OECD countries. Graduating from upper secondary education has become increasingly important globally, as the skills needed in the labour market become more knowledge-based and workers are progressively required to adapt to the uncertainties of a rapidly changing global economy (OECD, 2014a). Although it is not compulsory in Latvia, the vast majority continue to upper secondary education after completing basic education.

Latvia's upper secondary system (Grades 10-12) is largely school-based and is characterised by a stark divide between general and vocational pathways. Latvia's post-secondary non-tertiary education programmes are also considered to be part of the upper secondary level. In Latvia the term "vocational education" is generally used, rather than vocational education and training (VET), as most vocational education is implemented through school-based programmes that include periods of practical learning at school and in enterprises (MoES, 2015).

In 2009 Latvia embarked on a comprehensive reform to improve the attractiveness, quality and labour-market relevance of its vocational education with the involvement of social partners. It has set an ambitious target to equalise participation rates in upper secondary general and vocational education by 2020; that is a 50/50 split for all students finishing their basic education and entering Grade 10, compared with the 65/35 split in 2014/15. In recent years it has initiated reforms to optimise the vocational school network, modularise vocational programmes and establish professional standards, among other reforms. Although the reorganisation of the vocational school network is almost complete, further work is needed to improve the vocational curriculum.

Latvia's divided upper secondary system has long hampered efforts to follow the international trend of greater integration of general and vocational education to better prepare students for both further education and/or working life. Meanwhile the subject-heavy, knowledge-based upper secondary curriculum and teaching practices have not kept pace with the changing times. Participation in lifelong learning is low while many of the working-age population are believed to lack the skills they need to be more productive (OECD, 2015a).

This chapter starts with an overview of upper secondary education in Latvia. It continues with an in-depth discussion on a selection of key policy issues ahead and provides concrete policy recommendations for improvement for Latvia to consider.

Context and main features

Governance and financing

According to the General Education Law, everyone who has completed basic education has the right to enter upper secondary general and/or vocational education regardless of age. Although upper secondary education is not compulsory in Latvia, 89% of 25-64 year-olds had attained this level in 2013, compared with an OECD average of 75% (in 2012) and an European Union (EU) average of 72% (Eurostat, 2015b; OECD, 2014a).

The government and municipalities are responsible for maintaining schools in all areas of the country to ensure the accessibility of education. Although general upper secondary education is the responsibility of municipalities, the situation with vocational schools is quite different. In October 2014, 33 vocational schools were under direct control of the Ministry of Education and Science (MoES) with a further 7 governed by municipalities and other 8 by private providers whose provision is mainly aimed at adults. Fourteen vocational schools were directly supervised by the Ministry of Culture and one by the Ministry of Welfare. In addition one college that implements secondary vocational education programmes was under the responsibility of the Ministry of the Interior, one under the Ministry of Welfare and nine were under the responsibility of MoES (MoES, 2015).

MoES has overall responsibility for the legal framework, governance, funding and content of vocational education. Since 2000, it has worked in co-operation with the National Tripartite Sub-Council for Cooperation in Vocational Education and Employment, which has representatives from employer bodies and trade unions, and 12 Sectoral Expert Councils (SECs) established in 2011. It also works closely with the State Education Development Agency (SEDA) whose role is to administer Latvia's EU structural funding.

As mentioned in Chapter 1, the National Centre for Education was established under MoES to evaluate educational content and student achievement, and organise the development and revision of the basic and upper secondary curricula. A key function of the centre is to develop, administer and grade centralised general and vocational education examinations.

As there is no regional tier of government, MoES and other ministries have to work directly with each municipality. As covered in Chapter 3, schools and their school leaders (who are selected by the municipality) have considerable autonomy, regardless of whether they are governed centrally or by municipality.

Municipalities are required to ensure every child can acquire a secondary education and has access to extra-curricular programmes. Children can attend school in a different municipality to the one where they live, in which case the "home" city or municipality contributes to the costs incurred by the school they attend.

Whilst the cities and municipalities are bound by a set of statutory duties with regard to education, they appear to differ considerably in the way they discharge them, and the impression is that they act in a largely autonomous way. Each municipality has an Education Specialist and a Board of Education, whose head is appointed in collaboration with MoES. The boards have a wide range of responsibilities in terms of providing support to schools, but their key function is to ensure that local educational policy is implemented and to administer the state grants to schools.

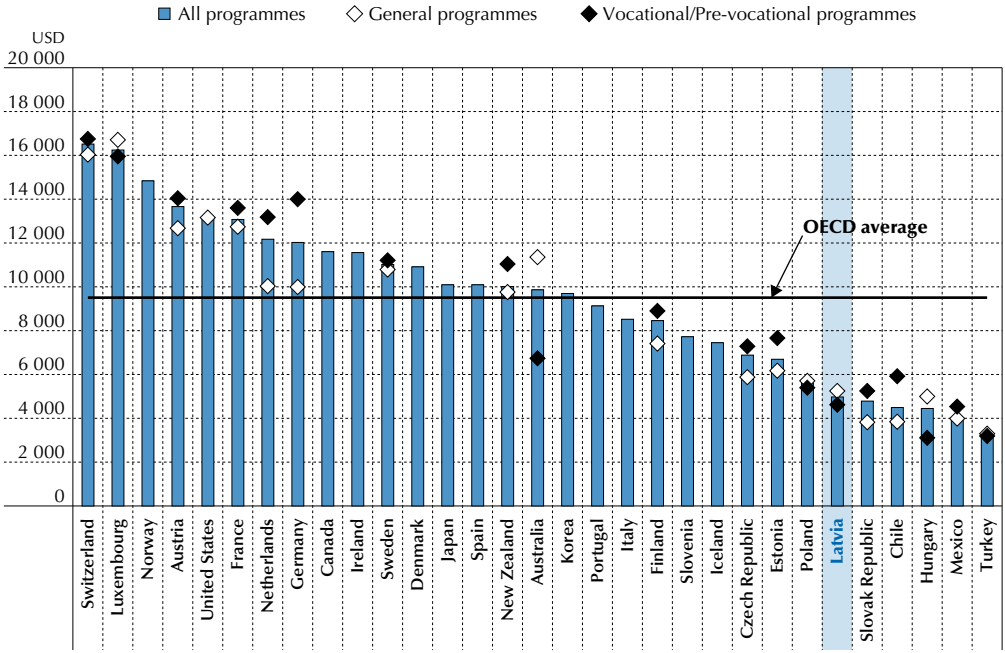
A requirement of the school accreditation process is that each school should have a "council of an education institution" comprising staff, parents, students and representatives from the local community, and a student council, although the level of involvement in decision making differs from school to school. There is no mandatory training for either board-level or council-level members.

As described in Chapter 3, the State Education Quality Service (SEQS) was founded in 2009 to, among other responsibilities, register and inspect educational institutions (public and private) and licence both general and vocational educational programmes through a uniform accreditation procedure of general educational and vocational educational institutions and programmes. It also acts as the National Reference Point for European Quality Assurance in Vocational Education and Training. The external evaluation of schools and their programmes normally takes place every six years, although some education programmes are accredited for a period of two years. The evaluation process involves internal evaluation, school visits by the committee of experts and submission of evaluation reports to the SEQS which publishes the experts' reports on its website. Schools must publish their internal evaluation reports on their web pages.

Financing of upper secondary education

Latvia's annual expenditure per student by educational institutions for all services at upper secondary level in 2011 was USD 4 983. This stood well below the OECD average of USD 9 506, as seen in Figure 4.1 (OECD, 2014a). It was also below the level of USD 6 688 spent by its Baltic neighbour Estonia. In one of the schools visited for this review, a head teacher referred to the school budget as a "survival budget, not a development budget". However, in relation to GDP, Latvia spent 25% of GDP per capita on each upper secondary student, which is comparable to the OECD and EU21 averages[1] of 27%.

Figure 4.1. **Annual expenditure per student, by upper secondary educational institutions (2011)**



Countries are ranked in descending order of expenditure on educational institutions per student in upper secondary education.

Source: OECD (2014a), *Education at a Glance 2014: OECD Indicators*, OECD Publishing, Paris, http://dx.doi.org/10.1787/eag-2014-en.

While on average across OECD countries, the cost per student rises in line with the level of education – from USD 7 428 for ECEC (3-6 year-olds) to USD 9 506 for upper secondary – in Latvia the costs for upper secondary (USD 4 983) are similar to the primary level (USD 4 982) and slightly below those for lower secondary (USD 5 019).

The difference in spending per student between general upper secondary education and vocational education is also unusual in Latvia. As Figure 4.1 shows, most OECD countries spend more per student on vocational programmes than on general ones, USD 9 307 and USD 8 613 on average respectively. This pattern is repeated in Estonia, for example which spends USD 6 153 per student on average on general upper secondary education, and USD 7 651 on vocational. In Latvia, in contrast, the levels are reversed: it spends USD 5 241 per student on general upper secondary education and USD 4 599 on vocational upper secondary education.

The maintenance of buildings and teaching resources are paid out of municipal budgets, apart from the schools financed directly by the central government. The evidence however suggests that some of the smaller municipalities lack the fiscal and human resource capacity to effectively manage their local school systems.

In addition, all of the 26 state gymnasia receive additional funding (EUR 1 423 per annum) for their regional role in the professional development of teachers. Questions have been raised about the effectiveness of this professional development approach (e.g. OECD, 2014b). MoES is currently piloting a new school funding model which will abandon the additional funding to gymnasia.

Vocational schools in Latvia are largely dependent on the finances provided through the European Regional Development Fund (ERDF), the European Structural Fund, and the European Social Fund (ESF). Latvia also participates in a range of EU-funded projects designed to enhance vocational education. The Department of Structural Funds and International Financial Instruments of MoES has the key task of ensuring that these funds are used as efficiently as possible while SEDA manages the funds related to education. Latvia received EUR 54 million from the ESF to increase the attractiveness of vocational education and EUR 129 million from the ERDF to establish the first 11 of its planned network of 18 Vocational Education Competence Centres (VECCs; see below).

A clear challenge for the financing of vocational education is its sustainability once investment from EU funds falls way. This is also an issue for other EU countries, to varying degrees, but Latvia seems particularly dependent on this source of funding to drive forward its plans to improve both the status and quality of its vocational education system.

Vocational schools can generate additional resources (in the form of funds or equipment) by carrying out projects or commissions for local employers. Some 20% of the budget of the Riga Technical School, for example, comes from commercial activity and a further 10% from fee-paying short courses. Some employers also support schools by giving or loaning them equipment such as wood turning machines for carpentry classes.

No national data are available on employer and individual contributions to the financing of continuing vocational education, but international comparative studies find that the Latvian tax system does not encourage employers to invest in training (Cedefop, 2015). Nevertheless, MoES data collected in 2012 show that municipalities invested approximately EUR 2.25 million in non-formal education of 63 000 adults. The level and type of investment varied across the country with some local governments employing a range of strategies to support adults.

Another challenge for some vocational schools is that some municipalities have discouraged students leaving basic education from entering vocational education by impugning the reputation of vocational schools and offering benefits, including financial support, if students continue their studies in general education (IMF, 2013). There are reports that in some areas financial incentives have been offered to young people to remain in local government-controlled schools (IMF, 2013). The incentive for municipalities to act in this way stems from the current funding model. Unlike most vocational schools, general upper secondary schools are mostly owned by municipalities.

Organisation and size of the upper secondary school network

Education is held in high regard in Latvia with 94% of 15-19 year-olds entering the upper secondary phase in 2012, compared to the OECD average of 83% (OECD, 2014a). The level of upper secondary attainment is among the highest across OECD and partner countries and, as Figure 4.2 shows, upper secondary attainment rates are high for both younger and older generations in Latvia.

In terms of the organisation of upper secondary education, Latvia has largely followed the segregated or "divided" model found in many European countries like Denmark, Finland and the Netherlands with separate institutions for general and vocational pathways (Sahlberg, 2007).

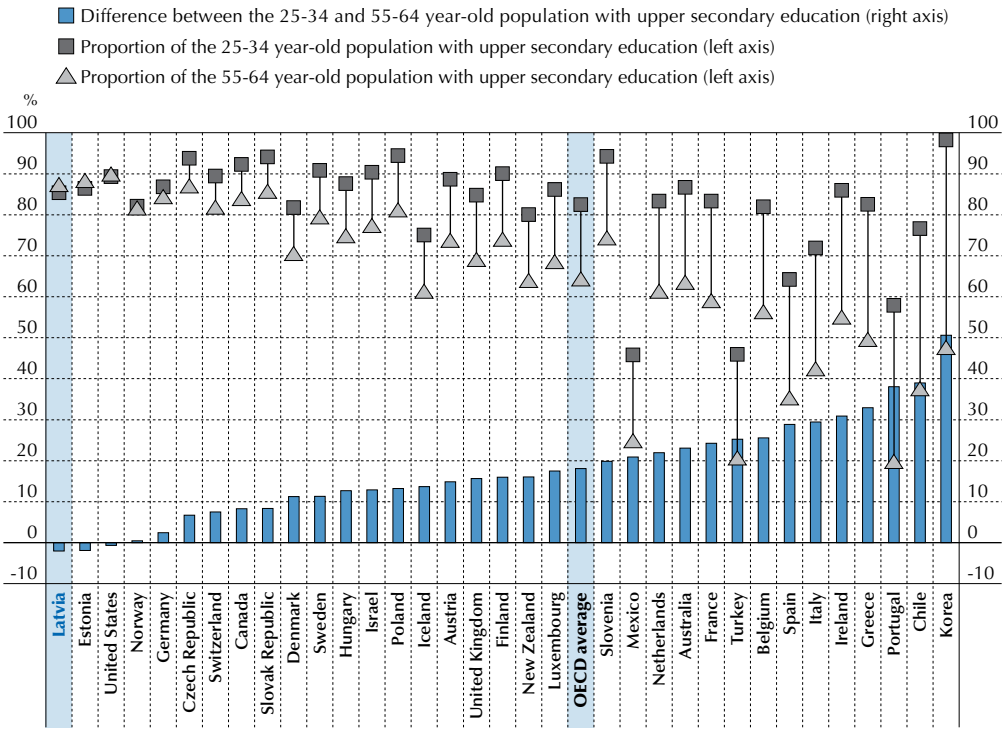
General upper secondary education

General upper secondary education lasts three years (Grades 10-12) and takes place in secondary schools (*vidusskola*), gymnasia *(gimnazija)* and evening schools *(vakarskola*). Secondary schools usually also provide lower secondary education programmes, i.e. the last grades of basic education (Grades 7 to 9), or the whole general education programme (Grades 1 to 12). This is partly driven by the small and decreasing student population, but it is believed such schools have a positive impact on children's aspirations and may facilitate the transition from one level to the next. Four secondary schools provide distance learning for students in remote areas and also for adults and new immigrants to the country.

In 2013/14 enrolments at general upper secondary level stood at 38 632 (Table 4.1), of which 28% were 20-29 year-olds and 4% 30-39 year-olds attending evening schools. The data show a slightly higher percentage of female students (53%) which is in line with the OECD pattern of higher levels of female participation in upper secondary education. The total includes some students who had completed vocational training (Central Statistical Bureau of Latvia, 2015).

Figure 4.2. **Percentage of younger and older upper secondary-educated adults (2012)**

25-34 and 55-64 year-olds, and percentage-point difference between these two groups



Countries are ranked in ascending order of the percentage-point difference between the 25-34 and 55-64 year-old population with upper secondary education.

Source: OECD (2014a), *Education at a Glance 2014: OECD Indicators*, OECD Publishing, Paris, http://dx.doi.org/10.1787/eag-2014-en.

As a result of Latvia's demographic decline and the resulting government policy to consolidate the network of schools discussed in Chapter 3, the number of upper secondary general schools has been reduced from 378 in 2005/06 to 358 in 2013/14. This reduction in schools is less than might have been expected considering the decline in student numbers of almost 30% over the same period. The number of evening schools has reduced from 34 to 25 during the same period, with enrolments falling by almost 23% for Grades 10-12.

Table 4.1. **Number of schools and students in upper secondary general and vocational education (2013/14)**

	Number of schools	Teachers	Students		
			Total	Males	Females
General upper secondary education (full-time schools)	358	4 609	30 375	13 830	16 545
General upper secondary education (evening schools)	25	548	9 608	4 926	4 682
Vocational upper secondary education	66	4 061*	26 464	15 901	10 563

Note: Students in special schools are not included.

* This number includes those teachers working also at the basic vocational education level.

Sources: Central Statistical Bureau of Latvia (2015a), *Statistical Yearbook of Latvia 2014*, Central Statistical Bureau of Latvia, Riga, www.csb.gov.lv/sites/default/files/nr_01_latvijas_statistikas_gadagramata_2014_statistical_yearbook_of_latvia_14_00_lv_en_0.pdf; Central Statistical Bureau of Latvia (2015b), "IZG08. General full-time schools (at the beginning of the school year)", *Statistics Database,* Central Statistical Bureau of Latvia, http://data.csb.gov.lv/pxweb/en/Sociala/Sociala__ikgad__izgl/IZ0080.px/?rxid=a79839fe-11ba-4ecd-8cc3-4035692c5fc8 (accessed 1 August 2015); Central Statistical Bureau of Latvia (2015c), "IZG13. Enrolment in general evening schools by grades (at the beginning of the school year)", *Statistics Database,* Central Statistical Bureau of Latvia, http://data.csb.gov.lv/pxweb/en/Sociala/Sociala__ikgad__izgl/IZ0130.px/?rxid=a79839fe-11ba-4ecd-8cc3-4035692c5fc8 (accessed 1 August 2015).

Vocational education

Latvia's system of vocational education is predominantly school based and state controlled. Vocational education is organised in three levels:

- vocational basic education (lower secondary)
- vocational secondary education (upper secondary)
- professional tertiary education, which can be divided into first-level professional tertiary (college) education and second-level professional tertiary (university) education (see Chapter 5).

Vocational education at lower secondary level, i.e. "vocational basic education", is implemented via vocational basic education programmes. Programmes are mostly provided by basic vocational education schools (*profesionālā pamatskolavidusskola*). Young people of at least 15 years old

can enrol in such programmes (ISCED-P 254) regardless of their previous education. They lead to a certificate of vocational basic education that allows progression to secondary level education and professional qualification at European Qualifications Framework (EQF) level 2 (such as cook's assistant).

Early leavers without basic skills are offered special vocational programmes (*profesionālā izglītības programma ar pedagoģisko korekciju*) for better integration into the education process. These programmes are mainly designed for students with intellectual impairment and dropouts from basic general education (MoES, 2015; Cedefop, 2015).

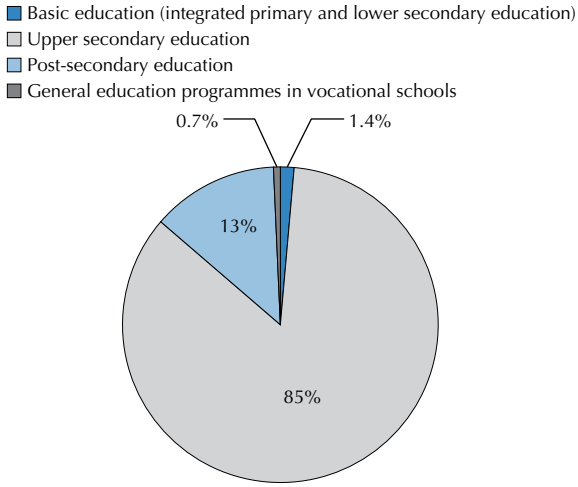
At the upper secondary vocational level (known as "vocational secondary education" in the Vocational Education Law) there are three types of programmes:

- Two- to three-year programmes leading to a certificate of vocational education and a professional qualification (EQF level 3) in a named occupation, but not granting access to tertiary education.
- Four-year programmes leading to a diploma of vocational education which grants access to tertiary education and a professional qualification (EQF level 4) in a named occupation.
- Post-secondary education programmes (which, despite their name, belong to the upper secondary level) primarily for 17-29 year-olds with or without a completed secondary education to help them acquire vocational skills. These programmes (generally 1-2 years) are mainly focused on the acquisition of professional skills. In 2014/15, 1-1.5 year vocational education programmes have been offered to 15-29 year-old students with basic or secondary education in the "Youth Guarantee initiative" using ESF support (MoES, 2015; Cedefop, 2015, see below).

Figure 4.3 shows that the vast majority of vocational education is provided at the upper secondary level (85%). It also shows that very few general education programmes are provided in vocational schools, evidence of the strict divide between general upper secondary and vocational education in Latvia.

Vocational students made up 39% of all upper secondary students in 2012/13 (see Table 4.1). This is lower than the OECD and EU average shares of 44% and 50% respectively (OECD, 2014a). Out of the 26 464 students in upper secondary vocational programmes in 2013/14, 60% were male but the gender balance is reversed for post-secondary non-tertiary provision. There are 6 colleges providing such programmes, with 3 945 students, 61% female (Central Statistical Bureau of Latvia, 2015a).

Figure 4.3. **Distribution of vocational education students, by type of programme (2013/14)**



Source: Cedefop (2015), *Vocational Education and Training in Latvia*, Publications Office of the European Union, Luxembourg, www.cedefop.europa.eu/en/publications-and-resources/publications/4134.

Reorganisation of the vocational school network

As Chapter 3 covered, Latvia's demographic challenge and the continued tight fiscal climate are driving the restructuring of the school network, including vocational schools. In 2010, the Cabinet of Ministers approved the Guidelines for the Optimisation of the Network of Vocational Education Institutions 2010-2015 that endorsed the reduction of the number of vocational education schools that MoES is responsible for from 59 in 2009/10 to 30 by 2015.

The reorganisation of the vocational school network is based on three principles: 1) accessibility – ensuring equal opportunities for the acquisition of vocational education; 2) co-operation – involving all stakeholders; and 3) resource efficiency – rational and purposeful use of the available funds (Cabinet of Ministers, 2010).

An important innovation coming out of the reorganisation has been the creation of the Vocational Education Competence Centres (VECCs). Since 2010 large vocational schools with more than 500 students have been gradually transformed into VECCs. These are to act as regional hubs for developing closer relationships with employers, provide high-quality vocational education for students (youth and adults), and develop pedagogical

support for other vocational schools, and, potentially, accreditation powers, including the recognition of prior learning for adults.

Schools have to meet specific requirements to obtain VECC status. These include the number of education programmes implemented, number of students, students' academic success, career management and co-operation with employers. The VECCs have to perform the functions of a regional or sectoral methodological centre, offer continuing education and teacher education, and assess professional competences acquired outside the formal education system. Once VECC status is achieved, schools get a 10% additional payment for personnel. By August 2015 a total of 14 vocational schools and 1 tertiary education institution had received VECC status.

Small vocational schools with fewer than 300 students are being combined with small general education schools and reassigned to the municipalities (MoES, 2015; Cedefop, 2015). This is expected to generate efficiency savings, as the municipalities can provide vocational and general education under one roof. Four vocational schools have come under the responsibility of municipalities between 2010 and 2014. During the same period 13 small vocational schools were merged with the VECCs.

The consolidation of the vocational school network is in its final stages and is expected to stabilise in the coming years, allowing reform efforts to focus on the improvement of curricula and teaching where further work (European Commission, 2015). There are no indications that, so far, the reorganisation of the school network has affected young people's access to vocational or upper secondary general education.

Content and structure of education programmes

Latvia maintains a bilingual education model with instruction available in seven minority languages: Russian, Polish, Hebrew, Belarusian, Ukrainian, Estonian and Lithuanian. At least 60% of all subjects must be taught in Latvian at the upper secondary level, whether general or vocational, although every school can decide which subjects are taught in Latvian.

General upper secondary

The content of general upper secondary education is determined by MoES. Since Latvia gained independence in 1991, there has been a process of educational reform that has introduced subject standards to codify the secondary curriculum and specify subject aims, content and assessment.

In 2008, the National Standard of General Secondary Education and the Subject Standards of General Secondary Education were introduced. They stipulate the length of the school year (35 weeks in Grades 10 and 11 and 38 weeks in Grade 12), the number of lessons (not more than 36 per week) and the length of lessons (40-45 minutes).

They also instigated a major change by organising programmes of study into four fields (or "directions"):

- general education
- humanities and social sciences
- mathematics, natural sciences and technology
- programmes with a vocational/professional orientation (e.g. arts, music, commercial science, sports).

This reorganisation addressed concerns that students were given too much choice over the subjects they could study. Previously, only 5 subjects (out of 12) were mandatory, with students choosing a further 7 from a wide range of options. This was seen as problematic for two related reasons:

1. too few students choosing to study sciences; and
2. as a result, students were limited as to what they could go on to study at university (Kangro and James, 2008).

Nowadays, all students take eight mandatory subjects and each field of study requires between three and six additional mandatory subjects (Table 4.2). Schools can also offer further optional subjects, taking up 10-15% of the study time or offer additional in-depth programmes covering one of the mandatory subjects.

All students can also take two further optional subjects: basic computer programming (105 hours) and graphic art (70 hours). The total number of study hours is reduced for evening and extramural students. The curriculum places a strong emphasis on creating a Latvian identity whilst at the same time enabling students from different ethnic backgrounds to preserve their ethnic identities.

Several people that we interviewed – at various levels of the system – expressed their concern that the upper secondary curriculum and teaching methods have not kept pace with the changing times. Several noted that the curriculum had become too subject-heavy, even "saturated". A reform of the upper secondary curriculum that is to promote a competency-based approach is scheduled for the period 2018-20.

Table 4.2. **Curriculum subjects and number of hours for general upper secondary education (full-time)**

Subjects	Education programmes			
	General education	Humanities and social sciences	Mathematics, natural sciences and technology	Vocational/ professional oriented programme
Compulsory subjects *				
Latvian language	210	210	210	210
Minority language and literature	420	420	420	420
First foreign language	315	315	315	315
Second foreign language	315	315	315	315
Third foreign language		315		
Mathematics	420	420	420	420
Informatics	105	105	105	105
Sport	315	315	315	315
Physics	315		315	
Chemistry	210		210	
Biology	210		210	
Natural sciences		315		315
Latvian and world history	210	210	210	210
Literature	210	210	210	210
Music	70	70	70	70
Visual arts	70	70	70	70
Vocational subjects				280
Compulsory optional subjects *				
Economics	105	105	105	105
Ethics	70	70	70	70
Philosophy	105	105	105	105
Geography	105	105	105	105
Cultural science	105	105	105	105
Household	70	70	70	70
Politics and judicial science	70	70	70	70
Psychology	70	70	70	70
Health studies	35	35	35	35
Optional subjects				
Basic programming	105	105	105	105
Technical graphics	70	70	70	70
Total lesson load	**3 360-3 780**			

Note: * Subject to state general secondary education standard set.

Source: Cabinet of Ministers (2013), *Noteikumi par valsts vispārējās vidējās izglītības standartu, mācību priekšmetu standartiem un izglītības programmu paraugiem* [Regulations Regarding the State General Secondary Education Standard, Subject Standards and Sample Education Programmes], Regulation No. 281, Cabinet of Ministers, Republic of Latvia, Riga, http://likumi.lv/doc.php?id=257229.

Content of vocational education – an area of reform

As with general upper secondary education, the content of vocational education is determined by MoES in co-operation with other ministries. Vocational provision is planned on the basis of data from the Ministry of Economics, which conducts medium and long-term forecasts of labour market skills. The Ministry of Welfare's agency, the State Employment Agency (*Nodarbinātības valsts aģentūrā*), also conducts short-term reviews of the balance between demand and supply in the labour market to inform the design of education and training programmes for the unemployed.

Since 2011 the Sector Expert Councils (SECs) have also been involved in this process to give sector stakeholders a say in developing vocational education content, in an effort to strengthening its quality and relevance. These newly established bodies comprise employer representatives (from industrial associations), central government representatives (from MoES and other ministries), and employee representatives (from the Free Trade Union Confederation in Latvia), based on a social partnership model. The SECs are to play a central role in the development of the new modularised vocational education programmes (see below). Working groups comprising teachers and industry specialists and the SECs will be responsible for evaluating how relevant the new programmes are to labour market needs.

Vocational upper secondary education is organised in eight fields of study:

- general education
- humanities and art
- social sciences, business and law
- physical sciences, mathematics and information technology (IT)
- engineering and manufacturing
- agriculture
- health and welfare
- services (e.g. hospitality, beauty therapy, environmental protection, transport, civil and military defence).

Students can switch to a different vocational field if they are assessed as being capable of meeting the requirements. All students have to study Latvian language and literature, foreign languages, mathematics, applied informatics, history, business, and sport.

The Regulations Regarding the State Vocational Secondary Education Standard and the State Vocational Education Standard state that the

theoretical part of vocational upper secondary programmes should consist of 60% general subjects and 40% vocational subjects. Among the general subjects 45% of lesson hours are spent on language and communication studies, 33% on mathematics, natural sciences and technical sciences and 22% social sciences and cultural studies (Cabinet of Ministers, 2000).

The development of practical skills is a key part of the vocational education curriculum. The content of each programme is divided between theory (general and vocational subjects) and practice (practical training). A minimum of 50% of any vocational programme must take the form of practical training. This can be done both in the vocational school and through a work placement, though there is no specification of how much time is to be spent in either site.

Post-secondary non-tertiary vocational education – which in Latvia is considered part of upper secondary vocational education – is organised in the same way as vocational upper secondary education, but with a greater emphasis on practice: the balance between theory and practice is 40-60. Students spend 65% of their time training in workplaces.

Providing all students with work placements has traditionally been a challenge for Latvia. Work-based learning and apprenticeships have been underdeveloped, partly due to the traditional "school-centeredness" of vocational education. Where they exist, they depend heavily on the voluntary involvement of the small and medium-sized enterprises (SMEs) and micro-enterprises that characterise much of the Latvian economy.

Since 2013, Latvia has been piloting work-based learning elements to provide a closer link between learning theory and practical work. In December 2012, Latvia, along with Greece, Italy, Portugal, the Slovak Republic and Spain, signed a memorandum of understanding with the German Federal Ministry of Education and Research on co-operation in vocational education and training in Europe. In the academic year 2013/14 a total of 148 students and 29 companies were involved in the pilot project implemented by 6 vocational schools. The following year the pilot was expanded to include 12 to 15 vocational schools (to a varying degree), around 500 students and 200 companies (European Commission, 2015; MoES, 2015).

Latvia is aiming to introduce work-based learning system wide. To this end amendments to the Vocational Education Act have been adopted in 2015, and at the time of writing, work is being carried out to develop specific work-based learning regulations by the Cabinet of Ministers. Though undoubtedly a positive development, this pilot initiative is still separate from the existing apprenticeship provision organised by the Chamber of Crafts.

This pilot is part of a larger reform of vocational education in Latvia that aims to:

- promote vocational education quality
- ensure its relevance to the labour market
- ensure efficient use of resources to raise attractiveness of vocational education (MoES, 2015).

These reforms have included the establishment of the SECs, reorganisation of the vocational school network and the establishment of the VECCs. In addition Latvia is in the process of modularising its vocational programmes, establishing professional standards and aligning its level descriptors with the EQF; these efforts are led by the National Centre for Education (VISC). These are without doubt positive developments that respond to the concerns about the quality and relevance of vocational education of Latvia for its economy and society at large.

A recent European Commission report (2015) concluded much more work is needed to update the curricula and professional standards, however. Work is progressing slower than planned. The evidence from our review visit also suggests that some SECs are less well established than others, limiting their potential to contribute to improving the quality and relevance of vocational education in Latvia.

Assessment of student learning

Since the mid-1990s, Latvia has been moving steadily towards the central marking of final (summative) examinations at the end of the upper secondary phase. Regulations introduced in 2004 have intensified the shift away from school-based assessment (Bethell and Kaufmane, 2005). Schools can also organise entrance examinations for subjects that have not been included in a student's certificate of basic education.

In general upper secondary education, teachers evaluate student attainment at the end of each semester using a range of methods including written, oral and integrated tests; evaluation of individual and group work; project-based assessment; and written examinations. As at the basic education level, they use a 10-point scale ranging from 1 (fail) to 10 (outstanding). Students are issued with a report card showing their results. Progression from one grade to the next is automatic, while students who have underachieved are given extra tasks to bring them up to the required standard. Students only repeat a year if they have had a significant period of absence from school.

At the end of upper secondary education, students take central examinations and are graded using a percentage-based point scale. To qualify for the Diploma in General Secondary Education and a Statement of

Records, students have to complete their studies in a minimum of 12 subjects and pass centrally marked compulsory examinations in 4: Latvian language, mathematics, a foreign language of the student's choice, and an elective subject (chosen from Latvian and world history, chemistry, biology, and physics). If a student has not acquired grading in any of the subjects or state examinations, they are issued with a school report.

The data show that relatively few students take the central examinations in chemistry and physics: 7.9% and 5.1% respectively in 2015 (VISC, 2015). The Education Development Guidelines 2014-2020 highlighted students' lack of interest in science and the resulting risk of imbalances in the labour market. In this context, Latvia in 2015/16 is implementing a pilot project on physics, chemistry or natural science in 50 schools (about 800 students). The introduction of the fifth mandatory subject in the centralised examination will be considered after the pilot exam results evaluation.

Assessment in upper secondary vocational education follows a similar pattern with the use of the 10-point grading scale and a pass/fail grade for practical tests. To reach the standard for certification, vocational students have to score a minimum of grade 4 (almost satisfactory) in all subjects, including practical tests and a minimum of grade 5 (satisfactory) in the final qualification examinations. As well as their vocational subjects, they are examined in the Latvian language and literature, a foreign language, mathematics, and a subject chosen by the student.

As described above, the qualification received by students who have passed the final exams depends on the programme studied. The shorter (two to three-year) programmes at the lower grades of upper secondary vocational education lead to a certificate of vocational education and professional qualification at EQF level 4 but do not provide access to tertiary education. For this, students must complete a further one-year intermediate general secondary education "bridge programme" (Cedefop, 2015; Nuffic, 2014). This programme leads to a vocational secondary education diploma and a general secondary education certificate and is designed for those students who successfully completed a three-year second level vocational education programme ("Code 32" programmes; *arodizglītības programma pēc 9 klases*). In 2013/14, out of the 3 323 students who had completed such a programme the year before, 206 (15.3%) continued on to this one-year bridge programme.

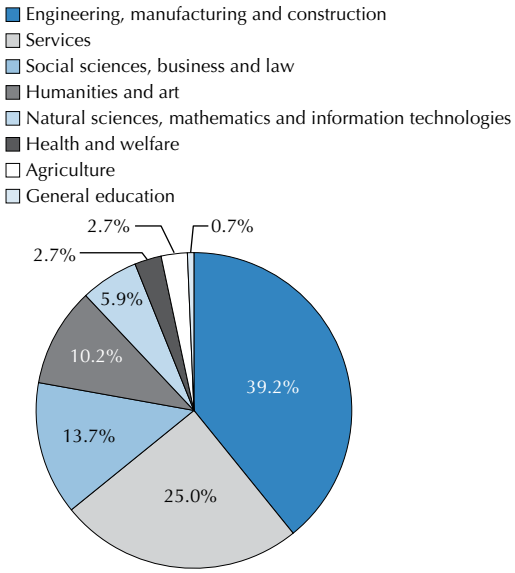
Such dual or hybrid qualifications are clearly valuable as they enable students to keep their options open. They reflect a trend in some European countries, discussed below, to develop double qualifications which are accepted for entry to both the labour market and tertiary education (Deissinger et al., 2013).

Graduation and completion

As of 2012, Latvia's upper secondary graduation rate of 90% is higher than many OECD countries (the OECD average is 84%). The average age of a first-time graduate from general programmes is similar to the OECD average at 19 years. Students in vocational programmes are on average 20 when they graduate, which is considerably lower than in many OECD countries where the average is 22 (OECD, 2014a).

The combined field of engineering, manufacturing and construction accounts for the highest enrolments in vocational upper secondary education (39.2%) (Figure 4.4). This is followed by services (25%) and social sciences, business and law (13.7%). The percentage of graduates in science, technology, engineering and mathematics (STEM) subjects from upper secondary vocational education was 38.9% in 2012, above the EU average of 29.2% (Cedefop, 2015). According to the Latvian government, however, too few students continue their tertiary studies in STEM-related fields of study. It intends to raise the proportion of tertiary graduates in STEM fields from 19% in 2012 to 27% in 2020 (MoES, 2014).

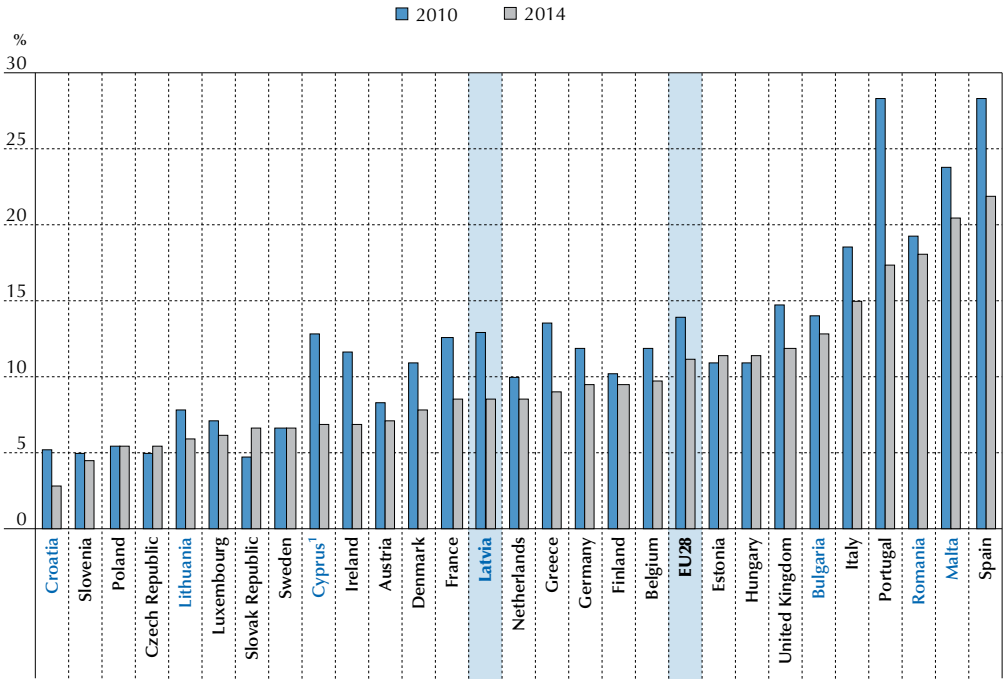
Figure 4.4. **Enrolment in vocational schools, by field of education (2013)**



Source: Central Statistical Bureau of Latvia (2015a), *Statistical Yearbook of Latvia 2014*, Central Statistical Bureau of Latvia, Riga, www.csb.gov.lv/sites/default/files/nr_01_latvijas_statistikas_gadagramata_2014_statistical_yearbook_of_latvia_14_00_lv_en_0.pdf.

Figure 4.5 shows that, like several other EU countries, Latvia has made good progress in reducing the percentage of early school leavers, i.e. the proportion of 18-24 year-olds who left school before completing upper secondary education and have not participated in further education or training.

Figure 4.5. **Early leavers from education and training, 18-24 year-olds**



Notes: Non-OECD countries are shown in blue.

1. Note by Turkey: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".

Note by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

Countries are ranked in ascending order of the 2014 percentage of early leavers from education and training.

Source: Eurostat (2015d), "Early leavers from education and training by sex and labour status", *Eurostat database*, Eurostat, http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=edat_lfse_14&lang=en (accessed 15 July 2015).

With 8.5% early school leavers in 2014 – down from 12.9% in 2010 – Latvia has already achieved the Europe 2020 strategy target of reducing the share to below 10% by 2020 (European Commission/EACEA/Eurydice, 2013). However this national average hides considerable differences within Latvia; early school-leaving rates are still about twice as high in rural areas as they are in urban areas and male students are considerably more likely to leave school early than female students.

There seems to be a conundrum here, however, for despite its high completion rates in upper secondary education, the Programme for International Student Assessment (PISA) 2009 found only 25% of 15-year-old students in Latvia said they expected to complete a university degree (OECD, 2012a). Although this figure is some years old, it suggests that young people in Latvia may have lower educational aspirations than would be expected from their levels of educational attainment.

Gender segregation

A challenge for all vocational education systems is the mitigation of gender segregation. The situation in Latvia reflects the international tendency for male students to cluster in engineering and construction-related areas, whilst females are clustered in health care and personal services. In 2012, 67% of Latvian male graduates from upper secondary vocational education were from engineering, manufacturing and construction programmes, compared with only 9% of female graduates (MoES, 2015).

By contrast, 34% of female graduates were from services programmes and 34% from social sciences, business and law, whereas the proportions of male graduates from these fields were small (12% and 6% respectively). On average across OECD countries, the gender balance was relatively more even, with 48% of male graduates from engineering, manufacturing and construction programmes and 24% of female graduates from social sciences, business and law programmes (OECD, 2014a).

Teachers and school leaders

The teaching workforce in both general and vocational upper secondary education reflects the profile of the education workforce as a whole: predominantly female and ageing. In 2013/14, just over one-fifth of the teaching workforce (7 938 out of 41 034) taught in the upper secondary part of the education system, with 4 609 teachers in general upper secondary education and 3 329 teachers in vocational education. A further 693 teachers were teaching in evening school classes.

Latvia has very low proportions of young teachers working at the upper secondary level. Only 6.7% of upper secondary teachers were under the age of 30 in 2012 (Eurostat, 2014), compared to the OECD and EU21 averages of 9% and 8% respectively (OECD, 2014a). On the other hand, Latvia is faced with a considerable cohort of teachers above the age of 50. Over 44% of upper secondary teachers were 50 or older; 13% were 60 or older (Eurostat, 2014b).

Latvia's share of male teachers is also very low. In 2012 just 19.2% of teachers in upper secondary education were male, which is the lowest share among EU countries with available data (Central Statistical Bureau of Latvia, 2015a; Eurostat, 2014b).

As discussed in previous chapters, Latvia pays its teachers less than many other OECD and European countries, and education is not generally regarded as a high status or attractive profession. Improving the image of teaching for both women and men would permit a more positive and balanced view of the profession (Kelleher, 2011). We believe that making teaching an attractive career option – for both men and women – will require basic salaries to increase in real terms (OECD, 2014c). One positive development is that MoES has recently taken measures to improve the situation, including the piloting of a new remuneration system (see Chapter 1).

In October 2014, the government adopted the Regulations on Necessary Teacher Education and Professional Qualifications, and Procedure for the Improvement of Professional Competences which determine education requirements and education acquisition procedures for vocational education teachers. Teachers without pedagogical qualifications must now have completed a 72-hour pedagogical course in a higher education institution. In addition, they must have either:

- tertiary education in a sector
- vocational upper secondary education or master of crafts-level qualification.

The requirement for a pedagogical course does not apply to those supervising practical work whose teaching load is less than 240 hours per year. Most vocational education teachers already have a tertiary degree; 92% in 2013/14 (Cedefop, 2015; MoES, 2015).

Teachers of general subjects (in general upper secondary and vocational schools) must have either:

- Tertiary education in pedagogy/education (bachelor's/master's degree or second level higher professional education) and a teacher's qualification in a particular subject.

- Tertiary education in the relevant subject (bachelor's/master's degree or second level higher professional education) and a teacher's qualification in particular subject (or studied in a teacher's education programme) or a pedagogical course/programme of at least 72 hours in a higher education institution.

As with vocational teachers, most teachers of general subject have a tertiary degree. The regulations determine all teachers should have tertiary education or must be in the process of obtaining one.

Continuing professional development (CPD) amounting to at least 36 hours over a 3-year period is now compulsory for all teachers, whether teaching general or vocational subjects. CPD must be agreed with the head of the school. The key vehicles for formal CPD in general upper secondary education are the A and B programmes provided by universities and other providers (see Chapter 3). Teachers can also participate in events organised by the "professional subject associations". However, as discussed in Chapter 3, it is not clear how active these associations are throughout Latvia or the extent to which they actually contribute to improving the quality of teaching and learning.

Throughout the years EU-funded programmes have played an important role in the CPD of teachers in Latvia, particularly in vocational schools. For example, EU funding gave 292 vocational teachers and apprenticeship supervisors in companies the opportunity to improve their knowledge and skills in 2014 (European Commission, 2015). Given the intensity of the reform process, further investments in the continuous professional development are likely to be needed. Teachers will need opportunities to reflect on their practice and to share their ideas both within and across schools.

Their expertise also needs to be made more visible at a regional and national level. In general little is known about the professional development and further professional development needs of upper secondary teachers at the central level. This is particularly the case for those teaching in general education schools who are less the focus of national reform efforts.

As discussed in Chapters 2 and 3 it is not clear how well teachers' initial education programmes are aligned with CPD programmes and processes today. During the first decade of independence, Latvia concentrated on the professional development of in-service teachers in order to support them in developing more innovative pedagogical approaches. There was no corresponding review of pre-service teacher education leading to concerns that even newly qualified teachers have been trained in a more conservative pedagogical tradition (Silova et al., 2010).

School leaders

A key person in any school is the school leader. In Latvia it is common for a single school leader to oversee Latvia's "general education" schools that combine both basic and upper secondary education (Grades 1 to 12). In both general education and vocational schools, school leaders are supported by deputy school leaders (MoES, 2015).

School leaders are usually teachers who were promoted to (deputy) principals upon passing a local competition. At the upper secondary level they are allowed to combine their leadership responsibilities with up to nine hours a week of teaching or other school activities although very few do.

Recruitment of school leaders depends highly on their teaching qualifications and experience, with leadership or managerial qualifications and experience only a secondary or even tertiary priority. There are professional development and support programmes in place for school leaders. There are no formal national regulations on school leader recruitment (ETUCE, 2012).

Participation in lifelong learning

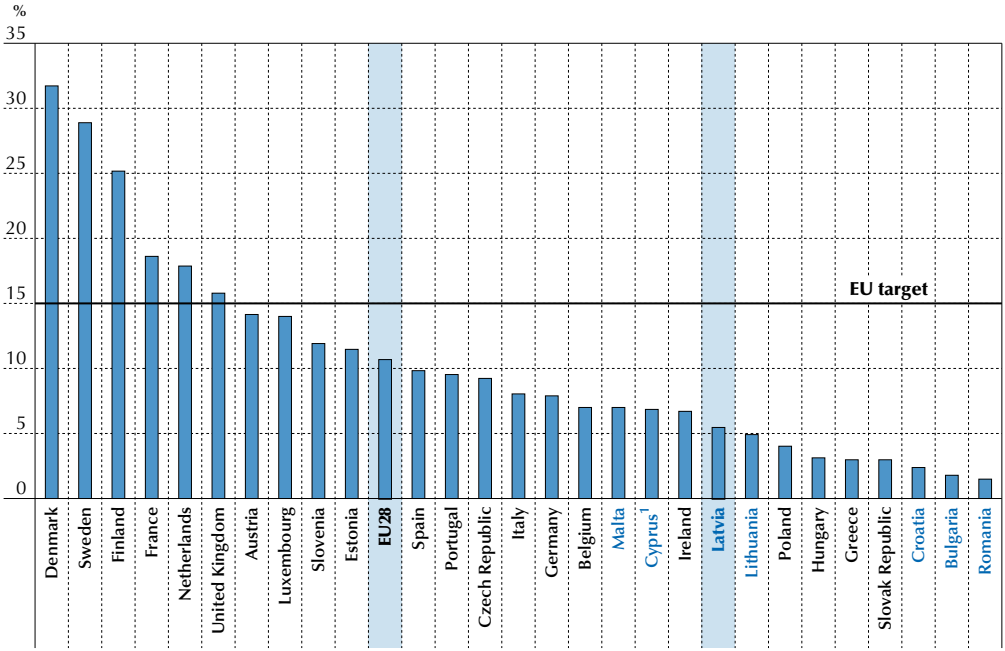
In Latvia there are a range of formal and non-formal education programmes and courses available for the working-age population. Within the formal educational system, adult education extends over general education (basic and secondary), vocational education, post-secondary education (further vocational training) and higher education (EAEA, 2011). Programmes can lead to a professional qualification when the study load is at least 480 study hours and 30% or more of the content is based on professional standards. Shorter programmes (of at least 160 hours) are also available but these do not lead to a qualification (MoES, 2015).

There are also a wide range of non-formal adult education opportunities, provided by national and local government and private education institutions. Since 2011, more value has been placed on informal learning acquired through working and personal life through the validation of professional competences acquired outside formal education. Accredited education providers and examination centres with a permit provided by the SEQS are permitted to carry out the validation process (EAEA, 2011; MoES, 2015).

A recent OECD report concluded that adult or lifelong learning in Latvia is underdeveloped while many of the working-age population are

missing the skills to become more productive (OECD, 2015a). Participation rates in both formal and non-formal forms of education and training among the working age population are low, compared with international standards (Figure 4.6). In 2014, a mere 5.5% of 25-64 year-olds participated in either formal or non-formal education and training. This was considerably below the EU average of 10.7% and the EU 2020 target of 15% (Eurostat, 2015a; MoES, 2015).

Figure 4.6. **Participation of adults (25-64 year-olds) in formal and non-formal learning (2014)**



Notes: The reference period is the four weeks preceding the interview. Non-OECD countries are shown in blue.

1. See note 1 on page 192.

Countries are ranked in descending order of participation rate.

Source: Eurostat (2015a), "Lifelong learning - Percentage of adult population aged 25-64 participating in education and training", *Eurostat database*, Eurostat, http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&plugin=1&pcode=tesem250&language=en (accessed 15 July 2015).

Key policy issues

Policy issue 1: Improving the quality and relevance of vocational education

Research evidence clearly shows that vocational education and training can play a central role in preparing young people for work, developing adult skills and responding to the labour-market needs of the economy. Despite this role, vocational education and training has been oddly neglected and marginalised in policy discussions, often overshadowed by the increasing emphasis on general academic education and the role of schools in preparing students for university education. It has also often been seen as low status by students and the general public (OECD, 2010) and this is also the case in Latvia.

In response, Latvia embarked on a comprehensive reform of vocational education in 2009 to make it more attractive and improve its quality and relevance to the labour market through the involvement of social partners. The 2009 concept paper Promotion of Interest in Vocational Education and Participation of Social Partners in Assuring the Quality of Vocational Education (Cabinet of Ministers, 2009) marked the start of this process.

The review team fully supports these reforms. The reorganisation of the school network and establishment of the VECCs is progressing well, but work on the reform of the curriculum has been progressing slowly. Some SECs are less well established, limiting their ability to contribute to the reform effort. Another challenge is the lack of data and information to monitor progress and identify innovations and good practices worthy of dissemination.

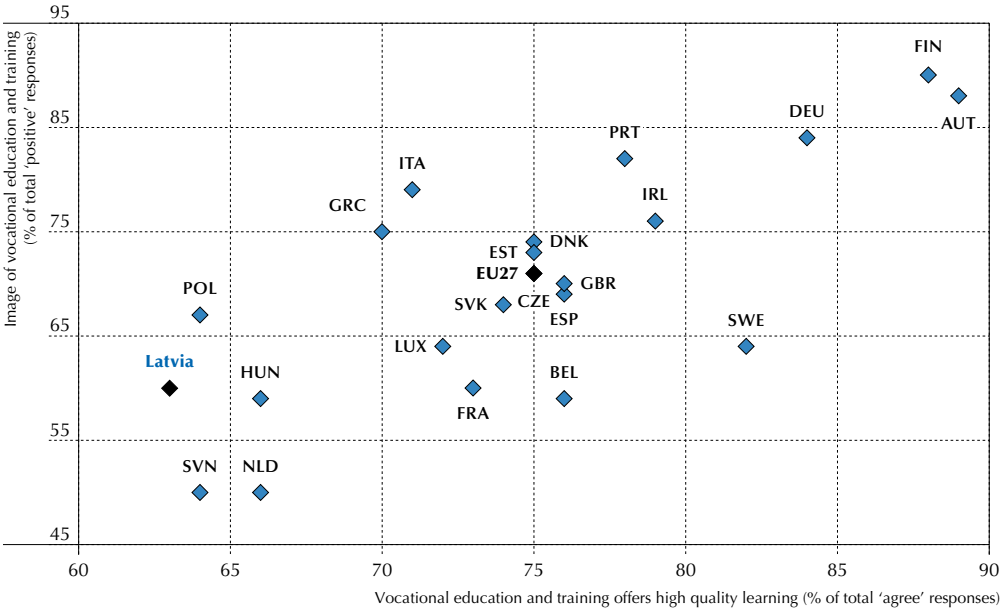
Lack of quality and attractiveness of vocational education – the imperative for reform

While in many OECD countries vocational qualifications offer young people a good chance of finding employment, they are sometimes seen as a second-class choice. In Latvia, vocational education has a similarly poor image, with students favouring a general upper secondary education over a vocational one. According to Eurobarometer (2011), the share of those who thought vocational education offers high-quality learning was among the lowest across EU countries (Figure 4.7).

This poor image of vocational education is not of recent origin but has plagued Latvia for decades. Back in 2001, the OECD review of Latvia's education system identified the lack of relevance of vocational education to the changing needs of the labour market (OECD, 2001). Many vocational school graduates lacked practical skills, either because they received no practical training or because what they received was of poor quality. The share of young people choosing to pursue vocational education over general upper secondary education consequently fell from 39% to 34% between 2002 and 2008

(Central Statistical Bureau of Latvia, 2015a). A key target of the ongoing vocational education reform is to equalise the share of students enrolled in vocational and general upper secondary education by 2020 (MoES, 2014).

Figure 4.7. **Perceived quality and image of vocational education and training**



Note: The following abbreviations are used in this figure: AUT (Austria), BEL (Belgium), CZE (the Czech Republic), DEU (Germany), DNK (Denmark), ESP (Spain), EST (Estonia), FIN (Finland), FRA (France), GBR (the United Kingdom), GRC (Greece), HUN (Hungary), IRL (Ireland), ITA (Italy), LUX (Luxembourg), NLD (the Netherlands), POL (Poland), PRT (Portugal), SVK (the Slovak Republic), SVN (Slovenia), SWE (Sweden).

Source: OECD (2015a) based on Eurobarometer (2011), "Attitudes towards vocational education and training", *Special Eurobarometer,* No. 369, European Commission, Brussels.

Involving employers and social partners to strengthen the quality and relevance of education

Ensuring that vocational education and training systems respond effectively to the needs of the labour market is a challenge faced by nearly all OECD countries (OECD, 2014b). Latvia's vocational education programmes need to be more closely aligned with demand. For example, Latvian government forecasts show a rising demand for highly qualified specialists in engineering, production (mainly electric and electronic engineering, metalworking, mechanical engineering and the food processing sectors), natural sciences, and information technologies. It also foresees that these sectors will face skill shortages (Cedefop, 2015).

Several OECD countries, like Austria, Finland, France, Germany and the Netherlands, have shown the usefulness of involving of social partners in designing the content and quality of education and training and supervision of the provision (OECD, 2014b; Box 4.1.). In these countries, social partners are often deeply involved in the design and delivery of education. There is frequent communication between educational institutions and labour-market actors, and, importantly, vocational education is responsive to the skills requirements of the labour market.

Latvia has also aimed to strengthen the connection between vocational education and the labour market in recent years through stronger engagement with social partners. As mentioned above, the 12 SECs were established in 2011 to strengthen sector stakeholders' involvement in vocational education content on a social partnership model.

Box 4.1. **Strong involvement of social partners in vocational education and training: Example from the Netherlands**

In the Netherlands 17 Centres of Expertise on vocational education, training and the labour market have been appointed by the Dutch Ministry of Education to perform legal tasks in the field of vocational education and training (VET):

- accreditation and assistance of work placement companies
- development and maintenance of the qualifications structure
- labour market research.

These centres of expertise are organised according to the different branches of industry and function as sector councils for VET. Although there are significant differences between the branches they represent, the centres are connected by their central role in the labour market. They support over 220 000 accredited work-placement firms responsible for the supply of over 500 000 training places for students at the senior secondary level.

Overall, the VET sector in the Netherlands is characterised by strong partnerships which include educational institutions and social partners. Either the institutions or the social partners can take the initiative to introduce new occupations or qualifications or renew existing qualifications, in dialogue with other parties. The importance attached to stakeholder input in the quality assurance system is demonstrated by the fact that one of the indicators in the Inspection Framework is the opinion of stakeholders regarding the VET institution, and their involvement in the design of the Practical Vocational Training Protocol and the educational programmes.

Source: EQAVET (n.d.), "Introduction to the VET system in The Netherlands", European Quality Assurance in Vocational Education and Training website, www.eqavet.eu/gns/what-we-do/implementing-the-framework/netherlands.aspx.

This foundation of a social partnership model is a welcome development because of its potential to strengthen the quality and relevance of vocational education. The SECs are to play a very important role in the reform process

including the modularisation of vocational programmes, the development of qualification standards and the envisaged introduction of work-based learning. For example, the SECs are part of the working groups, also comprising teachers and industry specialists, responsible for evaluating the extent to which new programmes will meet labour market needs. The SECs could play a valuable intermediary role in helping to connect schools, colleges and universities with employers and employees to develop provision that matches developments in the labour market.

However, the review team have had to conclude that some SECs are clearly less well established than others, thereby limiting their potential to make a positive contribution to the quality and relevance of vocational education. Latvia is not unique in this; international evidence shows that overall the capacity and resources of similar partner organisations in other countries often vary from one economic sector to another. It depends on the interests and capacity of their leaders and staff. Shortcomings can be visible at national or regional level (ETF, 2013a) as they also are in Latvia.

To fully unleash the potential of the SECs to strengthen the quality and relevance of vocational education, they will need to be empowered and professionalised. An important step forward in this respect has been taken as the amendment of the Vocational Education Law (April 2015) which provided the legal framework for employers to participate in developing vocational education. With this amendment, the SECs can now also formally play a central role in the reform of vocational programmes. It will take time for some of them to reach their full potential but their active engagement and contributions will be essential, not only to the reform process, but also to develop the internal capacity of the SECs. Latvia should continue to monitor the capacity of the SECs and, where need be, take measures to further empower them.

Modularisation of vocational programmes and occupational standards

The content of vocational education is currently being restructured around a flexible modular approach. This is done as part of the ESF project, Development of a Sectoral Qualifications System and Improvement of the Efficiency and Quality of Vocational Education and Training, which started in 2011. With this development Latvia is following the trend in several other European countries to modularise vocational education programmes to enable them to adapt to changes in work technologies and organisation and to give students greater labour market flexibility (Pilz, 2012).

The modular approach is considered by some to be a “pump of innovation in education” (OECD, 2004). In Latvia, it is seen as a key driver to make vocational education more attractive and flexible, help reduce the numbers

of early leavers from education, and facilitate the recognition of skills gained outside the formal education system (MoES, 2014). The National Centre for Education (VISC) is leading the work on the modularisation of vocational education programmes, establishing professional standards and aligning level descriptors with the EQF. The approach will divide programmes into modules based on learning outcomes, including the use of relevant teaching/learning methods and indicators of achievement. Dialogue on alternative forms of assessing and evaluating learning outcomes in relation to the new modular approach has begun (Cedefop, 2015).

In 2013/14 a total of 56 modular vocational education programmes and the content of professional qualification exams for 30 professions were developed. The modules include sector-specific and general competences, and complementary specialisation modules help learners acquire specific competences within a sector. Modules for adult learners have been identified as well, thus supporting interaction between initial and continuing vocational education and training. Moreover in 2013/14, a total of 80 professional standards or basic requirements of specialisation qualifications, according to the needs of the economic sector concerned, had been elaborated or improved.

Progress in the development of modular programmes and occupational standards has been slower than planned, however. A recent progress report by the European Commission (2015) concluded that less than half of the profession standards, planned modular programmes and contents of the qualification exams have been updated and the reform is due to continue until 2023 (European Commission, 2015).

The need to strengthen work-based learning

Work-based learning plays an important role in ensuring that learning meets the needs of the labour market. The workplace provides a strong learning environment and facilitates recruitment, while trainees contribute to output. Work-based learning opportunities are also a direct expression of employer needs and can encompass a variety of arrangements including apprenticeships, informal learning on the job, work placements that form part of formal qualifications, and internships of various types (OECD, 2010, 2014b).

In Latvia, it is noticeable that policy documents refer to “vocational education” rather than to “vocational education and training”, the term more commonly used across Europe. This reflects the fact that vocational education is primarily conducted within schools, rather than through a combination of school-based and work-based learning. Only a fraction of young people combine work and study in Latvia (OECD, 2015b).

Latvia has recognised this issue and intends to introduce work-based learning into vocational education programmes as part of its wider reforms (MoES, 2015).

As mentioned earlier, a pilot project of work-based learning is currently under way to assess the feasibility of such model in the Latvian context. Among other things, the pilot includes the development of a flexible curriculum (according to occupational characteristics) and sharing responsibility for teaching (theory) and training (practical) between school and enterprises. Students split their time between the school and the workplace, both of which contribute to the development of occupational expertise and other "employability-related" attributes. This promising pilot initiative is to be expanded in 2015 but its coverage is expected to remain insufficient (European Commission, 2015). Another possible limitation of the pilot project at present is that it is separate from the existing apprenticeship provision organised by the Chamber of Crafts. This isolation from the existing provision is a missed opportunity to engage employers who take apprentices, and to learn from the existing expertise in work-based learning.

Currently the apprenticeship system falls outside the formal education system and its qualifications provide access to neither the regulated professions nor the formal education system. There are also no mechanisms in place for those who dropped out from an apprenticeship before completing it to continue their learning (Daija, Kinta and Ramiņa, 2014). Integrating the existing long-standing apprenticeship provision into Latvia's education system may help to increase the status and attractiveness of vocational education. It would also provide a valuable source of expertise in work-based learning, enable vocational schools to form partnerships with more employers in both the public and private sectors, and generally strengthen the relationship between education and the labour market.

In developing its work-based learning model Latvia should therefore ensure it draws from the expertise of the existing apprenticeship system and, as intended, incorporate the apprenticeships organised by the Chamber of Crafts into the formal education system.

Expanding work-based learning in Latvia will be a challenge given the large proportion of SMEs and micro-enterprises in the economy but all countries, including those with well-established dual-system models, have to make continuous efforts to sustain the involvement of employers across all sectors (see Fuller and Unwin, 2012 for international case studies). The work-based learning pilots provide an important opportunity to evaluate the level of willingness of Latvian employers to commit to a formal apprenticeship model and to what extent a more differentiated approach might be required, one that offers apprenticeship alongside full- and part-time vocational education programmes with mandatory work experience and internships.

Motivating companies, especially SMEs, to provide quality work-based learning placements remains a challenge (European Commission, 2015). A number of countries provide examples of how to support smaller enterprises to enable them to recruit and train apprentices. These include creating pools of apprentices through sector-based group training associations so they can be shared among employers, as is done in Australia, England (the United Kingdom), Norway and Switzerland.

Latvia lacks a proper legislative framework regulating the relationships between apprentices and employers (e.g. on pay and training requirements) and effective incentives for companies to provide apprenticeships or practical training placements (European Commission, 2015). The development and expansion of a quality work-based learning system may require a system of financial incentives to facilitate the provision of learning opportunities on the employers' side (OECD, 2015b). A positive development in this context is the ongoing discussion with the government on the support measures for employers who offer training placements; these include labour tax exemptions for employers who offer training placements.

Employers in Latvia also need to do their part. They need to take responsibility for and ownership of the new work-based learning model by offering training places and quality supervision, among other actions. Research shows they have much to gain from it, including a better image, a potential positive impact on recruitment and even higher productivity. Research evidence also shows that in many cases the financial benefits of apprenticeships outweigh the training cost (ETF, 2013b). A survey of employers in Belgium, for example, has shown that, despite initial net costs due to the low productivity of novice apprentices, by the end of the training period productive returns from apprentices outweigh training costs (De Rick, 2008). The SECs will have an important role in engaging with employers and expanding the pool of enterprises offering training places.

The need for good data and information to monitor progress

The scale of the reform in Latvia will require careful monitoring and evaluation in order to keep it on track, identify barriers to timely and efficient implementation, and identify innovative and successful practice that should be shared across the system. More research on the accessibility and effectiveness of vocational education is needed, for example on ways to reduce the number of students that drop out or are expelled from vocational schools due to underperformance or non-attendance. This places demands on the country's systems for data collection and analysis on vocational education and for more research on education, skills and the labour market in general. MoES has recognised this as an area for improvement. Measures

include the strengthening of its management information system, the policy-analysis capacity of public administration and higher education and research institutions, and co-operation among the research community in Latvia.

To support these efforts and the wider reform process in general Latvia should consider introducing a number of new data sets and research studies. Longitudinal data would allow the tracking of individual education and employment histories and thus the ability to analyse the links between vocational education and later labour market experience. In order to track progress, some countries attach a unique identifier to each person. This identifier is in turn attached to a range of administrative data sets, including education, labour market and tax records. For example, in the United Kingdom, educational institutions have to return data on the participation, achievement and progression of every young person through the use of an Individualised Learner Record system. While such unified data sets raise privacy concerns, they can be a very efficient way of organising relevant data.

Another suggestion is robust labour-market data that can be disaggregated at the local, regional and sectoral level to plan and update vocational education systems. International studies emphasise the importance of collecting such data (OECD, 2012b). In New Zealand, the Department of Labour has developed a system for supplying regular labour market reports disaggregated to regional level and accompanying analytical tools to facilitate further analysis (Froy and Giguère, 2010).

An employer skills survey that provides data on employers' demand for and investment in skills, such as the model used in the United Kingdom since 2011, can help monitor employers' behaviour and demand for labour. This serves the needs of the key stakeholders: the governments, employers, education and training providers, individuals, and their career guidance advisers. Through this survey the government of the United Kingdom has access to a regular source of information about the changing skill needs in the labour markets and the extent to which employers are investing in training and engaging with government-funded initiatives such as apprenticeships.

Employers in turn can use the data to see how they compare with other organisations in their sector in their provision of training and in terms of their skill gaps or shortages. They can also monitor the key challenges and opportunities for their sector. Individuals and career guidance advisers can identify sectors and occupations experiencing particular skill shortages and any changes in the type of skills required. Education and training providers can also use the results to help adapt their provision so that it better aligns with employer and sector-based demand, and to monitor shifts in the type of demand.

Policy issue 2: Stark divide between upper secondary general and vocational pathways

One central question countries face when organising upper secondary schooling is the degree of differentiation between general and vocational education. In recent years a growing number have aimed for greater integration of general and vocational pathways in an effort to better prepare students for both further education and working life (OECD, 2007, 2014b). Latvia's strict division between vocational and general upper secondary education schools and programmes has long hampered efforts to follow this trend. Meanwhile, several studies, including our own, have noted that the subject-heavy, knowledge-based upper secondary curriculum and teaching practices have not kept pace with the demands from the labour market for school and college graduates (OECD, 2015a).

A "divided", school-based upper secondary system

Education systems across OECD countries vary greatly in the degree to which general and vocational studies complement each other and in the ways in which they are sequenced. Different practices reflect the historical, political and cultural traditions of individual countries (OECD, 2014a). Sahlberg (2007) identified three principal ways in which OECD countries organise upper secondary education:

- Divided school-based upper secondary school system with upper secondary education divided into general and vocational schools (e.g. Denmark, Finland, the Netherlands).
- Unified upper secondary school system whereby upper secondary education is organised within one school offering different programmes (e.g. New Zealand, the United States).
- Parallel school-based and work-based upper secondary school system whereby upper secondary education has school-based general and work-based vocational education options (e.g. Austria, Germany, Switzerland).

Latvia fits the first category, in which upper secondary education is largely school-based and divided into general and vocational schools.

Several OECD countries have in recent years aimed for greater integration and a softening of the divide between general and vocational pathways in an effort to better prepare young people for both further education and for working life (OECD, 2007, 2014b). The stark division between vocational and general upper secondary education schools and programmes in Latvia has militated against the partnership approach

required to share and develop the pedagogical and assessment approaches needed to support such integration.

The ongoing reorganisation of the school network together with other reform initiatives, like the ongoing modularisation of vocational education programmes and the intention to move towards a competency-based upper secondary general curriculum (MoES, 2014), provide Latvia with an opportunity to reconsider and narrow the divide between upper secondary general and vocational education.

As discussed above, many of Latvia's smaller vocational schools are being reassigned to the control of the municipalities and are to merge and/or collaborate with small general education schools or VECCs. This reorganisation is intended to better prepare "specialists" for the regional labour market, as well as lead to greater co-ordination and efficiency of the general and vocational education school network (MoES, 2014). There are some good examples of schools achieving this aim. The upper secondary school of Dobele, for example, has been offering vocational and general education programmes since 2011. The school's facilities are efficiently used, teachers of general study subjects work with general and vocational programme students, and more programmes are provided (Cedefop, 2014).

Municipalities and MoES should continue promoting such organisational and pedagogical innovations to narrow the divide between upper secondary general and vocational pathways. They should not overlook the need to strengthen the teaching and learning that takes place within them, however. Teachers need the time and support to draw on the growing body of innovative practice within the country and beyond, particularly in relation to creating more opportunities for situated learning so that academic and practical skills can be developed and assessed in context.

The gradual transformation of large vocational schools into VECCs, such as the Riga Technical School of Tourism and Creative Industry (Box 4.2), means they can offer both general and vocational upper secondary education programmes. VECCs can be considered promising innovations to the Latvian school system for several reasons, including their potential to further reduce the divide between the two educational pathways, but this potential does not seem to have been fully exploited yet.

Though in practice such innovations can come about naturally ("bottom up") MoES should consider more actively encouraging VECCs to blur the boundaries between students in general and vocational programmes. Collaborations with general schools are to be encouraged to allow them to benefit from pedagogical and methodological support, for example in authentic learning.[2]

Box 4.2. **Riga technical school of tourism and creative industry**

Originally founded in 1980 as a technical school, Riga Technical School of Tourism and Creative Industry was given the status of a VECC in 2014 and is the largest vocational school in Latvia with over 2 000 students and 255 staff. It operates as a "Government Company" and its activities are divided between: educational provision (70%), commercial work (20%) and short courses (10%). The school offers both general and vocational upper secondary education from basic through to diploma level and students can join a wide range of extra-curricular clubs. Vocational programmes are offered in the following specialisms (the asterisk denotes the two most popular and, hence, most selective programmes):

- catering services*
- hospitality*
- tourism
- patisserie
- food processing
- interior design
- fashion design
- sewing technologies
- beauty/hairdressing

The school works closely with the relevant SECs and has sector and employer representatives on its governing council. It has 1 500 agreements with local, regional and national employers to provide work placements for its students. It has a strong record of international partnerships and is involved in a range of European Union projects and initiatives (e.g. ERASMUS) from which both students and teachers benefit. The key aim of the school is to develop graduates who have the creative capacity, expertise and personal skills required to progress in the European labour market. This requires that teachers design and employ curricular, pedagogical and assessment approaches that generate opportunities for students to develop both occupationally specific and generic skills. IT skills are embedded in all subjects and developed through an integrated approach.

Source: Rīgas Tūrisma un Radošās Industrijas Tehnikums (n.d.), Rīgas Tūrisma un Radošās Industrijas Tehnikums [Riga Technical School of Tourism and Creative Industry] website, www.rtrit.lv/par-rtrit.

Double qualifications

To make the relationship between upper secondary general and vocational pathways more permeable some OECD countries with "divided" systems such as Austria, Denmark, Germany and the United Kingdom have introduced double-qualifying pathways. These combined qualifications can

encourage lifelong learning, by enabling students to see the worlds of work and study as intertwined.

Latvia also provides its students with similar doubly-qualifying pathways. It offers students the bridge year programme mentioned above that gives access to tertiary education. Few students pursue this option, however. Instead most students choose four-year vocational education programmes that provide direct access to tertiary education.

The effective implementation of double-qualification pathways is a complex matter. It is demanding in terms of curriculum, pedagogy and assessment, and requires strong partnerships between schools, enterprises and tertiary institutions (OECD, 2010). Within the Latvian education system the newly created VECCs are particularly well-placed to provide such pathways, as are the small vocational schools that are joining up with general education ones.

A subject-dense curriculum

Regardless of the organisational structure it is essential that all students acquire the range of skills needed for full social and economic participation, including access to decent work and/or further education. Countries have been softening the divide between general and vocational pathways to let students benefit from the best of both worlds through a range of measures, including reforming the upper secondary curriculum.

For example, Scotland (the United Kingdom) adapted its general upper secondary education curriculum in schools to include a stronger element of applied knowledge (e.g. product design and information systems) and included new vocational subjects such as hospitality, business studies and construction. This development was part of wider set of reforms that resulted in an increasing numbers of upper secondary students taking vocational subjects over the past decade, which can also be linked to the growth in professional and associate professional courses at post-compulsory non-tertiary and higher education levels (Canning, 2012).

Finland is in the final stages of reforming its national core curricula and local curricula. It has been preparing its new upper secondary education curricula since 2013, and will be introduced in the school year 2016/17. The aim is to cultivate in young people the dispositions and habits of mind often cited as being the building blocks for innovation and entrepreneurship. These dispositions include creativity, flexibility, initiative, risk-taking and the ability to apply knowledge in novel situations. This has necessitated a stronger focus on a closer alignment of academic and practical skills through a pedagogical focus on situated and problem-based learning. Importantly, Finnish employers have shown support for the reforms by sending strong signals to schools about the kinds of knowledge, skills and dispositions

that young people need in order to enter today's labour market and to face further future changes in the workplace and the economy more generally. Finnish industry leaders have stressed the importance of mathematics, science and technology in the school curriculum alongside the need for increased attention to be paid to creativity, problem-solving, teamwork and cross-curricular projects in schools (OECD, 2010).

Latvia's upper secondary curriculum provides students in both the general and vocational pathways with a rich diet of core and optional subjects. However, several reports, as well as people interviewed during our review visit, have raised concerns that the upper secondary curriculum and pedagogical traditions have not kept pace with the demands from the labour market for school and college graduates (OECD, 2015a).

In addition, during our meetings with teachers, school leaders and policy makers the terms "curriculum saturation" and "knowledge fragmentation" were frequently used when referring to the upper secondary curriculum. These concerns were echoed by the students we spoke to, who also expressed the desire to engage in more interactive and practical forms of learning. This is despite the fact that general secondary education students may opt for a vocationally oriented subject cluster, with a focus on subjects such as music, sports or economics (which does not result in the obtainment of any vocational qualifications). It currently is not known how many students participate in such programmes.

The subject density of the largely knowledge-based curriculum can be considered problematic for a number of reasons. First, in some schools not all the subjects can be taught by a teacher with the corresponding specialism. Second, in order to cover the curriculum, there may be a tendency to focus on the transmission of knowledge, leaving insufficient space for the development of interdisciplinary understanding, although effective schools ("learning environments") are the ones that promote "horizontal connectedness" across knowledge areas and subjects (Dumont, Istance and Benavides, 2010; OECD, 2013c). Third, this knowledge-led approach shapes the nature of both in-school and external student assessments and examinations, which are likely to privilege the memorisation of facts over and above the ability to demonstrate competences like learning to learn and critical thinking.

Latvia plans to review its upper secondary curriculum in the coming years, starting work in 2016 and implementing it from 2019. As with the plans for the basic education curriculum discussed in Chapter 3, the Education Development Guidelines 2014-2020 (MoES, 2014) reveal MoES intends to transform the largely knowledge-based upper secondary curriculum into a competency-based one. The intention is that the improved competency-based teaching content, including the use of ICT, will enhance students' learning

outcomes. The guidelines also refer to the development of content for new competences such as enterprising spirit, healthy lifestyle, financial literacy, civic education, human safety and the updating/revision of foreign language learning content and learning methodology for Grades 1 to 12. Reading the list of new competences, we do want to warn against once more "saturating" the curriculum – prioritisation may be needed.

Students in the vocational pathway have fewer lesson hours in general subjects than their peers in general upper secondary, while having to pass the same exams. Not surprisingly, average attainment levels of vocational students are considerably lower than those of their peers in general education (MoES, 2015). For example, among Grade 12 students in 2014, the average performance of general secondary education students in the mathematics exam, expressed as a percentage, was 49%. Meanwhile the average performance among vocational education students of the same grade in the same exam was 28%. Apart from demotivating students, this may have contributed to the poor image of vocational education, which stands at odds with Latvia's policy objective for vocational education.

Latvia may therefore want to reconsider the number of mandatory general subjects within the vocational school curriculum and to what extent they could be examined using different approaches, rather than paper-based exams alone. For example, the situated assessment approaches currently being tried in the work-based learning pilot are more fitting to a competency-based approach to teaching and learning (see also Box 4.3).

Box 4.3. **Examples of alternative assessment approaches to the final examination**

In **Slovenia** laboratory work in science is assessed as 20% of the final certificate in science subjects in the Matura examination. The laboratory work examination is part of the school-based examination for the final certification. The other 80% is based on external examination. The assessment of laboratory work in the final examination provides a strong incentive for teachers to use more student-centred, inquiry-driven laboratory work in their teaching, in line with curricular requirements.

In **Austria**, the qualification for entry to university or tertiary education uses a range of assessment methods to assess competences across the curriculum. These methods include:

- a multi-disciplinary paper on a research project
- a standardised, competence-based written examination at the end of the final year
- an oral examination in front of a representative of the examinations commission after the written examination, when they present and defend their project.

Box 4.3. **Examples of alternative assessment approaches to the final examination** *(Continued)*

These methods assess a wide range of competences, including those relating to communication, mathematics, science, languages, learning to learn, initiative and entrepreneurship, and social and civic competences. Importantly, they are assessed in relation to real-life contexts provided by the research project.

To assess a wider range of key competences, the state of **Baden-Württemberg** in Germany has introduced two new elements into the final examination for general education students in Year 10 in the *Realschule*:

- The EuroKom (European communication): This exam counts for around half of the final grade in the obligatory foreign language. Students take the 15-minute examination individually or in pairs and it consists of three elements: 1) a pre-prepared presentation, followed by questions, on a topic discussed and agreed in advance with the examining teacher; 2) an oral comprehension exercise; and 3) a role-play based on an authentic situation.
- In addition to written examinations in the core subjects of German, mathematics and the obligatory foreign language, pupils must also take a cross-curricular competence examination. Like EuroKom, this examination consists of a pre-discussed and pre-prepared presentation, followed by questions from the examiners. However, in this case the examination is taken by students in groups of between three and five, and must cover at least two curricular subjects. The examiners are teachers in these subjects, including an external moderator from a different school.

Source: European Commission (2012), *Assessment of Key Competences in Initial Education and Training: Policy Guidance*, SWD(2012) 371 final, European Commission, Strasbourg, http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52012SC0371&from=EN.

The reform of the upper secondary curriculum provides an excellent opportunity for change. Earlier steps could be taken, however, for example by allowing VECCs to experiment and develop alternative programmes and assessment approaches that can inform the reform of the upper secondary curriculum. The experiences of the work-based learning pilot could support such efforts.

Policy issue 3: Developing lifelong learning

As in many countries around the globe, Latvia considers education and lifelong learning as an essential prerequisite for economic development and promotion of national competitiveness, as well as to reach the highest welfare levels. In Latvia, lifelong learning encompasses formal and non-formal education, as well as informal learning. By promoting lifelong learning the country aims to give every member of the public the opportunity to obtain and/or develop knowledge, skills and competences in accordance with the requirements of the labour market, and individual interests and needs

(MoES, 2014). Through the National Development Plan's (CSCC, 2012) strategic goal of "decent work" Latvia acknowledges the symbiotic relationship between high-quality education and a labour market that has the capacity to demand and utilise skilled workers (OECD, 2014b).

Despite this recognition and policy support, lifelong learning is underdeveloped in Latvia and participation is low compared to many EU countries even though many of the working-age population lack the skills to become more productive (OECD, 2015a). Low demand for formal and non-formal education, a fragmented policy structure involving 10 different institutions and limited incentives for employers to invest in the skills of their employees are among the factors contributing to the low participation in lifelong learning in Latvia.

Low adult participation in formal and non-formal education

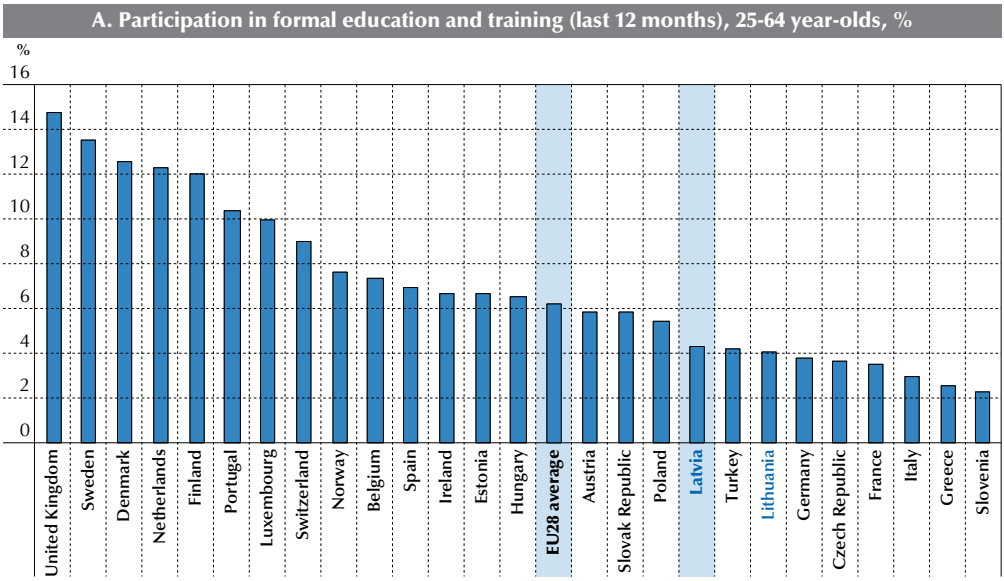
Latvia has set itself the target to have 15% of the adult population actively involved in lifelong learning by 2020 (MoES, 2014). Data from the 2014 labour force survey show that a mere 5.5% of 25-64 year-olds participated, suggesting that it is a long way from meeting this target. The reference period for participation in education and training is the four weeks preceding the interview, as is usual in the labour force survey. The survey found a slightly higher proportion of Latvian women (6.2%) participating in education and training than men (4.8%) (Eurostat, 2015a).

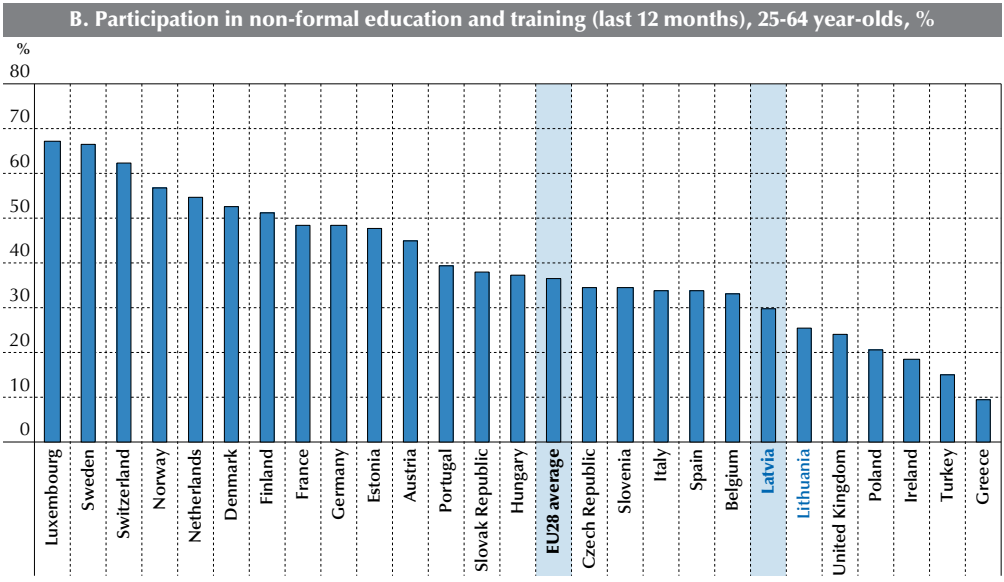
In addition to the data from the labour force survey, information on education and training is available from the 2011 Adult Education Survey (AES). According to this survey, in 2011 4.3% of people in Latvia aged 25 to 64 took part in formal education and training during the 12 months preceding the interview, which was 1.1% lower than four years prior and lower than many other EU countries (Figure 4.8). The participation of Latvian 25-64 year-olds in non-formal education and training was 30%, also below the EU average (36.8%) and slightly lower than four years before (30.7%) (Eurostat, 2015e).

The AES 2011 also shows a higher proportion of women participating in formal and non-formal education and training than men in Latvia, 37.3% and 26.9% respectively. In many EU countries this difference is reversed, and much smaller, with an EU-27 average of 40.7% of men and 39.9% of women (Eurostat, 2015e).

Among younger adults, 38% of 25-34 year-olds participated in education and training in 2011 (Table 4.3), which was slightly higher than countries like Lithuania and Poland but still considerably lower that the EU average (48.5%) and countries like Luxembourg and Sweden where participation rates exceeded 75%. Participation rates of Latvian adults in education and training were below the EU averages for all age groups.

Figure 4.8. **Participation in lifelong learning (2011)**





Notes: Based on the adult education survey (AES). The reference period for AES is the 12 months before the interview. Non-OECD countries are shown in blue.
Countries are ranked in descending order of participation in lifelong learning.

Source: Eurostat (2015e), "Participation rate in education and training by age", *Eurostat database*, Eurostat, http://ec.europa.eu/eurostat/en/web/products-datasets/-/TRNG_AES_101 (accessed 15 July 2015).

Table 4.3. **Participation in lifelong learning, by age (%)**

	25 to 34 years	35 to 44 years	45 to 54 years	55 to 64 years
Luxembourg	81.4	72.6	72.1	49.4
Sweden	78.7	77.8	72.6	57.5
Finland	65.8	64.8	59.0	35.5
Estonia	64.5	51.6	48.1	32.6
EU 28	48.5	44.0	40.9	26.6
Latvia	**38.0**	**37.6**	**31.7**	**19.7**
Lithuania	37.3	30.6	28.0	16.2
Poland	36.0	28.7	20.4	9.6

Note: Based on the adult education survey (AES). The reference period for AES is the 12 months before the interview.

Source: Eurostat (2015e), "Participation rate in education and training by age", *Eurostat database*, Eurostat, http://ec.europa.eu/eurostat/en/web/products-datasets/-/TRNG_AES_l01 (accessed 15 July 2015).

To increase participation rates to the desired level by 2020 Latvia has indicated it intends to extend a high-quality education offering, develop a regulatory framework and ensure effective resource management, including making better use of the existing infrastructure (MoES, 2014).

We agree these are important measures for increasing the demand for training and adult learning in the long run (OECD, 2015a). Investment in the skills of the young generation of working adults in Latvia will be essential for the (future) economy and society at large. Brain drain, an ageing workforce, historic low participation in lifelong learning and concerns about the quality and relevance of upper secondary education are among the factors that have contributed to the working population missing the skills to become more productive (OECD, 2015a; IMF, 2013; Zumente and Putriņš, 2011). This argues for the overall improvement of human resources, skills and capacity building.

Research evidence however shows that low-skilled adults are least likely to participate in adult education and training (OECD, 2013a). Data from the AES 2011 confirms this to be particularly true for Latvia. A mere 10.6% of adults with a lower secondary education or less indicated they had participated in education and training in the 12 months prior to the interview. The share was about five times higher for those with a tertiary education. This, combined with their generally lower employment rates, means that encouraging the low-skilled to engage in lifelong learning should be a priority for Latvia (OECD, 2015a).

National minorities were hit disproportionally by the economic downturn in terms of employment, suggesting that they should also be a policy focus. Although the factors behind these outcomes have not yet been fully identified, work experience and skill sets, including relatively weaker Latvian language ability, are likely to be relevant (OECD, forthcoming, 2015a; Falco et al., 2015a; Lehmann and Zaiceva, 2015). Insufficient public supply of both general and professionally oriented Latvian language courses for the adult population has in the past been identified as one of the barriers to the better integration of national minorities (Hazans, 2011). Language training however is now offered by the public employment service, as well as for employed under risk of job-loss as a part of lifelong learning programmes. Efforts to help national minorities to acquire the skills needed on the labour market should continue, combined with professionally-oriented Latvian language courses (OECD, 2015a).

The Youth Guarantee, initiated in 2014, is another promising initiative. The guarantee will support young people (aged 15 to 29), with or without prior vocational qualifications, to participate in short-term vocational education programmes. Up to 6 500 young people will have the opportunity to train for more than 90 careers for free until 2018. It must be noted though that the programme has been slow to start up and its visibility among the target group has been low. The Latvian government has recognised the situation and aims to address these challenges through a range of measures. This includes outreach measures to reach young people not in employment, education or training who are not registered at the public employment service. This is a new initiative and the fieldwork is expected to start in the beginning of 2016 (European Commission, 2015).

Another positive development is the reform of vocational education. The new modularised programmes, the involvement of social partners in setting occupational standards and the establishment of the VECCs that will co-operate closely with employers and offer continuing education to adults, will be key to increasing demand and ultimately participation in formal and non-formal education and training.

The VECCs are also charged with assessing and recognising professional competences that adults have acquired outside the formal education system, which may help further align the non-formal education and training of adults with the formal education system. The formal recognition of such skills is also expected to facilitate and stimulate lifelong learning among Latvian adults.

In addition, the VECCs will provide greater capacity for part-time learning. This seems important as according to the 2011 AES, 35% of Latvian adults (25-64 year-olds) who wanted to participate in education activities mentioned that they were hindered by conflicts between training and their work schedules (Central Statistical Bureau of Latvia, 2013).

The need to ensure employer support for education and training

Evidence suggests that underinvestment in adult learning is often a result of barriers on the demand side. Some are simply unaware of the need and benefits of continued learning, while others face difficulties in investing in education and training (OECD, 2013a, 2013b). Time for education and training seems to be a relevant barrier, as mentioned above. Family circumstances were a barrier for 30.8% of Latvian adults participating in the AES 2011 while more than half (53.3%) mentioned high costs.

Current measures to support individuals' lifelong learning, including income tax deductions for employees, might not be enough to develop adult education and training. Further support is needed to ensure jobseekers and low-productivity workers obtain the skills needed by the labour market (OECD, 2015a).

Employers have an important role to play in supporting their employees' further education and lifelong learning by providing them with time and/or (partial) financing. They will need to overcome their own obstacles to investing in employee training such as lack of time and resources, workload pressures, and costs. International evidence suggests that SMEs are much more likely to use informal rather than formal education and training (OECD, 2012b). This suggests that affordability and return on investment in lifelong learning may be an issue. In the Latvian context of SMEs and micro-enterprises, policies should focus on incentives for formal training and recognition of informal skills development (OECD, 2015a).

Underdeveloped career guidance system

Effective career information and guidance systems are a key to making lifelong learning a reality for all. They can help to make the best use of human resources in the labour market as well as in education by allowing better matches between people's skills and interests and available opportunities for work and learning (OECD, 2014b). Access to high-quality, independent careers information, advice and guidance at key points in a school career, as well as later on in life, is therefore central to a successful schooling and lifelong learning.

In Latvia the provision of career guidance services is weak and fragmented. Responsibility for career guidance is shared between the State Employment Agency and the State Education Development Agency. The latter is responsible for providing career guidance in schools, while the State Education Agency provides guidance to registered job seekers. A wider advisory forum, the Cooperation Council for the Career System is also in place and the newly created VECCs are also intended to play a part (OECD, 2015b).

The data show that in 2013 only 36% of the population had received any career guidance while in education, against an EU average of 61% (European Union, 2014). In Latvia, young people have access to school-based careers information, advice and guidance in Grades 8 and 9 of compulsory education, which schools fund out of their own budgets. It is not known, however, how much schools invest in this. Prior to the economic crisis, extra EU funds had been available for teacher training in guidance, but this was curtailed due to the economic downturn.

In upper secondary education, teachers discuss tertiary education options with students, but it is not clear how much time is spent discussing other options, including employment. There is a risk that other career options, such as vocational education and training, might not be sufficiently explored. The ongoing review of career guidance in the education sector is intended among others to increase school staff capacity for guidance and to broaden the range of guidance activities for students. These measures could help to reduce the potential bias toward keeping students in general education.

Earlier and more intensive career advice and guidance might help to tackle the significant gender segregation in vocational education programmes, but earlier intervention is also needed to enable young people to decide between the general and vocational pathways. Latvia intends to strengthen the career guidance system as part of the larger reform of its vocational education system, but plans are at an early stage (European Commission, 2015). Examples from other OECD countries may help shape its career guidance system.

Internationally, developments in digital communication technologies are helping to improve and bring innovation into the career guidance field. Some countries (e.g. Austria and Australia) have national career-focused websites, whilst others have websites dedicated to different aspects of the education system (e.g. Germany and the United Kingdom for apprenticeship). A private initiative in Latvia has also recently resulted in a similar youth career portal, Prakse (www.prakse.lv). With EU funding Latvia aims to further develop the current national learning information website into a portal that among others will include individual user profiles, as well as career interest, aptitude and value self-assessment functions to help users identify suitable further education and/or occupation opportunities.

In Switzerland career guidance and information sessions are mandatory in secondary education and all teachers receive some training on labour market opportunities. In lower secondary education, students learn in their own schools about different career options and how to use the independent institutions for guidance related to all levels of education and training – the *Berufsinformationszentren*. These centres work closely with schools, and sometimes provide services at the school rather than their own offices. In

other countries, short internships or periods of work experience towards the end of compulsory education or at upper secondary level are used to give young people the chance to sample different types of workplace and occupational fields.

In the United Kingdom, the concept of "ambassadors" is widely used as a way to encourage young people to look beyond their current horizons. A long-standing example is the Science, Technology, Engineering and Mathematics Network (STEMNET) (Box 4.4), which given the low numbers of young Latvians choosing to study STEM subjects, might offer a useful model.

Box 4.4. **STEM Ambassadors**

STEMNET (the Science, Technology, Engineering and Mathematics Network) was established as a charity in 1996, funded by the British government. It works with schools and further education colleges and STEM employers in the United Kingdom to enable young people to meet inspiring role models and participate in STEM activities to bring learning and career opportunities to life. STEMNET uses over 27 000 volunteer STEM Ambassadors, from a wide range of STEM occupations across engineering, digital and life sciences to promote STEM subjects to young learners in a range of practical and engaging ways.

Source: STEMNET (n.d.), "STEM Ambassadors", STEMNET (Science, Technology, Engineering and Mathematics Network) website, www.stemnet.org.uk/ambassadors/.

Lifelong learning: A fragmented area of policy

The government has an important role to play in promoting and removing barriers to adult learning, ensuring the portability of skills and improving information about training opportunities (OECD, 2012b, 2013a; Desjardins and Rubenson, 2013). Yet lifelong learning is a fragmented policy area in Latvia. Ten different institutions are in charge of implementing Latvia's lifelong learning strategy, in collaboration with a range of other stakeholders (OECD, 2015a; EAEA, 2011). These institutions include nine national ministries: MoES and the ministries of Welfare, Culture, Agriculture, Health, Regional Development and Local Government, Justice, Economy, and the Interior.

In addition, municipalities are also responsible for providing their residents with adult non-formal education. There is currently little information available on what non-formal education and training opportunities municipalities offer, nor on their quality. The economic downturn will probably have reduced the resources available to municipalities who in turn are likely to have reduced or in some cases stopped offering non-formal education and training opportunities to its residents. There however is no information to support this

assumption. This should be essential information for planning the provision of education and training of adults – formal and non-formal – throughout Latvia. The government has recognised the situation and intends to improve data collection on the non-formal education and training opportunities provided by municipalities on regular basis (MoES, 2014).

Although this variety of providers can have advantages in terms of diversity and innovation, the different offerings can also confuse students and employers or lead to the duplication of tasks such as curriculum design (OECD, 2014b). Further, although the main funds for lifelong learning are distributed from MoES and the Ministry of Welfare one can question whether in a small country such fragmentation is desirable and whether it is contributing to the slow progress in implementing Latvia's lifelong learning strategy (OECD, 2015a).

Recommendations

Recommendation 1: Continue improving the quality and relevance of vocational education

In 2009 Latvia embarked on a comprehensive reform to improve the attractiveness and quality and relevance of vocational education through the involvement of social partners. Good progress has been made with the reorganisation of the school network which is nearing completion, but progress on the reform of the curriculum has been slow. MoES should speed up this work also to ensure the overall reform doesn't lose its momentum. The empowerment and professionalisation of the SECs will be a prerequisite for this.

MoES's work-based learning pilot is without a doubt a positive development but even though its scope was increased in 2015 its coverage is expected to remain insufficient. Further expansion of the pilot will be essential to assess the feasibility of such a work-based learning model in the Latvian context. Latvia should draw on the expertise of the existing apprenticeship system organised by the Chamber of Crafts to develop its model and follow through with its intention to incorporate this apprenticeship system into formal education.

A quality work-based learning system will require a proper legal framework regulating the relationships between the apprentice and company (e.g. on pay and training requirements) and may need a system of financial incentives to facilitate the provision of learning opportunities on the employers' side but employers will also have to play their part and take responsibility for and ownership of the new work-based learning model as they have much to gain from it.

Lastly, the scale of the reform in Latvia will require more careful monitoring and evaluation in order to keep it on track and identify innovative and successful practice that should be shared across the system. MoES has recognised this and aims to strengthen its management information system and policy analysis capacity within Latvia. To support these efforts, and the reform process in general, Latvia should consider introducing a number of new data sets and research studies allowing it to: 1) track young people's progression through education and beyond into the labour market; 2) monitor and forecast labour-market changes and institutional responsiveness at local, regional and sectoral level; and 3) monitor employer behaviour and demand for skills.

Recommendation 2: Narrow the divide between general and vocational upper secondary education

Latvia's upper secondary education system has long been starkly divided between general and vocational pathways. The ongoing reorganisation of the school network and gradual introduction of modular vocational programmes provide Latvia with an opportunity to further integrate general and vocational programmes. The Latvian government should actively pursue this path to ensure its upper secondary students can get the best of both worlds.

Municipalities and MoES should continue promoting organisational and pedagogical innovations to narrow the divide between upper secondary general and vocational pathways. They should not overlook the need for teachers to have professional development and the time to collaborate and innovate. The VECCs can be considered particularly promising innovations for their potential to integrate the two educational pathways.

The planned reform of the upper secondary curriculum into a competency-based one could play a central role in this process. Latvia should be careful not to repeat the problems of the present curriculum and "saturate" the new one. It should use the opportunity to reconsider the number of mandatory general subjects within the vocational curriculum and explore to what extent they could be assessed other than through paper-based tests, for example the situated assessment approaches currently being tried in the work-based learning pilot. This may also help promote take up of the double qualification which provides students with greater opportunities and flexibility in their educational and career aspirations throughout their lives.

Recommendation 3: Increase efforts to raise participation in lifelong learning

Despite the policy support for lifelong learning in Latvia, lifelong learning is underdeveloped and participation is low. This while the evidence suggests many of the working-age population lack the skills to become more

productive. Latvia should therefore consider how the reforms in vocational education can further support the wider goal of promoting a culture of lifelong learning. Positive developments in this respect are the development of modular vocational education programmes and professional qualifications which will facilitate the portability of skills and the recognition of prior learning. The VECCs are also a positive development for promoting lifelong learning.

Although some important measures have been taken recently to improve career guidance in and beyond schools, Latvia should step up its efforts to establish a coherent career guidance system. In the economic recession the focus shifted from providing career guidance for school students to supporting the unemployed. This makes it crucial to re-establish career guidance in the education system.

Latvia should consider reviewing its incentive structures to Latvian employers for workforce development. Micro-businesses and SMEs in particular will need greater incentives to invest in training and to create the "decent jobs" which make the best use of their employees' potential.

The effective implementation of Latvia's lifelong learning strategy will require a full overview of the formal and non-formal education and training opportunities available. Currently no such overview exists with particular gaps in knowledge about programmes offered by the municipalities. The government should therefore carry out its intention to strengthen its data collection on all formal and non-formal education and training opportunities, including those within enterprises, offered throughout the country (MoES, 2014; Cedefop, 2015).

Latvia may need to reconsider how responsibility for the implementation of its lifelong learning strategy is distributed. Realising its goals for increased adult participation rates in education and training will require strategic co-ordination and collaboration across national and local levels, involving key stakeholders such as vocational schools, companies and NGOs. At present, responsibility for lifelong learning is fragmented across ten different institutions, possibly too many for such a small country. This may have slowed down the implementation of Latvia's lifelong learning strategy.

Notes

1. The EU21 average is calculated as the unweighted mean of the data values of the 21 countries that are members of both the European Union and the OECD for which data are available or can be estimated. These 21 countries are Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden and the United Kingdom.

2. Authentic learning refers to a wide variety of educational and instructional techniques focused on connecting what students are taught in school to real-world issues, problems, and applications (Great Schools Partnership, 2013). It typically focuses on real-world, complex problems and their solutions, using role-playing exercises, problem-based activities, case studies and participation in virtual communities of practice (Lombardi, 2007).

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Chapter 5

Tertiary education in Latvia

This chapter covers tertiary education and the key policy issues Latvia faces. Latvia's tertiary education system expanded rapidly after independence, but the country is now faced with a system whose capacity is not aligned with demographic decline, fiscal reality and labour-market needs. The government funds a certain number of tuition-free study places, but the funding system does not serve wider national priorities. Staff salaries are low and are based on teaching loads and do not account for research. Quality assurance has so far not met international standards.

Latvia should develop the new funding model recommended by the World Bank and continue to focus on improving the quality of tertiary education. This includes developing a robust quality assurance framework. Latvia should further continue its efforts to realign system capacity with demographic decline, fiscal reality and labour-market needs. Finally, it should strengthen leadership capacity at both national and institutional levels.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Introduction

A focus on human resources and quality of life has been a cornerstone of Latvia's development policy since the Saeima, Latvia's parliament, adopted the "people first" growth model in 2006 (Republic of Latvia, 2006). Latvia's tertiary education system has a central role in realising the goals of increasing its global competitiveness and long-term sustainability. In 2013, 31% of 25-64 year-olds had attained a tertiary education, which is only slightly below the OECD average of 32.6% (OEDC, 2014a). However, Latvia's younger citizens are considerably better educated than older age groups, above the OECD average, suggesting that the gap in tertiary education attainment is likely to narrow in the coming years.

As Latvia emerges from economic crisis, it faces major challenges in realigning its tertiary education and research institutions with its national priorities. These include declining enrolment, severe underfunding, an ageing academic and research workforce, and widely dispersed and uncoordinated institutional capacity. In addition, its network of research institutes functions somewhat separately from the universities, a legacy of Soviet times, although the trend has been to incorporate these institutes into universities and to develop an integrated national system of tertiary education, science and innovation.

The country has completed a thorough assessment of the challenges it faces and started several promising initiatives to strengthen quality assurance, improve transparency, reform finance, and strengthen science and research capacity. The aim is to become a more integral part of European tertiary education and global knowledge networks, increasing the mobility of students as well as academic and research staff, and attracting foreign students and researchers. Maintaining the momentum of these reforms will be critical to the future of the country.

This chapter outlines the context and main features of the tertiary education system. It describes the major policy issues and current initiatives before concluding with some recommendations for the Latvian government to consider.

Context and main features

Governance and financing

The legal framework for tertiary education has evolved since independence in 1991. The 1991 Law on Education introduced tuition fees in tertiary education for the first time and initiated the move from a fully state-regulated and state-funded tertiary education system towards one with more autonomous institutions, both state and private, and funding from diversified sources.

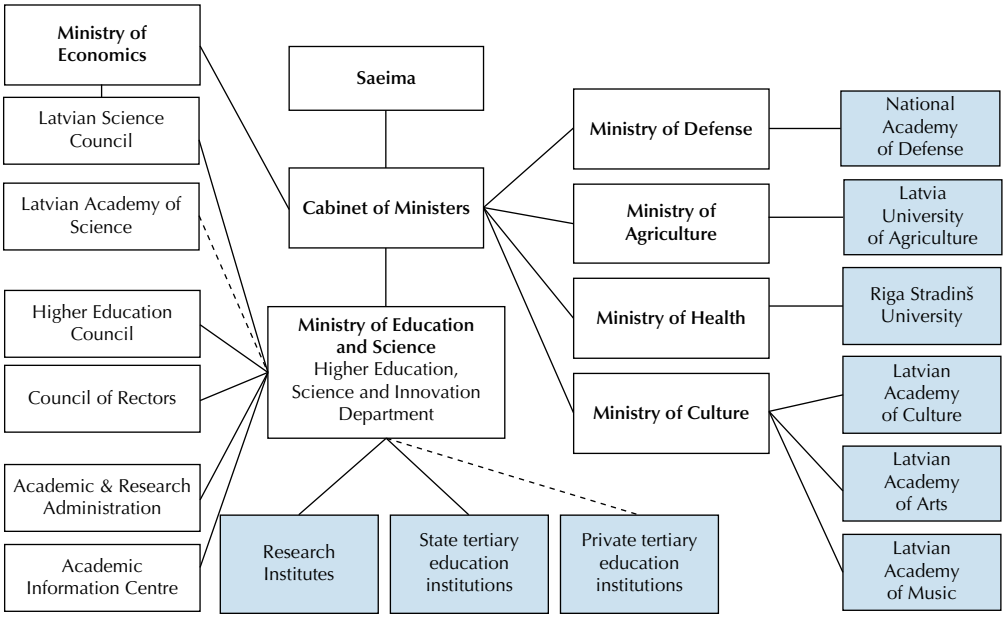
In 1995, the Saeima passed the Law on Higher Education Institutions, which established the current structure in tertiary education and set the framework for institutional autonomy. The 1995 law regulates the opening, closing and reorganisation of institutions and institutional governance. It also establishes the principle of academic freedom, the rights and duties of academic personnel and students, the procedure for staff selection, and modes for academic degrees and professional qualifications. It determines the basic requirements for study programmes, the financing of studies, and the assessment and accreditation of study programmes and institutions.

In 2011, amendments to the Law on Higher Education Institutions further enhanced the autonomy of state tertiary education institutions, by granting most of them (except the Latvian National Defence Academy) a new legal status of "derived public persons", comparable to that of municipalities. State-founded colleges remain under more direct state supervision by the Ministry of Education and Science (MoES) or other ministries, as described below. Private institutions (institutions founded by private persons), whether tertiary education institutions or colleges, are commercial companies or foundations. These institutions operate in accordance with the Commercial Law or the Associations and Foundations Law where these laws do not conflict with the Law on Higher Education Institutions.

Public tertiary institutions in Latvia have a higher level of autonomy than in many EU countries (Estermann, Nokkala and Steinel, 2011). Institutions are able to determine their internal structure, develop and adopt their own internal codes of conduct and procedures, establish academic programmes, determine the levels of pay for academic staff above government-established minima, and set tuition-fee levels. They are autonomous in regard to organisational procedure, implementation of the study process, internal rules and regulations, hiring and firing of academic and technical staff, and distribution of allocated funding. The main administrative bodies that represent and manage the work of the tertiary education establishment – Constitutional Meeting, Senate and the Rector – are elected in the order determined in the statutes of the tertiary education institution. The Cabinet of Ministers confirms the appointment of rectors of tertiary education institutions (MoES, 2015a).

Responsibility for tertiary education in Latvia is shared among a complex array of entities (Figure 5.1). The Cabinet of Ministers, including the Prime Minister and ministers, is the principal executive body of the government. In accordance with the Constitution (*Satversme*), and laws enacted by the Saeima, the Cabinet of Ministers approves the regulations and other actions necessary for policy implementation. The Minister of Education and Science has the central responsibility, within regulations approved by the Cabinet of Ministers, for the development and implementation of state policy.

Figure 5.1. **Principal entities responsible for tertiary education, science and innovation in Latvia**



The pre-1991 pattern, in which tertiary education institutions were linked to different sections of the command economy, is still reflected in responsibility for their oversight, which is distributed across seven ministries. MoES has responsibility for the majority of institutions and three-quarters of students. Within MoES, a department has specific responsibility for tertiary education, science and innovation.

Financing tertiary education

Funding for the Latvian tertiary education system comes from both public and private sources. The central government funds tertiary education through the state budget and EU structural funds. Other sources of funding are student tuition fees and funds generated from other activities such as scientific work not financed from the state budget, or commissions by companies. In 2012 the total funding for tertiary education in Latvia amounted to EUR 311.2 million, which was 1.4% of GDP. As Table 5.1 shows, 36% of this was from the government budget, 23% from student tuition fees, 21% from EU structural funds and 20% from revenue generated by tertiary education institutions through other activities (World Bank, 2014a).

Table 5.1. **Sources of finance for tertiary education in Latvia (2012)**

		EUR million	Share of total revenue	Share of category	Share of GDP
1	Total revenue of tertiary education institutions and colleges	311.2	100%		1.4%
	Public universities and colleges		88%		
	Private universities and colleges		12%		
2	Government funding	110.6	36%	100%	0.5%
	Subsidy from the general revenue for universities and colleges, including 15% co-financing for EU structural funds	95.9	31%	87%	
	National funding for science, including 15% co-financing for EU structural funds	14.7	5%	13%	
3	Private funding	72.8	23%	100%	0.3%
	Revenue from tuition fees in state (public) universities and colleges	43.4	14%	60%	
	Revenue from tuition fees in private universities and colleges	29.4	9%	40%	
4	Other funds	127.8	41%	100%	0.6%
	International funding for science and studies including 85% co-financing from EU structural funding	64.5	21%	50%	
	Revenue from scientific work not financed from the state budget or international financing	12.5	4%	10%	
	Other revenue of universities and colleges	50.8	16%	40%	

Source: World Bank (2014a), *Higher Education Financing in Latvia: Analysis of Strengths and Weaknesses*, World Bank Reimbursable Advisory Service on Higher Education Financing in Latvia, World Bank, http://viaa.gov.lv/files/news/24067/lv_hef_output_1_final_18mar14.pdf.

These overall figures hide significant differences between sectors and individual institutions (World Bank, 2014a; Civitta, 2014). For example, although state funding for teaching provides 33% of institutional revenue on average, for one institution it is only 3% of revenue and for another 18%, while three institutions receive more than 70% of their revenue from this source. Also, while on average 17% of state universities' revenue comes from other resources, six institutions generate less than 5% of their revenue from such sources while for two universities it is more than 30%.

Public funding to tertiary education institutions consists of a subsidy for education (87%) distributed on the basis of the number of student places, which are almost exclusively for full-time programmes, and a subsidy for research (13%) (Table 5.1). Private sources, i.e. households, are another considerable source of funding with 23% of expenditure on tertiary education in Latvia coming from private sources in 2012.

Latvia has a dual system of student financing. Students with the best academic performance and examination results are admitted to study free of charge on the basis of open competition, while others have to pay tuition fees. Students who are admitted to free study places also qualify for government-funded monthly stipends which are awarded on a competitive basis to the highest-achieving students in the programme. Each year MoES sets the number of free study places at individual tertiary education institutions and within the various fields of study following a consultative process involving multiple stakeholders. These include the 12 sector committees of the Latvian Employers' Confederation, other professional organisations, ministries and the Higher Education Council. The distribution of free study places across study areas takes into account tertiary education institutions' past performance on a number of indicators, including the actual number of state-financed students, graduates and dropouts. It also takes into account labour-market forecasts by the Ministry of Economics as well as the total public funds available for the year. MoES controls how many study places should be financed by the state for the tertiary education institutions it supervises, as is it involved in the process of determining the number of study places in tertiary education institutions supervised by other ministries. As funding for these places comes from their budget, MoES essentially agrees to their recommendations on the number of places. Co-operation between MoES and other ministries in terms of planning study places will be strengthened from 2016 by introducing trilateral agreements between MoES, the other ministry concerned and the respective tertiary education institution.

Research funding is mostly awarded on the basis of research output and competitions. International funding for education and research, including EU structural funds, comprised 21% of the total tertiary education budget in 2013/14. Since 2007 the European Social Fund and the European Regional Development Funds have been a major source of support for reform and innovation, providing a total of more than EUR 500 million.

In 2013/14 73% of students studied at public tertiary education institutions, including colleges (Central Statistical Bureau, 2015a). Of the 65 410 students enrolled in public tertiary education sector, 47% paid tuition fees. These fees vary considerably depending on the institution and study programme. Tuition fees at public institutions of tertiary education in Latvia in 2013/14 ranged

from EUR 882 to EUR 5 208 per academic year for bachelor's degree students, EUR 384 to EUR 15 000 for master's degree students, and EUR 1 067 to EUR 9 135 for doctoral programmes (MoES, 2014b; World Bank, 2014a).

Under the current conditions, sources of student financial assistance are especially important from an equity perspective. It is likely that the system of free study places for some students, with its heavy emphasis on merit-based selection, limits the chances of pursuing a tertiary degree for students from disadvantaged backgrounds (World Bank, 2014a).

Student financial aid in Latvia is provided in the form of direct and indirect public subsidies, and from private resources. These include state-funded study places, loans, scholarships (i.e. the free study places and stipends), and income tax rebates for educational expenditure. Government-subsidised student loans are available to all Latvian residents who pursue a tertiary education and are able to meet co-signatory loan requirements. Other loan schemes are provided by the main commercial banks who offer loans at commercial rates. In addition foundations offer philanthropic support and some municipalities provide financial support through funding provided by local businesses, philanthropists and the municipal budget.

The total level of financial assistance to Latvian students as a percentage of total public expenditure on tertiary-level education has recovered in recent years after falling during the economic crisis. In 2011, it amounted to 14% of total public expenditure on tertiary education, after recovering from 5% in 2007. This level of support is higher than its neighbours Estonia (9%) and Lithuania (10%) but is significantly lower than the EU28 average of 20% (Eurostat, 2014).

In 2011 Latvia's public expenditure on tertiary education amounted to 1% of GDP which is considerably lower than the OECD and EU21 averages (both 1.4%). Latvia also spends considerably less per student than most OECD countries – USD 7 552 per student (including research and development activities) compared with the OECD average of USD 13 958 (OECD, 2014a). Low salaries for academic staff in Latvia partially explain this comparatively low expenditure.

The same World Bank report also noted a number of other significant challenges facing the tertiary funding system and proposed a new "three-pillar" funding model that responds to these concerns (see below). The Latvian government has recently (June 2015) endorsed this model for development and implementation. In July 2015 a regulation was also passed that introduced additional public funding criteria based on the performance of tertiary education institutions in the realm of renewal of human resources, industry relevance and international competitiveness of research.

Organisation and size of the network of tertiary education institutions

As Latvia regained independence the number of tertiary-level institutions expanded rapidly. They increased from 12, 10 of which were public, in 1990/91 to 35 by the end of the 1990s. Much of the initial expansion was due to privately funded institutions in Riga but three public regional tertiary education institutions were also established during this period in Rezekne (1993), Valmiera (1996), and Ventspils (1997).

There are now 60 tertiary-level institutions and colleges in Latvia. These are classified into universities (*universitāte*), offering both academic and professional tertiary programmes; other tertiary education institutions or academia (*augsskola* or *akadēmija*); and colleges (*koledža*) offering professional tertiary programmes. The degree structure follows the three-cycle pattern of the Bologna Process: bachelor's (undergraduate), master's (graduate) and doctoral-level studies.

All six of the universities are public, but the other institutions are public or private. To be designated as a university, at least 65% of an institution's academic staff must have a doctorate and it must be active in research. In academies at least 50% of academic staff must have doctorates and in other tertiary education institutions the requirement is at least 40% (Eurypedia, 2015; MoES, 2015a).

Colleges can either be free-standing independent institutions or units within tertiary education institutions. For example, the University of Latvia Riga College of Medicine is a part of the University of Latvia. In a period of declining enrolments and severe funding constraints, the trend has been for free-standing colleges to become affiliated with, if not consolidated with, tertiary education institutions.

Attainment, participation and graduation

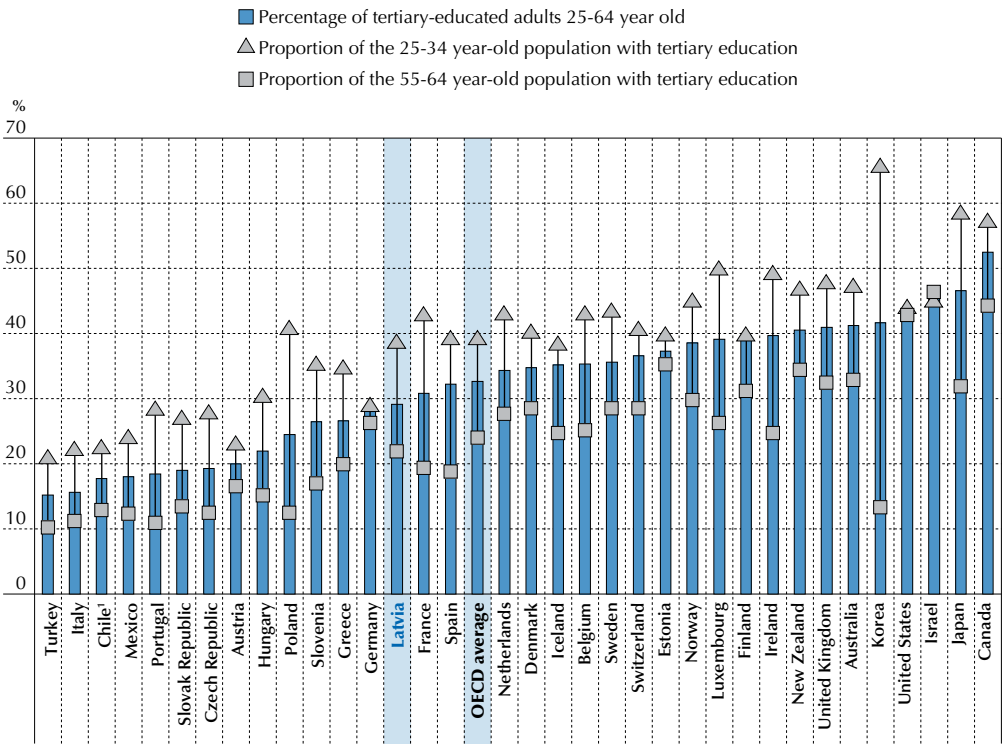
As mentioned, 31% of 25-64 year-olds had a tertiary degree in 2013, only slightly below the OECD average. Like many OECD countries there are considerable differences between the attainment rates of the younger and older population (Figure 5.2). The difference is larger than in many OECD countries suggesting that Latvia could be closing the gap in attainment with the OECD in the coming years.

The proportion of the Latvian population aged 30-34 with tertiary-level attainment has increased steadily over the past decade. By 2013 it had already surpassed the 40% target set by the Latvian parliament in 2010 (Saeima of the Republic of Latvia, 2010). It is estimated that 58% of young adults in OECD countries will enter academic tertiary programmes during

their lifetime if current patterns of entry continue. In Latvia, 85% of young adults are expected to enter an academic tertiary programme (OECD, 2014a) (Figure 5.3).

Figure 5.2. **Tertiary attainment of population, by age group (2012)**

Percentage of tertiary-educated adults 2012, OECD and partner countries



Note:

1. Year of reference 2011.

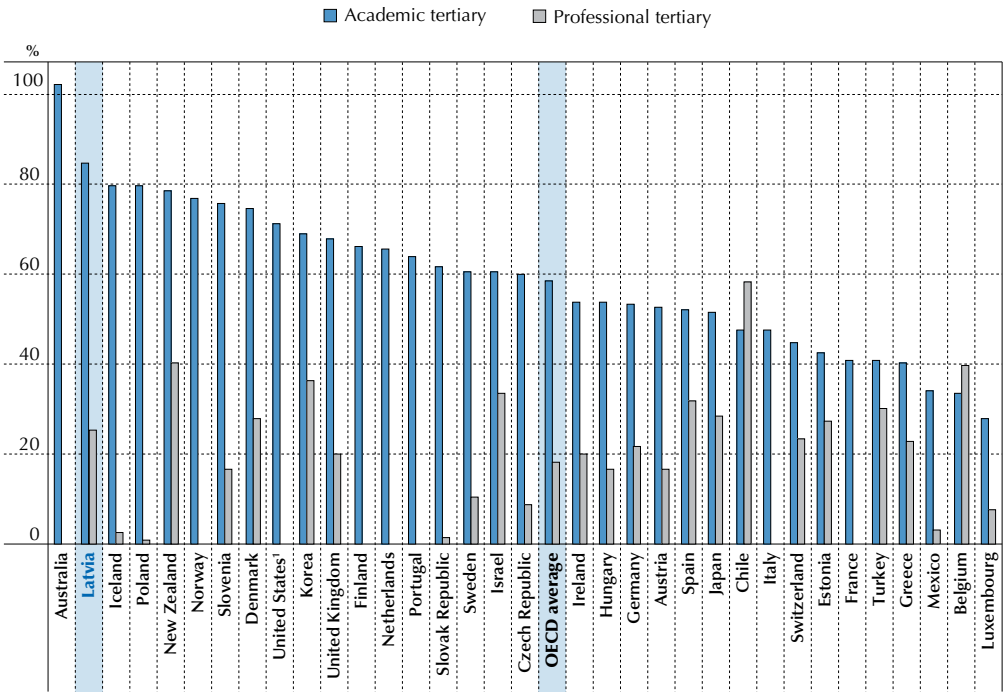
Countries are ranked in ascending order of the percentage of 25-64 year-olds who have attained tertiary education in 2012 (or latest available year).

Source: OECD (2014a), *Education at a Glance 2014: OECD Indicators*, OECD Publishing, Paris, http://dx.doi.org/10.1787/eag-2014-en.

Among OECD countries the proportion of students entering professional tertiary programmes is generally smaller, mainly because these programmes are less developed in most OECD countries. Proportions range from less than 5% in Iceland, Mexico, Poland and the Slovak Republic, to more than 35% in Belgium, Korea and New Zealand, and more than 50% in Chile. In Latvia

about a quarter of young adults enter such tertiary-type B programmes. At the same time, Latvia has a lower rate of entry into advanced tertiary education (2.1% in 2012) than the OECD average (2.6%) (OECD, 2014a).

Figure 5.3. **Entry rates to tertiary education (2012)**



Note:

1. The entry rates for academic tertiary programmes include the entry rates for professional tertiary programmes.

Countries are ranked in descending order of entry rates for tertiary-type A education in 2012.

Source: OECD (2014a), *Education at a Glance 2014: OECD Indicators*, OECD Publishing, Paris, http://dx.doi.org/10.1787/eag-2014-en.

Participation

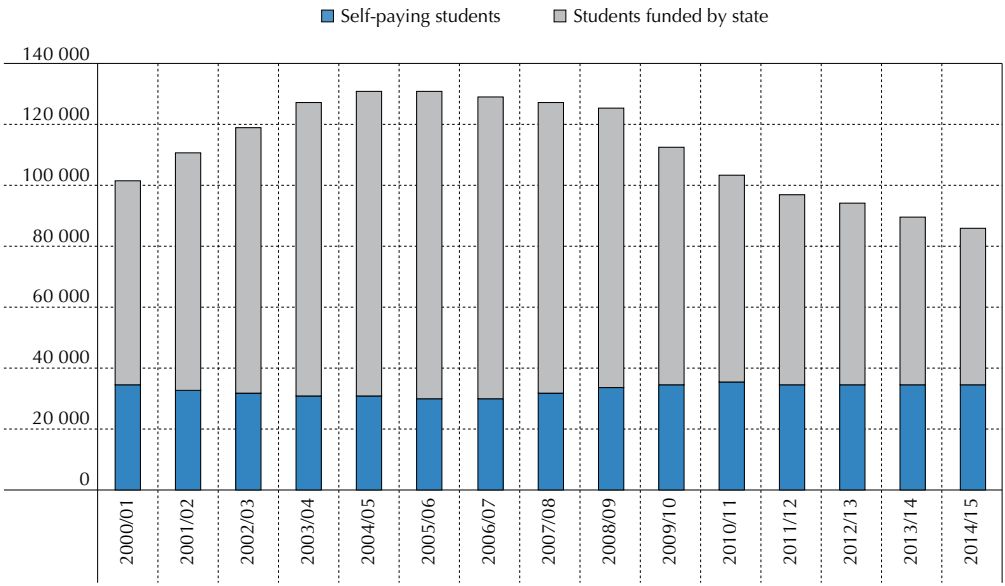
The number of students in Latvia has fallen for several years in a row. In 2013/14, there were 89 671 tertiary students, which was 5% lower than in the previous academic year. Overall, the number of students has fallen by 32% from its peak in the academic year 2005/06. As mentioned in Chapter 1, demographic factors and the intense emigration fuelled by the economic crisis in 2008-10 reduced the numbers of those who could afford to pay for tertiary education studies.

In the academic year 2013/14, 34 546 students, or 39% of the total number of students studying, were funded out of the state budget. The number of subsidised places has thus remained constant, while the number of self-funding students has fallen from 101 000 to 51 000 between 2005/06 and 2013/14 (Figure 5.4).

Although the total number of students has decreased, the number of students in state-funded study positions is intended to grow by 1-2% per year. About 70% of the state-funded study places are in fields reflecting national priorities, based on medium and long-term labour market forecasts. These are high value added and high-cost areas: natural sciences, engineering, manufacturing, building/construction, mathematics, IT and health care, and masters' and doctoral level studies which are important for preparing new teaching staff and scientists (MoES, 2014b, 2015b).

Figure 5.4. **The decline in student enrolment has mostly been among self-paying students**

Student enrolment, by scholarship and self-paying, relative to youth cohort size

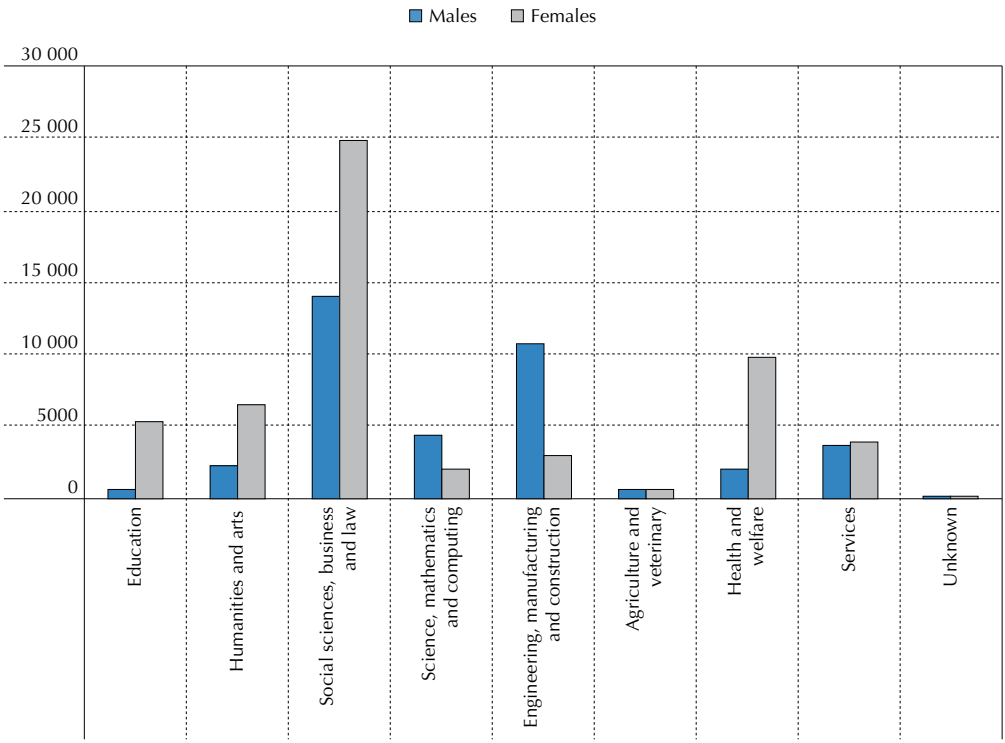


Source: Central Statistical Bureau of Latvia (2015b), "IZG26. Higher education institutions: Studies funded by state budget / for a fee", *Statistics Database*, Central Statistical Bureau of Latvia, http://data.csb.gov.lv/pxweb/en/Sociala/Sociala__ikgad__izgl/IZ0260.px/?rxid=a79839fe-11ba-4ecd-8cc3-4035692c5fc8 (accessed 16 June 2015).

Figure 5.5 shows that significantly more women than men enrol in the fields of education; humanities and arts; health and welfare; and social sciences, business and law than men. In contrast low proportions of women are enrolled in science, mathematics and computing; and engineering, manufacturing and construction. Latvia has set itself the target of increasing the proportion of science, technology, engineering and mathematics (STEM) graduates from the base level of 19% in 2013 to 25% in 2017 and 27% by 2020 (MoES, 2014a).

In addition, in 2012, among students in tertiary-type B programmes, significantly fewer (51%) were studying full time than on average across OECD countries (74%). Part of the explanation for these differences may lie in the fact that state budget places are awarded only to full-time students, with most part-time students paying the full tuition fee themselves.

Figure 5.5. **Enrolment of male and female students in tertiary education, by field of study (2013)**



Source: Eurostat (2015a), "Students enrolled in tertiary education by education level, programme orientation, sex and field of education", *Eurostat database*, Eurostat, http://ec.europa.eu/eurostat/web/products-datasets/-/educ_uoe_enrt03 (accessed 8 June, 2015).

There are also significant gender differences between Latvia and OECD countries in the proportion of students studying full- and part-time in tertiary-type B programmes. In 2012 48% of women and 52% of men in tertiary-type B programmes in Latvia studied part-time, compared with 26% for both women and men in OECD countries.

The differences are less marked when looking at tertiary-type A and advanced research programmes. In 2012, 22% of Latvian students studied part-time in such programmes, compared with the OECD average of 21%. This represented 23% of female students and 22% of male ones in Latvia, against 22% and 20% respectively in OECD countries on average (OECD, 2014a; MoES, 2015b).

Graduation rates

Based on current patterns of graduation, on average across OECD countries with comparable data for 2012, 39% of young people will graduate for the first time from tertiary-type A programmes during their lifetime. Latvia is above the OECD, average with a graduation rate of 43% overall; 59% for women and 28% for men. This gender difference is considerably larger than in many OECD countries (the OECD average rates were 47% for women and 31% for men).

For tertiary-type B programmes, Latvia's graduation rate of 12% is comparable to the 11% average of OECD countries with data available. Again the graduation rate for women (15%) is higher than for men (8%). Latvia's graduation rate from advanced tertiary programmes is 1.2%, considerably lower than the OECD average of 1.6% and well behind countries like Finland (2.8%), Sweden (2.8%) and Switzerland (3.3%) (OECD, 2014a).

Academic staff

In Latvia, academic staff, like other teachers, do not have civil servant status. Their terms and conditions are defined within the law by individual contract and any collective agreements which may apply. Employment contracts are signed by the Rector of the institution, normally for six years but they may be longer (Eurypedia, 2015; MoES, 2015a). Academic staff are appointed on the basis of their education and experience and a doctoral or master's degree is normally a prerequisite for an academic career. The following education is required for the following posts:

- professor: doctoral degree and at least three years of experience as associate professor
- associate professor: doctoral degree
- assistant professor (docent): doctoral degree

- lecturer: doctoral or master's degree
- assistant: doctoral or master's degree.

Prospective lecturers in tertiary education institutions follow further training in their subject field after obtaining their first tertiary education qualification. They usually have to obtain a master's degree, followed by a doctorate (3 to 5 years) in the area they are teaching and researching. For professional programmes, because of the need for practical skills and knowledge, the position of docent, lecturer and assistant can be taken by staff with tertiary education but without an academic degree (bachelor's) as long as they have sufficient practical experience in the work related to the subject being taught (Eurypedia, 2015; MoES, 2015a). Academic staff must undergo 160 hours of professional development activities within their first 6 years.

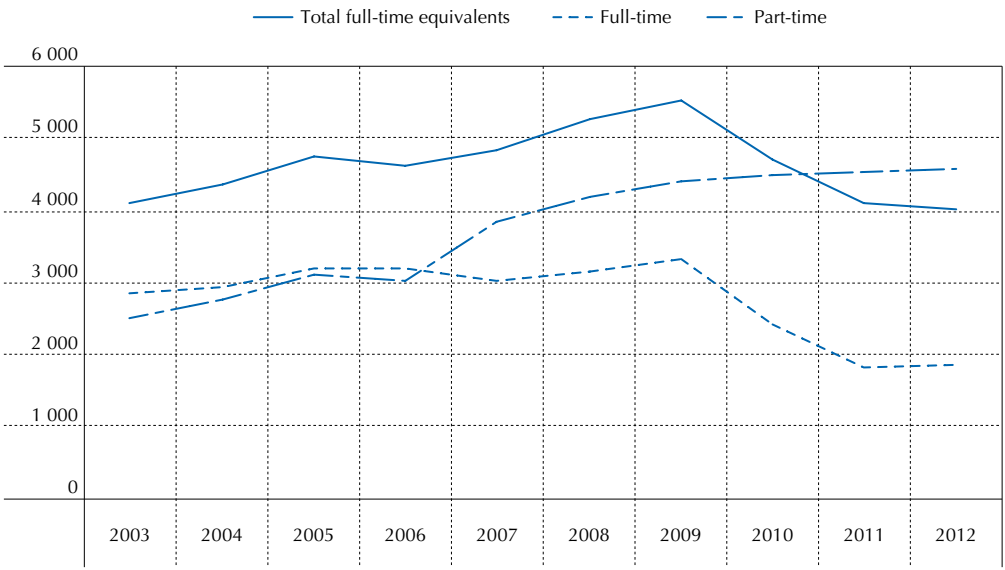
Latvia aims to increase the proportion of academic staff with doctoral degrees from 54% in 2012 to 60% in 2017 and 65% in 2020 (not including colleges) and has made this a priority for European Social Fund (ESF) investment. Between 2007 and 2013 ESF funding has supported 23 master's degree scholarship projects and 28 doctoral degree scholarship projects, as well as supporting young researchers by paying their salaries in projects that have received funding on a competitive basis (World Bank, 2014a; SEDA, n.d.). Some progress has been made since 2012; in 2014/15 58% of staff had a doctoral degree.

A dramatic change has taken place in the working patterns of academic staff since 2007 (Figure 5.6). Up to 2006 the greater proportion of academic staff worked full time but in 2007 part-time staff started outnumbering full-time staff. Figure 5.6 shows the impact of the economic crisis on the number of full-time academic staff which has fallen rapidly since 2009; by 2012 Latvia had fewer than 1 900 full-time staff left. These changes reflect decisions taken in response to severe budget constraints worsened by the decline in student enrolments, which meant less revenue from student fees.

As with other levels of education, a challenge for Latvia in the coming years is the ageing tertiary education workforce. At the tertiary level, 50% of academic staff were 50 years or older in 2013 and the proportion of staff between the ages of 30 and 49 fell slightly to 45%. In recognition of the situation, Latvia has set a target to increase the proportion of academic staff between the ages of 30 and 49 from 45% in 2013 to 50% in 2017 and 55% in 2020 (MoES, 2014a).

Attracting young academic talent to the profession has been a challenge, partly due to low salaries and heavy workloads. MoES has recognised the situation and has initiated a number of reforms that aim to make an academic career a more attractive option. These include plans to raise salaries and to implement of a new tertiary education funding model which will have an indirect, positive impact on institutional salary policy.

Figure 5.6. **Numbers of academic staff, full-time and part-time (2003-12)**



Source: Eurostat (2015b), "Teachers (ISCED 0-4) and academic staff (ISCED 5-6) by employment status (full-time, part-time, full-time equivalence) and sex", *Eurostat database*, Eurostat, http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=educ_pers1t&lang=en (accessed 8 June, 2015).

Internationalisation of academic staff

Economies cannot effectively participate in global markets if their universities remain national. The internationalisation of universities has therefore become a deliberate policy in countries all over the world. The obvious result of these changes include not just the growing mobility of students, but also of academic staff (OECD, 2009; Knight, 2004; Svetlika and Lalić, 2014). The Law on Institutions of Higher Education requires that at least 5% of staff should be international professors, associate professors or lecturers. According to MoES, in 2013/14 an average of 4.8% of academic staff were in this group (MoES, 2014c). The government aims to increase this proportion and has set a target of 5% for 2017 and 7% for 2020 (MoES, 2014a). Plans also call for increases in opportunities for international professional development and exchanges for academic staff at Latvian institutions.

Language policies currently require that foreign academic staff (excluding visiting lecturers or professors) develop proficiency in Latvian and limit instruction in other EU languages. A regulation has been introduced to increase the use of EU and other languages at public tertiary education

institutions. To attract academic staff from abroad (EU and non-EU countries), the intent is to amend regulations to enable and increase the use of EU and other languages at public tertiary education institutions, ease requirements concerning Latvian language competence, and simplify visa and residence permit procedures.

Quality assurance

Over the past two decades, Latvia has put in great efforts to strengthen the quality assurance of its tertiary education system. Latvia ratified the Lisbon Convention in 1997 and was one of the signatories to the Bologna Declaration in 1999. This engagement in the Bologna Process and the development of the European Higher Education Area committed the country to the creation of an external quality assurance system in accordance with the standards and guidelines of the European Quality Assurance Register for Higher Education (EQAR).

Prior to changes implemented in 2013, there were three main elements to the quality assurance processes: 1) MoES licensed study programmes for three years, within which time the tertiary education institution had to seek accreditation of the programme; 2) the Latvian Higher Education Programme Accreditation Commission (AIKNC) accredited study programmes; and 3) the Higher Education Council accredited tertiary education institutions.

The AIKNC, which operated from 1996 to 2012, was a non-profit organisation with tertiary education institutional representation and other tertiary education stakeholders. The AIKNC was funded primarily by the tertiary education institutions undergoing accreditation, but it also carried out tasks under contract by MoES (MoES, 2014c). In 2010 an international assessment concluded that AIKNC was in full compliance with only two of the eight criteria set up by the EQAR. Its deficiencies included gaps in the expert selection procedure, potential conflicts of interest, and insufficient financial and human resources.

The foundation for a new external quality assurance model for tertiary education was enacted through amendments to the Law on Higher Education Institutions in 2011 and was adopted by the Cabinet of Ministers at the end of 2012. Under this new model, the transition from the accreditation of student programmes to accreditation of study directions (subject areas) encompassing a range of study programmes has been introduced. At the same time, the licensing process was merged with the accreditation process for study directions.

In early 2013, responsibility for the accreditation of study directions was assigned to MoES and the AIKNC was disbanded. The new regulations incorporate quality standards consistent with European Standards and Guidelines for Quality Assurance. They define clear evaluation criteria

as well as the rights and responsibilities of the parties involved in the accreditation process. Between May 2013 and March 2014, 247 study directions were considered for accreditation: 218 were accredited for 6 years, 27 for 2 years and 2 were rejected.

Meanwhile, efforts to strengthen the quality assurance system continue. In 2015 regulation was passed transferring the function of accreditation and licensing to the Academic Information Centre (AIC) on the basis of which an independent external quality assurance and evaluation entity will be established and registered in EQAR by 2018.

Science

From a national policy perspective, tertiary education and research in Latvia are governed by separate laws. The Law on Scientific Activity pertains to research and scientific activity, part of which takes place in research institutions distinct from tertiary education institutions. The Law on Scientific Activity also stipulates that it is the duty of tertiary education institutions to perform research activities.

Apart from responsibility for education, MoES also has the central responsibility for the development and implementation of state policy in the area of science and research. The principal unit within MoES responsible for this area is the Department of Higher Education, Science and Innovation. Several other entities play important roles:

- The Latvian Science Council plays a role as a semi-governmental decision-making and expert body. In close co-ordination with MoES, it prepares the draft science budget, makes conceptual proposals for science and technology policy in Latvia and defines priorities for the development of science and research areas. The council is a collegial body of researchers, which works through its expert commissions with responsibilities for advancement, evaluation, financing and co-ordination of scientific research in Latvia.
- The Latvian Academy of Sciences facilitates research in basic and applied sciences, participates in the establishment of the Latvian science policy and advises the government on scientific issues. Members of the Academy are elected prominent scientists.
- The Ministry of Economics co-ordinates economic development policies and has the overall responsibility for elaboration and implementation of innovation policy. Its Innovation Division, hosted in the Industrial Department, is responsible for the elaboration, co-ordination and implementation of legislation, policy documents/programmes/projects, funding system, and co-operation with other related governmental and non-governmental actors in the field of innovation-oriented policies.

- The Latvian Investment and Development Agency aims to promote business development by facilitating more foreign investment, while also increasing the competitiveness of Latvian entrepreneurs in both domestic and foreign markets. It is responsible for the administration of state support programmes, attracting EU structural funds, and implementing a range of research and innovation policy measures.
- The State Education Development Agency ensures co-operation with foreign institutions and units of international organisations in scholarship programmes offered by foreign and international organisations in the field of education and science policy; ensures implementation of international cooperation projects and EU policy initiatives in Latvia in the field of education and science policy; and ensures engagement, selection of and financing for foreign nationals and residents of Latvia for studies, research and participation in international summer schools in tertiary education and science institutions within the framework of international agreements in the sector. In addition it provides the National Contact Point functions for the EU Framework Programme HORIZON 2020 and ensures Latvia's participation in EU joint programmes and joint technology initiatives.

In 2014 there were 91 registered scientific institutions including 46 state-founded institutions (MoES, 2014c). Ten of these were public tertiary education institutions and four were units in tertiary education institutions. Many of the other independent research institutions have historic ties with tertiary education institutions and collaborate with them on various levels (World Bank, 2014a).

Under the Law on Scientific Activity, to be eligible for public funding, a scientific institution – whether a research institute, university, corporation or other body engaged in research and development – must be registered with the State Education Quality Service. To found an institution and receive public funding, it must have at least five people with a doctoral degree working full time in a research function.

There are two main sources of public funding for science in Latvia: the national budget and European Structural Funds. In 2012 state science funding constituted almost EUR 14.7 million, while the EU contribution was EUR 64.5 million. State budget financing is intended to provide base funding for research activities at public tertiary education institutions and public research institutions, as well as to support basic and applied research. Additional funding for research can be generated through competitive research grants and collaboration with enterprises. Funding for doctoral study programmes, calculated according to the general procedure of state funding for study places, is also considered part of science funding at tertiary education institutions (World Bank, 2014a).

Funding from the state budget is only available to state-established scientific institutions listed in the Registry of Scientific Institutions. In 2013, all public tertiary education institutions (with the exception of the National Defence Academy) were represented in the registry either in their own right or through an institution affiliated to some degree with them (World Bank, 2014a). The registry also lists privately founded scientific institutions.

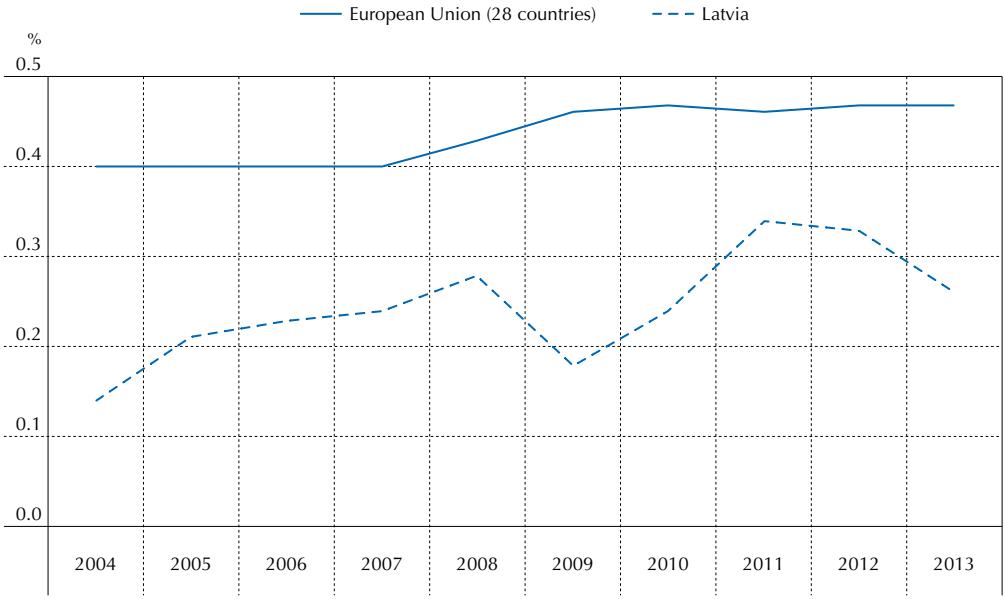
Public funding for research is also available on a competitive basis from the State Research Programme, the Commercially Oriented Research Programme, and the Fundamental and Applied Research Programme. Funding from these sources is available to all institutions registered in the Registry of Scientific Institutions, including privately founded ones. The amount of public funding available is determined by the general availability of resources in public budget (World Bank, 2014a).

The decrease in the state allocation to tertiary education in the past years has correlated with a decrease in the research expenditure of tertiary education institutions (MoES, 2014a). From 2009 to 2013, EU structural funds became the main source of funding for scientific activities at tertiary education institutions. While public base funding for science might be considered insufficient, this issue seems unlikely to be addressed as long as project-contingent science funding is the primary form of financial support for research (World Bank, 2014a).

Research funding from EU structural funds is available for developing scientific infrastructure as well as increasing human resource capacity in research. As mentioned above, the ESF has been used to build Latvia's research capacity by funding scholarships for master's and doctoral students as well as paying young researchers' wages on funded projects (World Bank, 2014a).

The EU has set a target to have 3% of the EU's GDP invested in research and development (R&D) by 2020 (European Commission, 2010). Latvia's national target is less ambitious at 1.5% but it is a long way from meeting it. In 2013, expenditure on R&D was just 0.6% of GDP (OECD, 2014a). While funding as a share of GDP is increasing in many EU countries, the most recent data from Latvia show a decrease (Figure 5.7). Expenditure in R&D in tertiary education stood at 0.24% of GDP in 2007 and then increased to 0.34% after the crisis in 2011 but since 2011 funding has not kept pace with increases in GDP. In fact the share of R&D in tertiary education has returned to the pre-crisis level of 0.24% in 2013 while the EU and OECD and averages were almost twice as high, at 0.47% and 0.46% (in 2011) respectively. The low expenditure on R&D and relatively large network of research institutions means that funds for R&D in Latvia are spread thinly.

Figure 5.7. **Expenditure on R&D in tertiary education as a percentage of GDP (2004-13)**



Source: Eurostat (2015c), "Total intramural R&D expenditure (GERD) by sectors of performance", *Eurostat database*, Eurostat, http://ec.europa.eu/eurostat/en/web/products-datasets/-/RD_E_GERDTOT (accessed 8 June 2015).

Key policy issues

Policy issue 1: System capacity is not aligned with demographic decline, fiscal reality and labour market needs

As well as their implications for economic development and the sustainability of social security systems, demographic trends naturally have an impact on education and training, including tertiary education. The impact of demographic changes on enrolment in education tends to become an issue at times of marked increases or decreases in the relevant age cohort (OECD, 2008a). Increased participation rates across the EU in the last decade have masked the impact of declining younger age cohorts on tertiary education institutions as student numbers have continued to increase. Current projections show a significant decline in the typical age cohort for tertiary education students (20-24 years) over the next 40 years in a majority of EU member states (Kwiek, 2013).

Latvia is at the forefront of this development, as the natural decline in its potential student body has been aggravated by two decades of emigration. Latvia therefore faces a major challenge in aligning the overall capacity of its tertiary education system – institutions, study programmes and human resources – with demographic decline, fiscal reality and the changing demands of the labour market.

Latvia should continue its various initiatives to rationalise institutions and study programmes including through consolidation and promoting collaboration. It should carefully monitor the progress of these efforts. In case progress is too slow and/or insufficient to achieve the systemic realignment of the system's capacity Latvia could consider developing a national framework for the future size and shape of its tertiary education system to provide high-level guidance for further rationalisation of the system.

Student population decline has had little impact on institutions and study programmes

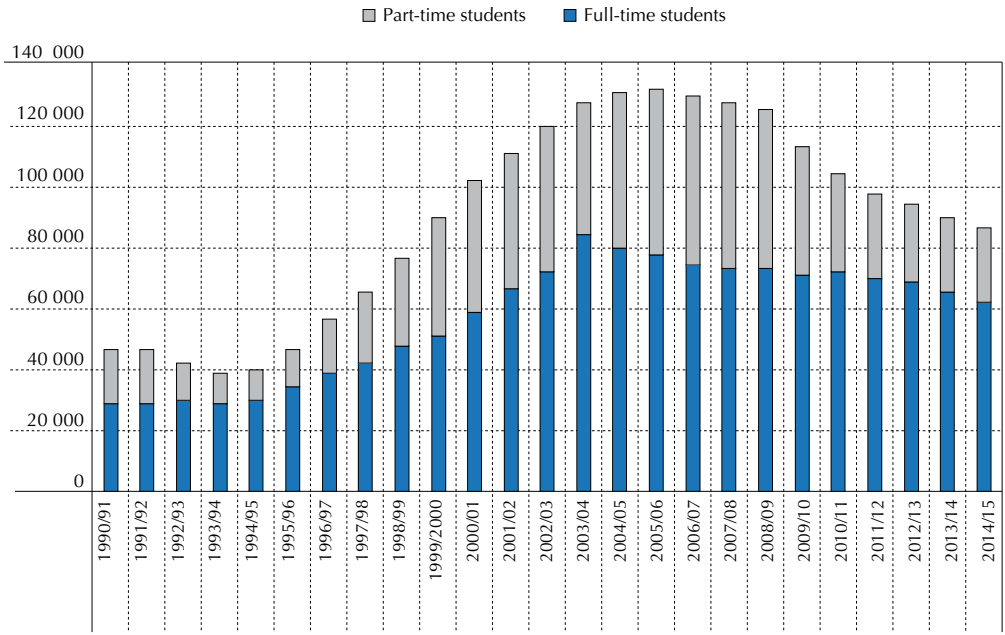
Demography has become a subject of concern in a growing number of countries. The population of some OECD countries is rapidly ageing, especially in Japan, Korea and Southern and Eastern Europe (OECD, 2008a). As discussed in Chapter 1, the combination of two decades of low fertility rates and emigration means Latvia has lost significant numbers of its population in the prime age groups for tertiary education (Hazans, 2013; Lulle, 2013).

Overall, student numbers increased steadily through the 1990s until 2004/05 but have been declining steadily since then (Figure 5.8). Both full-time and part-time enrolments are decreasing but the proportion of part-time students declined especially sharply during the economic crisis, leading to a change in the balance between full-time and part-time students.

Enrolment at state tertiary education institutions has declined by 25%, from 89 644 students in 2004/05 to 56 723 ten years later. The decrease in enrolments has been even sharper in private tertiary education institutions which saw a fall of 45% over the same period, from 32 315 to 17 223 students. Enrolments at state colleges have increased by 47% from 4 571 to 6 733 students and at private colleges by 25% from 4 176 to 5 202.

Following these patterns, the proportion of students in the population as a whole showed a dramatic increase until the mid-2000s and a decline since then. The decline in total student numbers has been steeper than the decline in new entrants, suggesting that in recent years, the number of students leaving before completing a degree may be increasing.

Figure 5.8. **Student enrolment in tertiary education (1990/91-2014/15)**



Source: Central Statistical Bureau of Latvia (2015c), "IZG24. Higher education institutions and colleges (beginning of the school year)", *Statistics Database*, Central Statistical Bureau of Latvia, http://data.csb.gov.lv/pxweb/en/Sociala/Sociala__ikgad__izgl/IZ0240.px/?rxid=a79839fe-11ba-4ecd-8cc3-4035692c5fc8 (accessed 16 June 2015).

There are clear differences between regions in enrolment rates. The Riga region has the highest percentage of students enrolled, reflecting the number and range of institutions there. An analysis of enrolments revealed significant year-on-year variations in some regions which may suggest anomalies in reporting of enrolment by students' residence. Nevertheless, a part of the explanation is likely to be due to differences in socio-economic conditions and students' performance in the national examinations that determine eligibility for places.

Although enrolments have declined sharply, the number of institutions and study programmes has remained relatively constant during the last decade, resulting in a much lower average number of students at each institution (Table 5.2). Changes have occurred in the distribution of enrolments and graduates among fields of study but these have been relatively minor in comparison to the decline in overall enrolments.

Table 5.2. **Number of institutions by legal status and number of study programmes (2004/05-2014/15)**

	2004/05	2009/10	2013/14	2014/15
Total number of institutions of tertiary education	**56**	**61**	**61**	**60**
State institutions of tertiary education	20	19	17	17
Private institutions of tertiary education	16	15	19	18
State colleges	16	18	17	17
Private colleges	4	8	8	8
Total number of accredited study programmes		920	901	936

Source: Central Statistical Bureau of Latvia (2015d), "IZG25. Higher education institutions by legal status", *Statistics Database,* Central Statistical Bureau of Latvia, http://data.csb.gov.lv/pxweb/en/Sociala/Sociala__ikgad__izgl/IZ0250.px/?rxid=a79839fe-11ba-4ecd-8cc3-4035692c5fc8 (accessed 16 June 2015).

In the period from 2001/02 to 2004/05 Latvia developed separate professional tertiary education programmes for the first time. Initially students in three-year professional training programmes at technical schools started their first-level higher professional education in new experimental project-method based programmes. Vocational schools providing first-level professional tertiary education started being counted as tertiary education institutions and colleges in 2003/04. This change resulted in an increase in the number of tertiary-level colleges. This change is reflected in the increase in the number of institutions from 2004/05 to 2009/10.

Improving the alignment of capacity with the realities of enrolment and national goals is a central theme of the Education Development Guidelines 2014-2020. The guidelines call for higher quality and more efficient use of resources. Planned and initiated actions include concentrating the resources for tertiary education institutions through increased collaboration among institutions; joint study programmes and, in some cases, consolidation of study programmes within and across institutions; and various policies and changes in national laws that are aimed to integrate the education system and industry as well as consolidate the research and teaching of the education system (MoES, 2014a).

Growing numbers of international students, but more Latvians studying abroad

The number of students enrolled in tertiary education outside their country of citizenship has sharply increased over the last decades, from 1.3 million in 1990 to nearly 4.3 million in 2011, an average annual growth rate of almost 6% (OECD, 2013). This reflects the expansion of tertiary education systems worldwide and the globalisation of economies and societies.

As countries increasingly benefit from student mobility, the competition to attract and retain students has diversified the map of destinations over the past decade. Latvia has joined this competition and has set the objective of raising the proportion of foreign students in Latvian tertiary education institutions to 6% in 2017 and 8% in 2020 (MoES, 2014a). Latvia has made good progress in recent years and has already reached the 2017 target. In 2014/15, 6.2% of the tertiary student population (5 293 students) consisted of foreign students, which represents an increase of more than 4% over 4 years.

Plans to continue and possibly strengthen this trend and increase the attractiveness of tertiary education in Latvia include the reform of the quality assurance system. Other plans include increasing the number of scholarships for foreign students (MoES, 2014a).

Nevertheless, a considerable challenge for Latvia is that outward mobility continues to considerably exceed inward mobility. In 2012, 6 632 Latvians pursued their tertiary studies abroad while the country hosted 2 757 foreign students and 736 exchange students. One positive sign is that the number of inbound students from within Europe is increasing. Also, while data are not available on the educational backgrounds of young Latvians returning to the country, anecdotal evidence suggests that many of them are returning with tertiary qualifications earned abroad. In this respect, the outflow of students may in the long run contribute to increasing the country's human resource capacity if these students can be encouraged to return and provided there are jobs available.

Insufficient alignment with labour market demands

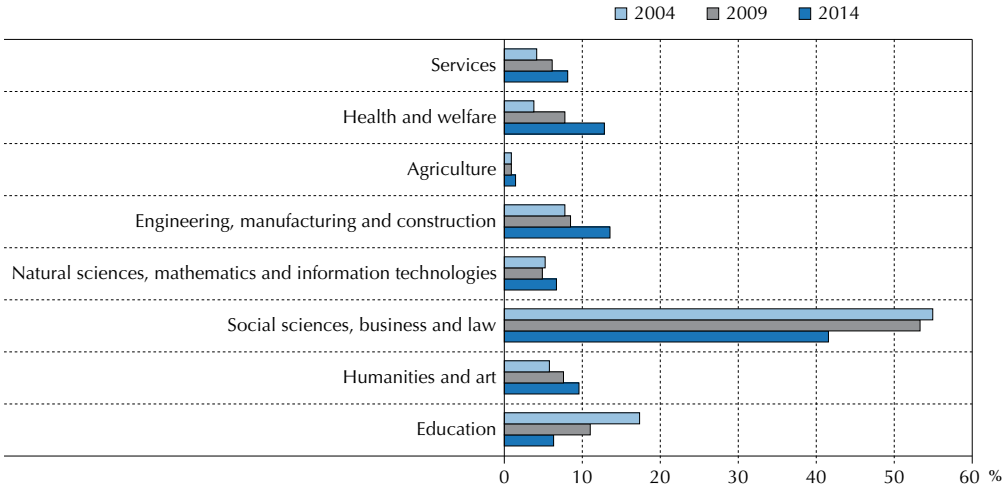
Medium and long-term labour market forecasts for Latvia have stressed the need for more graduates of professional tertiary programmes and in science, technology, engineering and mathematics and the health professions. Recent trends show a gradual realignment in this direction but Latvia still faces a major challenge in adjusting capacity to meet future needs.

In 2013/14, tertiary education institutions and colleges in Latvia offered 901 study programmes in 29 accredited study directions within 8 thematic fields. The largest share of study programmes was in the field of social sciences, business and law. The shares of graduates in each study area reflect the number of study programmes in each field.

Figure 5.9 shows the changes that have occurred in the percentages of graduates in each thematic field in recent years. The most pronounced change is in the declining share of graduates in social sciences, business and law. This is partially the result of fewer free study places being offered in these subjects in recent years.

In line with government priorities, Latvia has seen small increases in the percentages of graduates in STEM-related fields during the last decade. The increased number of free study places in these fields has played its part in this development. The Latvian government however recognises further efforts are needed if Latvia is to achieve its target of 25% in 2017 and 27% by 2020, and ensure the supply of graduates is better aligned with the demands of the labour market. It is making a concerted effort to concentrate free study places in priority areas for Latvia's economy, especially in STEM fields (MoES, 2014a, 2015b). The government aims to increase the proportion of state-funded study positions in STEM fields from 44% in the base year of 2013 to 50% in 2017 and 55% in 2020 (MoES, 2014a) which we agree is an important policy to further match the supply of graduates with labour market needs.

Figure 5.9. **Percentage of graduates, by field of study (2004, 2009 and 2014)**



Source: Central Statistical Bureau of Latvia (2015e), "IZG29. Graduates with degree or qualification in higher education institutions and colleges by education thematic groups", *Statistics Database*, Central Statistical Bureau of Latvia, http://data.csb.gov.lv/pxweb/en/Sociala/Sociala__ikgad__izgl/IZ0290.px/?rxid=a79839fe-11ba-4ecd-8cc3-4035692c5fc8 (accessed 16 June 2015).

In support of these goals, Latvia could consider increasing its efforts to encourage more women to choose STEM fields of study. As in many OECD countries, very few women choose to study STEM subjects in Latvia. Box 5.1 outlines just two examples of the many initiatives taken across OECD countries to tackle this that Latvia could look to for guidance.

As noted earlier, Latvia has a diverse tertiary education sector with a considerable number of private institutions and colleges supplementing the country's public tertiary education infrastructure. Nevertheless, one concern is the high concentration of private-sector capacity in study fields that are not considered national priorities. Enrolments in private institutions are concentrated in the fields of social sciences, business and law. In 2013 private tertiary education institutions and colleges offered 124 of the total 310 study programmes in social sciences, business and law in Latvia, enrolling 47% of the students in this field. They offer few programmes in engineering and manufacturing.

This suggests that state financing and regulatory policies could offer more incentives to the private sector to respond to national priorities. It also raises questions about the sustainability and capacity of small private institutions that depend largely on revenue from tuition fees.

Box 5.1. **Promoting females in STEM-related fields of study, examples from Finland and Australia**

Finland – A group of women and the Federation of Finnish Technology Industries launched an initiative for a technology forum to get more women into the field. The Women In Tech 2013 forum was organised for the first time on 15 October 2013 to bring together men and women with a keen interest in the future of technology and in encouraging and supporting young women to begin and develop their careers in the technology sector. Over 500 university students, university teachers, researchers and company members gathered to the forum to discuss how women could have a larger role in creating success stories in business and technology. Top speakers − women and men working in the corporate world and universities − shared their experiences as leading, visionary experts in the industry.

The Women in Tech 2013 forum was organised by the Federation of Finnish Technology Industries together with significant technology industry companies (Ensto Oy, KONE Oyj, NOKIA Oyj, Microsoft Oy, Wärtsilä Oyj, Outotec Oyj, Tieto Oyj), universities, female student unions and other stakeholders. The next forum will be in 2015. Meanwhile, other Women in Tech activities are ongoing, for example upper secondary school visits by female students and young professionals. More information at the Women in Tech website: www.mytech.fi/women-in-tech.

Box 5.1. **Promoting females in STEM-related fields of study, examples from Finland and Australia** *(continued)*

Australia, Royal Melbourne Institute of Technology (RMIT) – Over the last two years there have been two initiatives to promote enrolments of girls in STEM programmes, supported by the RMIT's College of Science, Engineering and Health (SEH). The college supported a research project titled Gender-Based Discipline Choices in Science and Engineering in conjunction with the Engineering Information Foundation, NY, USA during 2012-13. The project investigated what influences male and female undergraduates in their choice of engineering or science. It explored the idea that STEM programme marketing might be more effective if it equally addressed the different interests of boys and girls. The influence of family and media varied significantly with gender. In particular, girls were more strongly influenced by their family, boys were more influenced by engineering in the media. The project developed hands-on marketing activities with broad appeal to engage boys (smash and crash, science in the media, mastery appeal) and girls (group work, discussion on how STEM helps society, applications related to the human body).

SEH formed a Women in STEM Programmes Working Group that reported to the Academic Development Committee, chaired by Associate Professor Margaret Jollands. Each STEM school nominated a member to the group. A girls-only Power of Engineering programme was run for Year 10 students, and a Girls in Engineering session was run at an RMIT open day. The group assessed STEM marketing initiatives worldwide. The most successful Women in Engineering programmes are characterised by "adapting" – systemic transformation of the institution – and the least successful characterised by "adopting" – focusing on helping female students to cope e.g. study support, peer mentoring, common rooms. The group now advocates a more inclusive approach, with a focus on inclusive teaching in STEM programmes. It has requested a more inclusive name.

Source: OECD (2014b), *Fostering Equity in Higher Education Compendium of Practical Case Studies – Promoting Female Participation in STEM*, OECD Higher Education Programme, OECD Publishing, Paris, www.oecd.org/edu/imhe/Promoting-female-participation-in-STEM.pdf.

Policy issue 2: Inadequate tertiary education funding

Tertiary education is a significant driver of national economic competitiveness in an increasingly knowledge-driven global economy. As such, it is an increasingly important topic on national policy agendas for many countries. Alongside this increased policy focus, many tertiary education systems face serious challenges in maintaining their quality and relevance, increasing their efficiency, and securing equity in the area of tertiary education. New tertiary education financing models are being developed in many European countries in response to these challenges (World Bank, 2014b; OECD, 2008a).

For much the same reasons, calls for the reform of the tertiary education financing model have been growing louder in Latvia. In 2014 Latvia concluded an extensive assessment of the tertiary education financing system led by the World Bank which revealed a number of significant challenges, detailed below. Reform of the system for financing tertiary education is now one of the central priorities of the government of Latvia, and the World Bank study and its recommendations form the basis of the government's priorities for tertiary education reform in 2015 and beyond. The World Bank proposed a "three-pillar funding model" which is likely to increase the quality, internationalisation and labour market relevance of tertiary education, improve access and concentrate resources (efficiency). A positive development therefore is that the model was endorsed by parliament in June 2015 and its implementation was set in motion directly afterwards.

Challenges of the tertiary education funding system

Among the problems identified by the World Bank study was the significant underfunding of the tertiary education system in comparison to most other EU countries. In addition, neither the system of funding through free study places, nor the research funding model create meaningful or appropriate incentives for tertiary education institutions to improve teaching, productivity or internationalisation. They are static and "one-dimensional", merely input-based, lacking two important pillars of funding: performance-oriented funding and innovation-oriented funding.

The model also hinders institutions' efforts to align teaching and research. This finding resonates with one of the key messages the review team heard during meetings with academic staff. They repeatedly shared their concerns about low salaries and high workloads that limit time for research. In response, the new funding model aims to support the alignment of teaching and research.

On academic salaries, the senates of tertiary education institutions determine the principles and rates of pay for their institution, although they may not be less than the minima determined by Cabinet of Ministers' regulation. The government has recognised the need to address low salaries by increasing the minimum wage rate of academic personnel and making other reforms to the wage system. The minimum wage for academic staff is planned to rise from 1.5 times the average wage in the country in the base year of 2012 to 2.5 times the average wage in 2017 and 2.8 times in 2020 (MoES, 2014a, 2014c).

On workloads, both workloads and salaries for academic staff are based on teaching loads. A full-time teaching load is 1 000 hours per year. It is assumed that staff will pursue research within the teaching workload but this is considered a challenge by many academic staff. If an academic staff member is undertaking externally funded research such as an EU project,

tertiary education institutions have the flexibility to reduce teaching loads to allow time for research. However, they cannot do this for academic staff members without externally funded research projects. As a result, these staff may simply not have the time and/or financial means to conduct research.

In addition, the current funding model is administratively burdensome and lacks incentives for institutions to diversify, consolidate or collaborate. These incentives are particularly relevant considering the relatively large and unsustainable network of tertiary education institutions and research institutions.

As mentioned earlier, there are great variations in the pattern of funding between institutions. Private colleges and universities are highly dependent on revenue from tuition fees. The funding patterns for public universities vary according to mission (whether they are research-intensive institutions or primarily teaching institutions), the alignment of their study programmes with national priorities, their ability to compete for international funding, and the extent to which they are able to generate revenue from alternative sources.

Revenue diversification can have a great impact on institutional sustainability. Institutions that depend highly on tuition fee revenue are more at risk from changes in student enrolment. Those that depend primarily on state funding are more at risk from cuts in state funding in periods of economic crisis. The data suggest that some institutions with limited diversity in funding sources are indeed more vulnerable than others to these risks (World Bank, 2014a).

Moreover Latvian tertiary education institutions do not seem to fully use the financial autonomy they have, and their autonomy is not accompanied by sufficient accountability towards external stakeholders (both public and private). Tertiary education institutions are currently not required to publicly account for their balance sheets. Although useful information about general trends in revenue for the tertiary education sector is available in the annual MoES statistical report (MoES 2014a) "the availability of more detailed data on the tertiary education institutions' revenue streams both in private and public sector is limited" (World Bank, 2014a). Information about public institutions' funding is more readily available but the World Bank cites a report that when the consolidated budget reports of public tertiary education institutions are examined, there are concerns about the accuracy of the data, for instance due to under-reported transfers between institutions of tertiary education (Civitta, 2014).

Proposed "three pillar" funding model

The World Bank therefore proposed a "three-pillar" funding model designed to provide a balance between stability, performance and innovation. In this model, stable funding is combined with a performance-oriented component based on performance indicators, and an innovation-oriented component allocated via performance agreements.

- For continuity, the first pillar would mainly consist of a modified version of the study-place model, as its input-oriented approach remains an important element of the state-funding system. It would also include a per capita funding component based on the number of professors or academic staff, to enhance the funding available for basic research and to further align teaching and research funding.
- The performance-oriented pillar would be based on a small number of indicators derived from national strategies and of general relevance for all tertiary education institutions. Part of the allocation would be based on institution-specific indicators related to their profile and strategic development and reflected in the performance agreement.
- The innovation-oriented pillar would provide funding for activities that contribute to targets set in a university target or performance agreement. This pillar also contains funding for research centres of excellence, accounting for research evaluation outcomes and a national strategy for research priorities. The targets incorporate national priorities, and operationalise university profiles and strategies.

While the performance-oriented (Pillar 2) component of the performance agreement is focused on selecting a few relevant indicators specific to the institution's mission, the third pillar should assess more broadly how the institution will contribute strategically to Latvia's tertiary education vision, mission and objectives. As well as teaching and research, these should also extend to all kinds of "third mission" activities like technology transfer and innovation, continuing education, and social engagement (European Commission, 2008).

The second pillar partly rewards and sanctions past performance, whereas the innovation-oriented component provides financial support for future objectives negotiated between individual universities and the ministry (taking into account state goals and institutional profiles). To complement the three-pillar model, the report also addresses the issue of cost-sharing and emphasises that means-tested or need-based financial support can widen access and address equity concerns. Table 5.3 illustrates the main features of the three-pillar model recommended by the World Bank.

Through the World Bank study, Latvia has recently completed a thorough review of the tertiary education financing with extensive engagement of stakeholders from throughout the tertiary education system and civil society. The study is an excellent example of Latvia's use of the independent assessments by international organisations and experts to help frame policy issues and leverage essential reforms. The recommendations

from this process are fully consistent within international best practices and it is very positive that the Cabinet of Ministers has recently endorsed the new funding model. The challenge for Latvia now is to fully design and implement it.

Table 5.3. **Three-pillar model for new financing system**

	Pillar 1: Basic funding	Pillar 2: Performance-oriented funding	Pillar 3: Innovation-oriented funding
Teaching	• Number of study places per field • Cost-oriented weight	• Number of graduates • Number of incoming and outgoing students Institutional indicators	Profile-oriented target agreements teaching + research + third mission
Research	• Number of professors/ academic staff • Cost-oriented weight	• Bibliometric indicator • Third-party funds • Number of PhDs Institutional indicators	Funding of centres of excellence

Source: World Bank (2014c), *Higher Education Financing in Latvia: Final Report*, World Bank Reimbursable Advisory Service on Higher Education Financing in Latvia, World Bank, http://viaa.gov.lv/files/news/24134/lv_hef_r3vsub_190922014_c_final.pdf.

In June 2015 the Cabinet of Ministers endorsed the proposal of MoES to implement the three-pillar funding model. With the support of the tertiary education institutions the second pillar financing was launched in July 2015. The Cabinet passed the regulation by which additional performance-based indicators were introduced in the tertiary education funding system. These indicators will reflect the performance of tertiary education institutions in the area of research and innovation. The funding allocated specifically for the second pillar constitutes EUR 5 million for 2015, EUR 6.5 million in 2016 and EUR 6.5 million in 2017.

Policy issue 3: Concerns about the quality of tertiary education and science

External quality assurance systems are now almost universal across the world, and it is remarkably easy to forget how recent most of the systems and the agencies that operate them are (OECD, 2009). Since Latvia regained independence in 1991 it has aimed to strengthen its tertiary education external quality assurance system but progress has been slow and a recent review found significant challenges to the current system. These include a

lack of efficiency and transparency and a fragmented legal framework. Latvia also lacked a single external quality assurance body with stable funding and adequate administrative capacity.

Establishing an external quality assurance system that meets international standards must therefore be one of the highest priorities for Latvia. A positive development therefore is the founding of the AIC in July 2015 in accordance with the EU standards and regulations. In addition, the planned establishment of the Higher Education Quality Assurance Agency, scheduled to enter the European Quality Assurance Register (EQAR) no later than 2018, is an essential step towards promoting Latvian tertiary education quality, visibility and international recognition.

Weak tertiary education quality assurance system

As noted, Latvia has been pursuing a number of initiatives to strengthen the tertiary education quality assurance system in compliance with the requirements for registration with the EQAR. The country has made good use of international reviews to document the need for the improvement of study programmes. Efforts have been made to identify low-quality study programmes and to use the allocation of state-funded study places as an incentive for institutions to change.

In spite of these recent changes, Latvia recognises the need for further action to develop a quality assurance system that meets the requirements of the EQAR. In November 2014 the Cabinet of Ministers adopted a Concept for the Latvian Higher Education External Quality Assurance System Development (Cabinet of Ministers, 2014). The concept includes a review of the current situation of tertiary education quality assurance in Europe, identifies problems with the current Latvian tertiary education quality evaluation system, examines possible options for a tertiary education quality assurance agency, and recommends the transfer of accreditation and licensing functions to the AIC.

Among the challenges of the current Latvian system identified as the rationale for a strengthened external quality assurance capacity were:

- Efficiency: the lack of a common vision for the university or course of study, quality assurance processes that are in isolation from one another and the lack of a clear quality assurance procedure focused on continuous quality improvement.
- Transparency: the lack of a single, clear and transparent procedure. Licensing and accreditation procedures take place at different times using different procedures that are not comprehensible and transparent to the public.

- Normative and methodological burden: the legal framework is fragmented and rules laid down in various laws, and regulations are not always well co-ordinated.
- Governance: the lack of a common control process. The accreditation and licensing processes need to be reasonable, independent, credible and efficient and to also ensure the quality dimension of the base.
- Monitoring: quality assurance is a dynamic rather than a static process. It should be continuous and not "once in a lifetime".
- Systemic and sustainable action: in the absence of a single external quality assurance body with stable funding and adequate administrative capacity, it is difficult to manage an external quality assurance system and to use resources efficiently.

The Cabinet of Ministers adopted the recommendation to transfer accreditation and licensing functions to the AIC. The aim is to improve the external quality assurance system to operate in conformity with the European quality standards and guidelines and promote the quality, visibility and international recognition of Latvia's tertiary education. The plan is that the National Higher Education Quality Assurance Agency (the transformed AIC) will be set up at the end of 2015 or beginning of 2016 with funding for the state budget. The ESF is to support the initial operations of the quality support services and help strengthen capacity with the aim of gaining entrance to the EQAR by no later than 2018 (MoES, 2014a).

We agree that establishing a quality assurance system that meets international standards must be one of the highest priorities for Latvia. The lack of a system that is fully compliant with EQAR registration undermines Latvia's ability to achieve its goals for the tertiary education system.

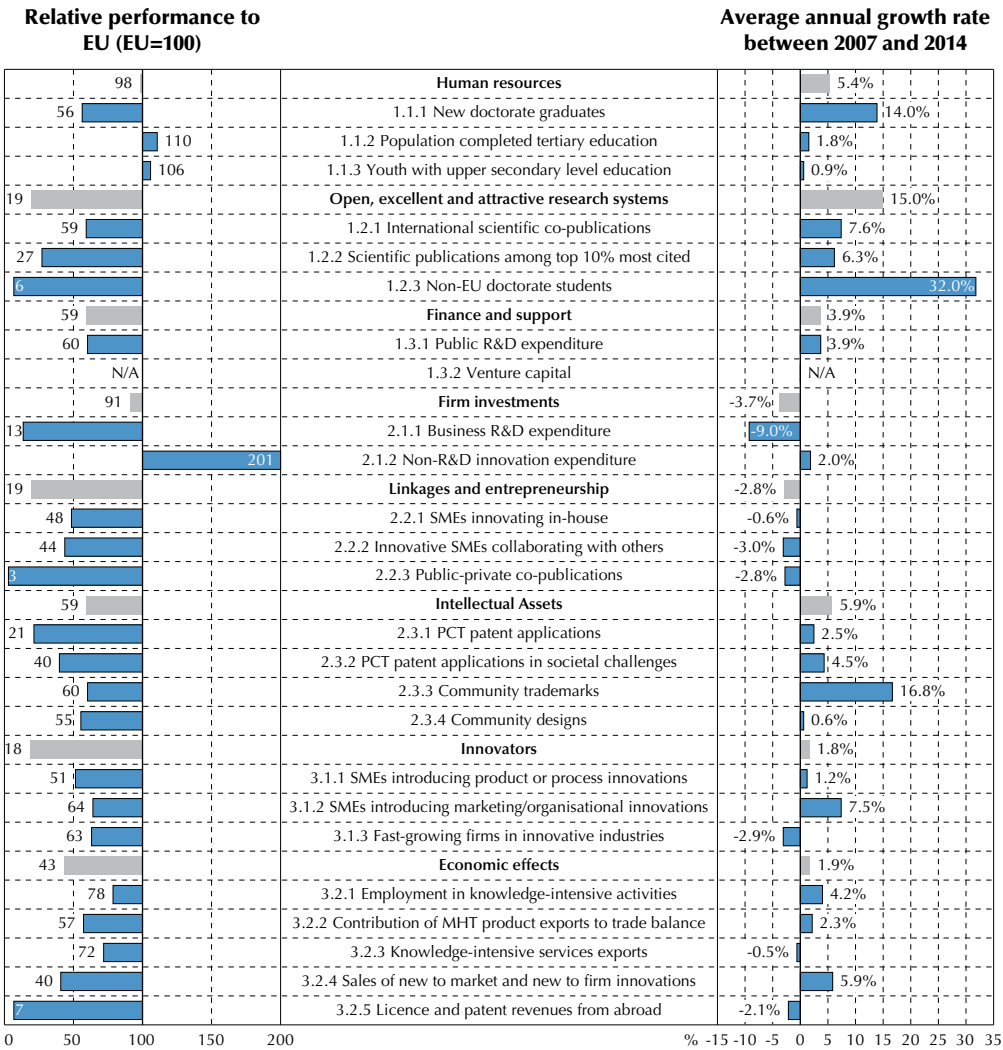
However Latvia has been making incremental efforts to address quality assurance issues for more than a decade and, unfortunately, resistance within tertiary education has blocked the reforms. Further delay is likely to have serious consequences, including for Latvia's relationship with the EU and its ability to compete for students and academic staff in the European tertiary education area and beyond.

Despite some progress, scope for further strengthening science and innovation remains

Latvia is firmly committed to improving the quality and performance of science and innovation as the key the country's future global competitiveness, but faces a number of challenges. The 2015 Innovation Union Scoreboard considers Latvia a "modest innovator" (European Commission, 2015b; Figure 5.10). Latvia performs well below the EU average for most dimensions,

particularly for open, excellent and attractive research systems; linkages; and entrepreneurship and innovators. Its worst-performing indicators, relative to the EU, are public-private co-publications, non-EU doctoral students and license and patent revenues from abroad.

Figure 5.10. **Innovation Index (2014)**



Source: European Commission (2015b), *Innovation Union Scoreboard 2015*, European Commission, Brussels, http://ec.europa.eu/growth/industry/innovation/facts-figures/scoreboards/files/ius-2015_en.pdf.

Latvia's relative strengths are in non-R&D innovation expenditures, population with completed tertiary education and youth with upper secondary level education. Although Latvia performs below the EU average for almost all indicators, its performance is improving for about two-thirds of the indicators. Latvia was ranked the first among EU countries in its rate of improvement over the eight-year period of 2007-14 (European Commission, 2015b).

The findings of the Innovation Index confront issues with Latvia's research system, particularly its openness, quality (excellence) and attractiveness. These data corroborate earlier concerns about the quality and relevance of research in Latvia (e.g. Allik, 2003; Dombrovsky, 2009).

In recognition of the situation MoES conducted an evaluation of Latvian science in 2013. Carried out in collaboration with the Nordic Council of Ministers, it involved self-evaluation reports by scientific institutions and departments of tertiary education institutions and reviews by international expert panels organised by major sectors. Expert panels provided overall assessments of institutions according to a five-point scale: with 5 being the highest ("A powerful international player, leader in its field showing excellent performance") and 1 being the lowest ("A weak local player"). Of the scientific institutes and tertiary education institution departments evaluated, 15 were rated 4 or 5; 33 were rated 3; 77 were rated 2; and 22 were rated 1. Within the various discipline groups the experts concluded that:

- Mathematics and physical science is relatively strong and well formed, although with variable quality.
- Social sciences is much less developed, due to having only two decades of development.
- Life sciences research is mainly at the national level, but there are a few highly evaluated institutions that can operate internationally.
- As in many countries humanities is highly fragmented and focuses on national issues.
- Engineering is also surprisingly fragmented and despite some areas of high quality is largely irrelevant to the international level.
- Agricultural sciences research also focuses on national needs and requires a more international outlook (Technopolis Group, 2014).

Among the issues identified by the experts were the low absolute level of science funding and an over-reliance on temporary EU structural funds which raises questions about the sustainability of the system. They noted fragmentation of the system and concurred with the World Bank study (2014a) on the need for greater integration of education and research. Another serious challenge is the age distribution among researchers, with few young

and many older scholars. With the exception of social sciences, many leading scholars are well above retirement age. The experts noted the new generation of researchers and PhD students will need support to stay in the field.

The experts made a number of recommendations which was endorsed by the government in the document "Implementation of Structural Reforms of the Science System of Latvia by July 1, 2015", endorsed by the Cabinet of Ministers on 19 August 2014 (Cabinet of Ministers, 2014). The principles underlying the proposed reforms emphasise:

- respecting the autonomy of the research institutes
- encouraging self-initiated reforms (in contrast to top-down mandated changes) including potential collaboration, consolidation and merger, making regulatory changes to facilitate change
- using both the state budget and European structural funds to target funds to invest in competitive research institutions and to facilitate change
- aligning state and European funding with the "Smart Specialisation" strategy—a strategy to focus on selected competitive sectors of the Latvian economy with funding used to support excellence, facilitate consolidation, and increase full-time employment (FTE) workloads for scientists/researchers.

The main reform measures include the increase of base funding by 10% for "competitive" research institutes (those ranked 4 and 5) beginning in 2015 and universities as "knowledge centres. On the other hand no state funding will be provided to science institutions ranked 1 and 2 except those that took action to merge or consolidate. These are important measures to consolidate the fragmented science network, while aiming to further promote excellence in science in Latvia.

In addition Latvia aims to increase the workload allowances (FTE) for research supported by external funding beginning in 2016. This is to promote the involvement of scholars in externally funded research, including from private sources where there is much scope for improvement. Co-operation between businesses and academia has been very limited to date in Latvia (European Commission, 2015a; World Bank, 2014a).

As a further action the Cabinet of Ministers in October 2014 endorsed a policy, "Implementation of the Guidelines for Science, Technology Development and Innovation 2014-2020", which includes the outline of "Monitoring System for Smart Specialisation". Actions to be taken include:

- Establish a monitoring system within the framework of the European Innovation Scoreboard with three levels of indicators: European, national, and programme level.

- Link the monitoring system to accountability for research institutions.
- Support the introduction of results/outcomes-based governance of research institutions.
- Name 15 recipients: 11 research institutes (all legal entities, including 2 universities) with scores of 4 and 5, and 4 remaining universities.
- Target funding for excellence and consolidation as well as increasing the workload allowance (FTE) for researchers/scientists to reflect external funding.
- Align all policy instruments to the Smart Specialisation strategy.

We agree these are important measures to consolidate Latvia's fragmented research system and, ultimately, potentially also improve the competitiveness of the country's economy. As with the proposed reforms of the tertiary education funding model, these reforms related to science are critical to the country's future. The country has however moved more slowly than some of the other countries from the former Soviet Union to a more integrated system of tertiary education and research. The actions adopted by the government are important steps forward, but the challenge will be to sustain the momentum and ensure their implementation. Much will depend on the leadership at the national and institutional levels if these reforms are to be successful.

Policy issue 4: Underdeveloped capacity for leadership and sustained implementation

Many OECD countries have undergone profound changes in the way they govern their tertiary education system with greater institutional autonomy, a move towards market type-mechanisms and performance-based financing models being among their key features (OECD, 2008b, 2009; World Bank, 2014a). These developments require fundamental changes in leadership capacity at both the national and institutional levels.

The review however found that the capacity to lead and implement the desired changes at the national level is limited. Challenges include capacity within MoES, whose staff are few; a fragmented governance structure involving seven ministries; and limited capacity for policy analysis and monitoring. MoES should therefore invest in strengthening its own capacity, including ensuring the quality of data monitoring and reporting systems. Latvia should also consider consolidating responsibility for the funding and operation of all tertiary education institutions within MoES. It should also ensure consistent high-level representation of issues related to tertiary education, science and innovation at the level of the Cabinet of Ministers, to ensure co-ordination across the government, especially with the nation's strategies related to economic development.

At the institutional level, institutional autonomy needs to be better matched with public accountability. The limited inclusion of external representatives in institutional strategic planning and management should be resolved, and institutional leaders should pay more attention to building the capacity of the academic and other staff on which the success of reform depends. Proper human resource management should be a priority for institutional leaders.

The need to strengthen strategic leadership capacity at the national level

The World Bank (SABER, 2012) and the OECD (2008b) both agree that moves from government control to "steering at a distance" and performance-based funding models will require fundamental changes in the capacity for leadership at both the national and institutional levels. Box 5.2 summaries several of the best practices in system steering identified by the OECD (2008b) Thematic Review of Tertiary Education.

Countries vary in the way they organise their national-level structures for tertiary education to reflect the characteristics outlined by the 2008 OECD Thematic Review and the World Bank. Some countries carry out these functions within the framework of a ministry which also has responsibility for all levels of education. Other countries have established independent, or "buffer", bodies that are responsible for advising the government on tertiary education policy, allocating resources between institutions, implementing government initiatives and holding institutions accountable for performance. Such bodies also ensure that there is no direct political control of individual institutions (Eurydice, 2008; OECD, 2008a). Whatever the specific structure it is important to have a focal point at the national level charged with responsibility for leading and sustaining tertiary education reform.

The Higher Education Authority of Ireland is one example of an independent body. In contrast to earlier buffer bodies composed primarily of institutional representatives, the authority is composed of distinguished leaders who do not currently have official roles in governing or leading institutions. It also includes international experts.

Latvia's national strategies, structure and finance policy already exhibit many of the characteristics of best practice as outlined by the OECD (Box 5.2). Latvia's key strategy and planning documents reflect progressive thinking on the central role of globally competitive, locally engaged tertiary education institutions in the nation's capacity for innovation and economic competitiveness (see Figure 5.11). And they exhibit thorough analysis and understanding of the demographic, economic, cultural and institutional challenges facing Latvia.

In addition, the government engages a broad range of stakeholders in the policy-development process to support this work, which is important for developing a broad consensus on goals, challenges and the reforms needed. For example, the Rectors' Council provides a means for institutional leaders to participate in the formulation of national policy.

Box 5.2. **Points for future policy development in tertiary education**

Develop a coherent strategic vision for tertiary education:

- Undertake a systematic national strategic review of tertiary education and produce a clear statement of its strategic aims.
- Communicate a vision for tertiary education clearly and effectively so that all relevant parties see the role that they should play within the broader policy framework.
- Draw on a comprehensive advisory body to establish strategic aims for tertiary education.
- Create a body, e.g. a National Council or Forum of Tertiary Education, to assist in integrating strategic leadership, policy planning and co-ordination among the main actors.
- Strengthen this body by inviting international experts to provide a wider perspective on problems faced in tertiary education and examine ways of addressing them.

Establish sound instruments for steering tertiary education:

- Ensure that the capabilities of tertiary education authorities keep pace with changing responsibilities.
- Strengthen tertiary education authorities' capacities in data collection and analysis, policy experimentation and policy analysis.
- Reinforce the steering capacity of tertiary education authorities through the development and administration of financing instruments and the review and monitoring of outcomes.
- Develop steering instruments to establish a balance between institutional autonomy and public accountability. These could be through performance contracts, performance-related funding or targeted funding. Avoid detailed annual reporting requirements in favour of tailor-made strategic forms of accountability.
- Use institutional competition and student choice to help improve quality and efficiency and to achieve stronger performance from the tertiary system.

Source: OECD (2008b), *Tertiary Education for the Knowledge Society, Volume 1, Special Features, Governance, Funding, Quality*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264046535-en.

Latvia has several other essential strengths when considering the strategic leadership of the sector. These include a commitment to develop a more integrated system encompassing tertiary education as well as science and innovation. The proposed reforms in tertiary education financing, quality assurance and science are consistent with best practices within EU and OECD countries, and – if successful – will help ensure the quality and integration of Latvia's tertiary education and science systems.

At the same time, at the national level Latvia has seen frequent changes in governments and Ministers of Education and Science in recent years. Although policies established by the Cabinet of Ministers provide a foundation for consistency over time, frequent changes in government have made it difficult for Latvia to sustain the urgency and momentum of reform. A complicating factor is Latvia's highly fragmented national leadership structure with responsibility for policy development and implementation split between multiple ministries and entities which may have complicated reform efforts (see Figure 5.11).

In addition, the political climate for change in tertiary education funding is difficult as positions are polarised and there is a tendency to reallocate funding only within the overall education budget (World Bank, 2014a).

Latvia also relies heavily on participatory decision making and voluntary co-ordination by engaging multiple stakeholders in important policy decisions. Though such an approach can be useful for reaching consensus and ownership of reforms, critical decisions on matters such as the consolidation of institutions and study programmes, or new financing models, can be blocked by lack of consensus or special interests. This has happened more than once in the past.

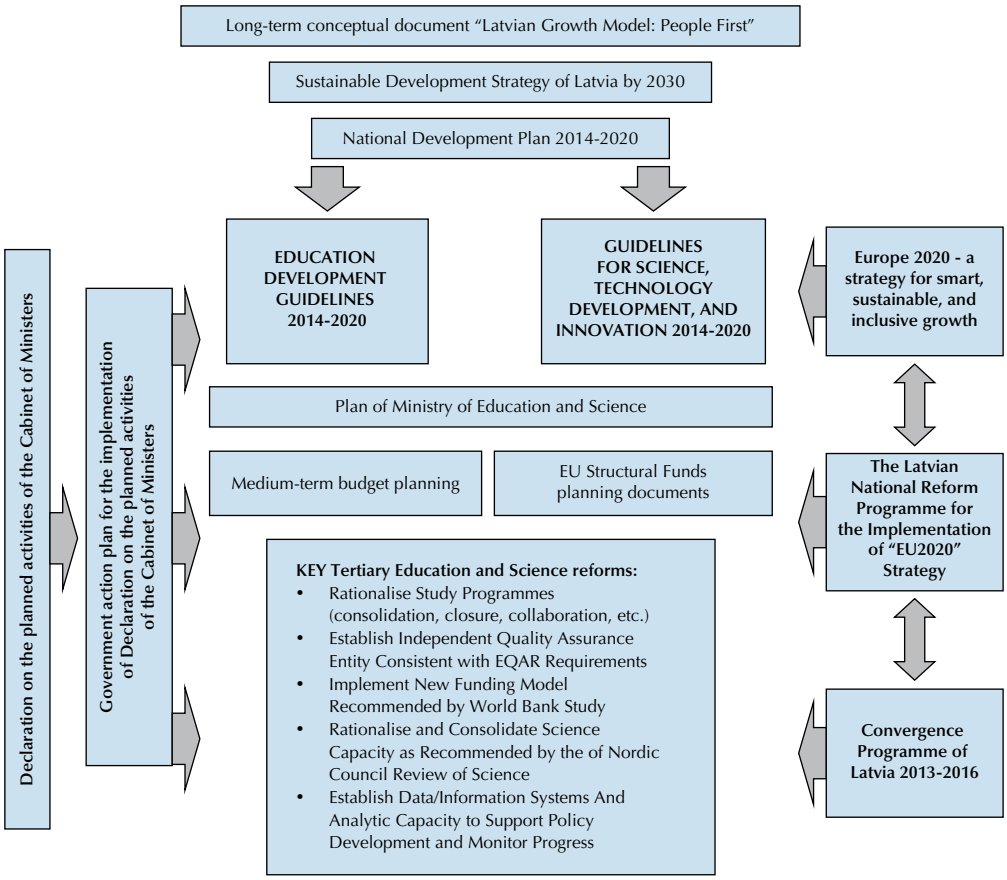
Though Latvia benefits from a highly competent leadership team at MoES responsible for developing and implementing policy for tertiary education, science and innovation as is reflected in the scope and quality of its strategy documents, the team is also relatively small considering the ambitious reforms Latvia has embarked on. Reductions in staffing of MoES during the economic crisis have impacted on its capacity. Furthermore, as recognised by MoES (2014a) itself, its data information systems to support policy development and monitor progress are underdeveloped.

Scope for strengthening institutional leadership capacity and public accountability

The high degree of institutional autonomy and diverse revenue sources of Latvia's institutions potentially provide institutional leaders with the authority and flexibility to make strategic decisions regarding the internal directions of their institutions. Not all institutional leaders seem to seize this

opportunity to the full, however. For example, as discussed, some tertiary education institutions have remained highly dependent on state funding rather than diversifying their resource base. The recent World Bank study also found that there is a lack of clarity over the exact limits of their financial autonomy (World Bank, 2014a). This is an issue that should not be overlooked when designing and implementing the new financing model as the success of this reform will, among others, depend on the capacity of institutional leaders to implement the new model.

Figure 5.11. **Latvia's planning framework for tertiary education and science reform**



Source: Liepina, S. (2014), "Strategic and policy objectives in Latvia higher education: Context for higher education funding reform", Presentation by Sanada Liepina State Secretary MoES for World Bank Higher Education Funding Assessment Stakeholder meeting on initial findings, 12 March 2014.

Furthermore, although Latvian tertiary education institutions have more autonomy than institutions in many other countries, they retain a highly traditional collegial form of governance. In contrast with trends across OECD and EU countries, there is limited involvement of external stakeholders in institutional strategic leadership and management. In contrast, in Denmark more than half the members of an academic senate will come from outside the university, for example from the business sector.

International practice shows us that as countries have redefined the role of the national government, they have also strengthened the management capacity of autonomous institutions (OECD, 2008a). Some countries have moved away from traditional collegial models of institutional governance through senates or similar bodies composed entirely of internal stakeholders (primarily academic staff and students), while others include external stakeholders in the strategic decision-making process. Some countries have adopted dual models in which a council or board of trustees composed of a majority of external stakeholders is responsible for long-term and strategic planning, determining the institutional orientation, and strategic decisions on finance, while senates remain responsible primarily for internal academic policy. In other countries, one body retains both these tasks but increasingly include some external representation (OECD, 2008a; Eurydice, 2008).

The experience of OECD countries is that including an external perspective in institutional governance can strengthen public accountability and the institution's ability to make strategic decisions and bring about needed internal reforms (OECD, 2008a). Some small countries have found it difficult to identify external representatives from a relatively small pool of candidates and especially to identify individuals who do not have potential conflicts of interest. An alternative may be to include prominent international leaders from the country's diaspora in the external representation on university boards.

In addition, the great autonomy Latvian tertiary education institutions enjoy is not sufficiently matched with public accountability. As noted by the World Bank (2014a) "the freedom to make their own decisions enable tertiary education institutes to behave as competitive organisations. However, the rules of the game must be transparent and the system needs to be guided by some national strategies or priorities in order to generate a more effective tertiary education system as a whole". As mentioned above, tertiary education institutions are not currently required to publicly account for their balance sheets. Therefore there is no accurate information on revenue streams and how funds are spent – and importantly whether they are in accordance with Latvia's national strategies and priorities.

This does not help improve the co-operation between businesses and academia or leverage private investment. Co-operation between businesses and academia remains very limited to date (European Commission, 2015a).

Changing this situation will, among other things, require an accurate insight into the quality and relevance of the science base.

Furthermore, the pace and scale of the reforms underway are in a sense unprecedented in Latvia. Though tertiary education finance, quality assurance and the integration of tertiary education and science systems are rightfully at the top of the reform agenda, tertiary education institutions are also "people enterprises" (Knight, 2012). The quality of the people working in these institutions, the way they work with and learn from each other, and are able to respond to and take forward the desired reforms will mean the difference between institutional success and failure (Gordon and Whitchurch, 2007). Developing the proper management of human resources is therefore essential for Latvia.

As discussed above, there are important national-level policy initiatives already underway to raise academic salaries, increase the number of students and potentially future academic staff with doctoral degrees, and attract academics from abroad. These are important measures, especially in light of the ageing academic workforce. MoES should carefully monitor the human resource development in the sector and be ready to take further action if needed. Although this needs further investigation, the Review team formed the impression that human resource management and staff development is quite underdeveloped. For example staff appraisals are seemingly mostly seen as administrative exercises that take place only once every six years when it is time to decide whether or not to extend staff contracts, rather than being conducted on a regular basis and as a means to identify the needs and interest of staff for further professional development and growth.

Recommendations

Recommendation 1: Move forward with the implementation of the three-pillar financing model

A recent assessment by the World Bank revealed a number of challenges of Latvia's tertiary financing model. In response a "three-pillar" tertiary education financing model was proposed. Latvia should carry out its intention to move ahead with the development and implementation of the new financing model.

The pace of implementation will depend on state budgetary commitments. The government has indicated it will increase investments and expenditure on tertiary education. If these additional funds materialise they will provide the opportunity to develop new funding instruments that can be developed with "new money" flowing into the system. Latvia should also ensure that the money freed up by the projected decline in student numbers is used to intensify

and improve the quality of teaching and research. The new model should also be more equitable, moving away from the purely merit-based selection system, and ensuring that promising disadvantaged students who for various reasons are not at the top of the class have access to free study places.

Furthermore, in response to the downward trend of part-time students – which stands at odds with Latvia's lifelong learning ambitions (see Chapter 4), the government should promote part-time study with financial assistance and incentives for employers to invest in the professional development of their employees, which may include part-time university level studies.

Lastly, the new model should be supported by policies and regulations that ensure greater transparency and accountability towards external stakeholders (both public and private) in the way tertiary education is funded and linked to the quality of education and research, and how these relate to developments in larger society. This will help increase the willingness of stakeholders to invest in tertiary education, so that the envisaged added value of tertiary education and research will not just be realised but also demonstrated.

Recommendation 2: Continue improving the quality of tertiary education and science

The review team agrees with the government that establishing an external quality assurance system that meets international standards must be one of the highest priorities for Latvia. The planned established of the Higher Education Quality Assurance Agency (the transformed AIC) and its scheduled entrance to the European Quality Assurance Register no later than 2018 are essential steps towards promoting tertiary education quality, visibility and international recognition. With EU funding guaranteed to support this process, success will depend on the leadership of the government and within the Higher Education Quality Assurance Agency to drive through the necessary reform measures.

The parallel introduction of the new tertiary education financing model will act as a powerful instrument that the government should use to offer incentives for the desired improvements in the quality, labour market relevance and internationalisation of education.

We further fully support the recent measures to concentrate government funding for research on those institutes or departments that have been assessed as strong local players, strong international players or excellent international players. The decision to stop funding satisfactory or weak local players will help consolidate the fragmented science network, while aiming to further promote excellence in science. In addition Latvia should move ahead with the implementation of the "Monitoring System for Smart

Specialisation" which includes important measures for consolidating and further concentrating Latvia's fragmented research system and ultimately contributing to improving the competitiveness of its economy.

Recommendation 3: Continue efforts to realign system capacity with demographic decline, fiscal reality and labour market needs

Latvia should continue its various reform initiatives that support the rationalisation of the tertiary education system through consolidation of institutions and study programmes, promotion of collaborations, etc. The progress of these efforts should be carefully monitored. In case progress towards a sustainable tertiary education system is found to be too slow and/or insufficient, Latvia should consider developing a national framework for the future size and shape of its tertiary education system that is to provide guidance for further rationalisation. Latvia may need to consider further consolidation – if not closure – of institutions. If it relies primarily on the initiative of individual institutions to undertake these changes, there is no guarantee that the resulting configuration of institutions will be in the best interests of the country.

A national framework could set forth criteria for consolidation and reconfiguration, including such questions as:

- geographic distribution
- profile or mission: strengthening capacity at the professional tertiary level, concentrating capacity for globally competitive research and doctoral (science degrees), maintaining mission differentiation
- collaboration and alliances: joint study programmes, joint appointments of academic and research staff, mobility of students between and among institutions
- shared services: sharing non-academic support services related to financial and management functions and human resources.

Recommendation 4: Strengthen the capacity for strategic leadership and management

Latvia has embarked on several ambitious reforms. Their success will depend on the national-level capacity to lead and sustain change and on the strategic leadership and management capacity at the institutional level to implement the desired changes. Whatever reform and policy initiatives follow should reinforce the current policy direction to integrate policy related to tertiary education, science and innovation. Finance policy plays an important role in this. Pillars II and III of the new tertiary education financing model, as well as EU structural funds should be used to leverage change.

MoES may also need to reconsider its own capacity to lead and implement these far-reaching reforms. Although we recognise the high-level capacity of some of its staff leading these reforms, their numbers are few. Strengthening MoES's capacity for policy analysis and development, and monitoring progress towards national objectives is a precondition for success. This includes ensuring the quality of data monitoring and reporting systems.

In addition Latvia should reconsider how tertiary education and science are governed at the national level. First, Latvia should consider consolidating responsibility for the funding and operation of all tertiary education institutions (with the exception of those institutions related to national defence and security) within MoES. It should be possible to continue the relationships some institutions need (e.g. health, agriculture, and the academies for arts, culture and music) to determine the number of state budget places, provide opportunities for work-based learning/clinical experience, or support research without maintaining the current fragmented approach to overseeing and funding institutions.

Latvia should also ensure consistent high-level representation of issues related to tertiary education, science and innovation at the level of the Cabinet of Ministers to ensure co-ordination across the government, especially with the nation's strategies related to economic development.

At the institutional level, institutional autonomy needs to be better matched with public accountability. Publicly accountability for their balance sheets is a case in point. Latvia should also consider the inclusion of external representatives in institutional strategic planning and management. To expand the pool of potential external stakeholders, international representatives could be included, for example internationally recognised academicians or researchers or civic leaders from the Latvian diaspora.

Lastly, institutional leaders should not overlook the capacity of the people on which the success of reform depends. Developing the proper human resource management should be a priority and not limited to attracting talented academics from abroad.

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Annex A

The authors

A specific OECD Review team was formed to undertake the analysis and the development of concrete policy recommendations. The team is composed of OECD analysts and high-level international experts.

External experts

Aims McGuiness is a Senior Associate with the National Center for Higher Education Management Systems (NCHEMS), a private non-profit policy center in Boulder, Colorado. Prior to joining NCHEMS in 1993, he was director of higher education policy at the Education Commission of the States. Before joining ECS in 1975, he was executive assistant (chief of staff) to the Chancellor of the University of Maine System. Over the past 35 years he has advised governments all over the world in their higher education reforms. The countries he has worked in include Australia, the Dominican Republic, Egypt, Estonia, Greece, India, Israel, Ireland, Kazakhstan, Latvia, Lithuania, the Republic of Korea, Japan, Malaysia, the Russian Federation, Turkey and the United States. Aims has authored several publications on state higher education policy, university systems and governance and holds an undergraduate degree in political science, an MBA, and a PhD in social science.

Lorna Unwin is Professor Emerita at the Centre for Learning and Life Chances in Knowledge Economies and Societies (LLAKES) of the Institute of Education, University of London in the United Kingdom. Lorna started her career in journalism and then taught in further and adult education. From 2008 to 2012, Lorna was Deputy Director of the Economic and Social Research Council-funded LLAKES Centre and managed its strand of research on learning environments, knowledge transfer and innovative pedagogy in the context of the regeneration of city-regions. She was Chair of the Commission of Inquiry into the Role of Group Training

Associations from 2011-2012 and academic adviser to the Commission on Adult Vocational Teaching and Learning from July 2012 to March 2013. Lorna has authored several books and has been involved in both teaching and research in a number of European countries, Singapore and the United States, and contributed to the OECD Systemic Innovation in Vocational Education and Training study for the country report on Australia. Lorna holds several degrees including a PhD, MPhil and BA. She has been awarded the Order of the British Empire in 2014 for services to vocational education and training.

OECD Analysts

Marco Kools is a Policy Analyst at the OECD Directorate for Education and Skills. He currently leads the OECD-Latvia Education and Skills Accession Review, the project Transforming Schools into Learning Organisations and working on a review of the education system of the Netherlands. He previously worked on education policy reviews on Latvia, Sweden and Wales, the Innovative Learning Environments project and led the development of the Education Today 2013 publication. Prior to joining the OECD in 2012, Marco worked with UNICEF in the Solomon Islands, Laos and at the UNICEF Innocenti Research Centre in Italy. Before that he for several years worked in the field of education in the Netherlands, where he in 1999 also started his career as a teacher. Marco holds several degrees including an MBA and a BSc in Educational Sciences, and is currently pursuing a PhD in Public Administration.

Anna Pons is a Policy Analyst at the OECD Directorate for Education and Skills. She is currently involved in the OECD Accession Reviews of Colombia and Latvia. Anna has co-ordinated or contributed to reviews of the effectiveness and equity of a wide range of school systems. She is also co-author of the OECD thematic report Equity and Quality in Education. Previously, Anna contributed to the work on competition policy, public integrity and transparency. Prior to joining the OECD, Anna had worked for the Higher Education Commission of the Government of Catalonia and the private sector. Anna holds a BA in Economics and a BA in Political Science and a Master in Economics and Public Policy.

Hiroko Ikesako is a research assistant at the OECD Directorate for Education and Skills. She currently works on the OECD-Latvia Education and Skills Accession Review. She was previously involved in the OECD Education and Social Progress project. Hiroko holds several degrees including an undergraduate degree in Human Behavioural Science and master's degrees in International Education Policy and Educational Research Methodology.

Désirée Wittenberg is a research assistant at the OECD Directorate for Education and Skills. She currently works on the OECD-Latvia Education and Skills Accession Review and has previously contributed to the OECD report Teacher Remuneration in Latvia: An OECD Perspective and the OECD Education Policy Outlook project. She previously worked at the European Centre for Government Transformation at the College of Europe and at the Hamburg Institute for Educational Monitoring. Désirée has a MA in European Political and Administrative Studies and degrees in European Studies.

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Chapter 1. Latvia and its education system
Chapter 2. Early childhood education and care in Latvia
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