Chapter 1

School education in Denmark

This chapter presents an overview of the political, economic, social and demographic context in Denmark. It also provides a brief description of the Danish school system for international readers. It presents evidence on the quality and equity of the Danish school system and describes current policy priorities and recent developments, including the 2014 reform of the Folkeskole, the introduction of a new framework for the utilisation of teachers’ working time, and the policy of inclusion of children with special educational needs in the regular school system.

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.
Context

**Geography and population**

Denmark – not counting the self-governing Faroe Islands and Greenland – covers about 43 000 km² (that is ten times smaller than Sweden and eight times smaller than Germany) and consists of the Jutland Peninsula and 391 islands, most notably Zealand (Sjælland), Funen (Fyn), Lolland-Falster and Bornholm. The Jutland Peninsula (including Vendsyssel-Thy) accounts for 69% of Denmark's total area (Statistics Denmark, 2015a).

In January 2015, the country had a population of 5.7 million people with over one million living in the capital Copenhagen and just over half a million living in the three other major cities Aarhus (261 570), Odense (173 814) and Aalborg (110 495). Population density in Denmark is relatively high compared to other European countries with 131 persons per km². In the other Nordic countries, population density is considerably lower, at 17 persons per km² in Norway, 18 persons per km² in Finland and 24 persons per km² in Sweden (Eurostat, 2016b; Statistics Denmark, 2015a).

Since 1970, Denmark has seen a slow, but steady increase in the size of the population as the number of births has been higher than the number of deaths and the number of immigrants has been higher than the number of emigrants (population growth rate of 0.4% in 2007 and in 2012, OECD, 2015a) (Statistics Denmark, 2015a). While the Danish population has been growing in size, it has also been ageing. Between 2004 and 2014, the share of the elderly population aged 65 or above increased from 15.0% to 18.2%, while the share of young people aged less than 15 decreased from 18.8% to 17.4% in the same period (OECD, 2015a; OECD, 2015c). Almost one in four Danes is now over 60, while this was only the case for one in five in 2000 (Statistics Denmark, 2015a).

Concerning the school-age population, Denmark has had a slightly different trend than other EU or OECD countries since 1990, but today shares the experience of a declining school-age population. As can be seen from Figure 1.1, the number of school-age children has fluctuated more in Denmark than across the OECD and EU27 area.

Between the early and the mid-1990s, the number of children aged 6-16 (the age bracket for compulsory education in primary and lower secondary education) declined sharply, but from the mid-1990s until 2005 it increased again steeply and above 1990 levels (see Figure 1.2). Since then, the school-age population has again been slowly decreasing and outside the capital area of Copenhagen only a few municipalities have experienced growth in the number of school-aged children over the last years. Between 2008 and 2014, the number of 6-16 year-olds dropped by 4.5%, on average across municipalities, and in some municipalities by close to 30% (Statistics Denmark, 2016a, 2016b; Houlberg et al., 2016). According to demographic forecasts, this development is likely to continue in the years to come, even if the trend may reverse again in the long run as the number of 0-4 year-olds has started to grow again (see Figure 1.1) (OECD, n.d.). These demographic changes continuously challenge educational planning to adjust school capacities to the changing number of students.
In 2014, immigrants and their descendants made up 11.6% of the total Danish population. The largest group originated from Turkey, followed by Poland, Germany and Iraq. The level of immigration is, however, relatively low when compared to countries such as neighbouring Germany and Sweden (Statistics Denmark, 2015a). Students with an immigrant background similarly made up 10.7% of all students in public primary and lower secondary education (Statistics Denmark, 2016c).

Table 1.1 provides some statistics about the average 15-year-old in Denmark. The year 2000 comprises 69 000 boys and girls, with boys slightly outnumbering girls.
1. SCHOOL EDUCATION IN DENMARK

Denmark is a comparatively wealthy country by OECD and European standards. In 2012, the Danish GDP per capita (at purchasing power parity, PPP) was the tenth highest in the OECD area, at 115.6% of the GDP per capita of the OECD area as a whole and at 116.1% of the Euro area as a whole. Economic development in Denmark has, however, been somewhat stagnant. Between 2002 and 2012, the Danish economy increased at an average growth rate of only 0.36%, compared to 1.11% in the Euro area and 1.72% in the OECD group of countries. Denmark was one of only five countries with an annual growth rate below 1% within the OECD. The financial and economic crisis has not left Denmark untouched and GDP per capita decreased by 0.8% in 2008 and by a historic 5.7% in 2009 (OECD, 2014a), but after five years of slow recovery, the Danish economy seems to be picking up: GDP grew by 1.8% in 2015 and growth is expected to remain at just under 2% in 2016 and 2017, supported by investment and a pick-up in world trade (OECD, 2015f).

The Danish labour market has not yet fully recovered from the financial and economic crisis that started in 2008

The employment rate for Denmark for the population aged 15 and over fell from 62.5% in the 4th quarter of 2007 to 59.1% in the 4th quarter of 2014, and is projected to increase only slightly to 59.8% by the 4th quarter of 2016. The current job gap – that is the difference

### Table 1.1. The average Danish 15-year-old in 2015

<table>
<thead>
<tr>
<th>Origin (%)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Immigrants</td>
<td>3</td>
</tr>
<tr>
<td>Descendants</td>
<td>8</td>
</tr>
<tr>
<td>Danish origin</td>
<td>89</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Siblings (%)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lives together with 0 siblings</td>
<td>19</td>
</tr>
<tr>
<td>Lives together with 1 siblings</td>
<td>49</td>
</tr>
<tr>
<td>Lives together with 2 siblings</td>
<td>25</td>
</tr>
<tr>
<td>Lives together with 3 siblings</td>
<td>6</td>
</tr>
<tr>
<td>Lives together with 4 siblings and over</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Housing (%)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lives in one-family houses</td>
<td>67</td>
</tr>
<tr>
<td>Lives in apartments</td>
<td>20</td>
</tr>
<tr>
<td>Lives in terraced houses</td>
<td>12</td>
</tr>
<tr>
<td>Lives with both mother and father</td>
<td>72</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>School (%)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Goes to public primary and lower secondary school (Folkeskole)</td>
<td>72</td>
</tr>
<tr>
<td>Goes to private school</td>
<td>16</td>
</tr>
<tr>
<td>Goes to continuation school</td>
<td>11</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Leisure (%)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Plays computer games daily</td>
<td>59</td>
</tr>
<tr>
<td>Does sports</td>
<td>23</td>
</tr>
<tr>
<td>Never does sports</td>
<td>9</td>
</tr>
<tr>
<td>Streams music</td>
<td>70</td>
</tr>
<tr>
<td>Plays a musical instrument</td>
<td>26</td>
</tr>
</tbody>
</table>

Note: The continuation school (Efterskole) is a Danish independent boarding school for students between 14- and 18-years-old. Students can choose to spend one, two or three years to finish their lower secondary education before enrolling in upper secondary education. Besides normal compulsory subjects, continuation schools offer different profiles and subjects, such as sports, the arts, entrepreneurship and citizenship.

in the share of the population aged 15 years and over that is currently employed with pre-crisis employment levels – is still 3.3 percentage points and Denmark has yet to regain its pre-crisis employment rate (OECD average: 1.4 percentage points, EU15 average: 2.5 percentage points). This post-crisis reduction in employment is largely related to an increase in unemployment, from 3.6% in the 4th quarter of 2007 to 6.3% in the 4th quarter of 2014. However, the unemployment rate is still lower than the OECD and the EU15 averages (OECD average: 5.5% in 4th quarter 2007 and 7.1% in 4th quarter 2014; EU15 average: 7.3% in 4th quarter 2007 and 11.4% in 4th quarter 2014). Youth unemployment peaked at over 14% in the years following the financial and economic crisis, but has since fallen again (11.2% in 4th quarter 2014). However, youth unemployment remains higher than before the crisis (6.8% in 4th quarter 2007), even if it is still lower than the OECD and EU28 averages (14.7% and 21.5% respectively, in 4th quarter 2014). The percentage of young people aged 15-29 who are neither employed nor in education or training – the so-called NEET rate – has increased since 2007, but remains comparatively low (OECD, 2015g). In 2014, 11.5% were NEET in Denmark, compared to 15.8% on average across OECD countries (OECD, 2015c).

**Inequality and poverty**

As illustrated in Figure 1.3, Denmark has the lowest level of inequality in disposable income among OECD countries for which data are available. The Gini coefficient, a common measure of income inequality that scores 0 when everybody has identical incomes and 1 when all the income goes to only one person, stands at 0.249. This compares to 0.315 on average across OECD countries. The gap between the average income of the richest and the poorest 10% of the Danish population is also comparatively low. The richest 10% earn about 5 times more than the poorest 10%, compared to almost ten times more on average across OECD countries. Nevertheless, as in many other countries, income
inequality has been on the rise in Denmark. Between 2007 and 2011, incomes in real terms at the top increased while incomes at the bottom fell (OECD, 2015e).

Poverty in Denmark is also very low. Only about 1 in 20 people in Denmark is affected by poverty defined as the share of people living with less than half the median income in their country annually (OECD average: about one in ten people). The financial and economic crisis did not affect poverty in Denmark as it did in other countries. When measured in terms of “anchored” poverty, i.e. when fixing the real low income benchmark to pre-crisis levels, the poverty rate actually decreased by 0.4 percentage points between 2007 and 2012 (OECD, 2015e). Only a small proportion of Danish children (6.3%) fall below the country’s relative poverty line, but those who do, fall almost 30% below that line, much more than in many other countries (UNICEF Office of Research, 2013).

**Governance and administration**

**The Local Government Reform of 2007**

Denmark reorganised its public sector through a Local Government Reform in 2007. This reform reduced the number of municipalities from 271 to 98 and abolished the 14 counties replacing them with five regions (see Annex 1.1). Except for some smaller islands, most of the 98 municipalities have a minimum size of 20 000 inhabitants. The reform also redistributed responsibilities from former counties to municipalities, leaving the municipalities responsible for most welfare tasks, and reduced the number of levels of taxation from three to two as regions were not granted the authority to levy taxes. Regional revenues consist of block grants and activity-based funding from the central government and the municipalities. In addition, to ensure that the local government reform would not result in changes in the distribution of the cost burden between the municipalities, the grant and equalisation system was reformed to take into account the new distribution of tasks (Blöchliger and Vammalle, 2012) (see Danish Ministry for Economic Affairs and the Interior, 2014, for further details on governance). The reform sought to primarily improve the quality of municipal services, but also to address efficiency concerns (e.g. by creating economies of scale). Many of the 271 municipalities that existed prior to 2007 were considered too small to provide effective local services, in particular in the health sector.

Since the local government reform, municipal responsibilities include all of the following:

- social services
- childcare and compulsory education, including special needs education and special pedagogical assistance for small children
- special needs education for adults
- preventive health care and rehabilitation and long-term care for the elderly
- nature and environmental planning
- local business services and promotion of tourism
- participation in regional transport companies and maintenance of the local road network
- libraries, schools of music, local sports and cultural facilities
- and the responsibility for employment, shared with the central government.

The new regions took over the responsibility for health care from the counties, including hospitals and public health insurance covering general practitioners and specialists. In addition, the regions are responsible for regional development and the operation of highly
specialised social services (e.g. special needs education for children with functional physical and mental impairments, and secure institutions for juvenile offenders).

The central government was given a clearer role in overseeing efficiency in the provision of municipal and regional services. Employment services became a shared responsibility between the central government and the municipalities. Tax collection was transferred to the central government as was part of collective transport and road maintenance. The central government assumed a stronger role in nature and environmental planning. Finally, responsibility for culture was transferred to the central government (in practice, subsidising a number of private cultural institutions of national character) (Blöchliger and Vammalle, 2012; Houlberg et al., 2016).

Regarding responsibilities for education, the local government reform transferred the responsibility for general upper secondary education from the counties to the central state. As vocational education was already a state task, the central state has been responsible for all upper secondary education since the reform. Upper secondary schools generally have the status of self-governing institutions. The reform allocated full responsibility for both mainstream and special needs compulsory education to the municipalities to facilitate a more effective use of resources (Houlberg et al., 2016). Municipalities that do not have sufficient capacity to offer special needs education rely on special needs education organised through the regions.

**Multi-party politics**

Danish national governments are often characterised by minority administrations that rely on the informal help of one or more supporting parties. This means that Danish politics is largely based on consensus with parties often striving for broad coalitions on important issues and decisions. Since 1909, no single party has held a majority in parliament.

Political authority in the municipalities lies with the municipal council consisting of 9 to 31 councillors. The councillors are elected for a fixed four-year term on the basis of a proportional voting system. The head of the council is the mayor, who is elected by and among the local councillors (Houlberg et al., 2016; Statistics Denmark, 2015b).

**Public finances**

**A fiscally highly decentralised country**

In 2011, the sub-central share of total public expenditure amounted to 62.8%, compared to 31% on average across OECD countries. The sub-central share of revenues was 28.9% (OECD average: 15%) (see Figure 1.4) (OECD, 2013a). The financial framework on the overall tax and expenditure levels for all local authorities is decided annually between the Ministry of Finance and Local Government Denmark (KL/LGDK), the association of Danish municipalities. For 2014, the frame for municipal service expenditures was agreed to be DKK 230.5 billion. Annual agreements do not set parameters for individual municipalities, but LGDK co-ordinates the budgeting processes of individual municipalities to keep the collective budget of all municipalities within the agreed limit.

Local expenditures by municipalities are mainly financed through local taxes and general grants from the central government (71% and 26% respectively, of the total municipal revenues in 2014). General grants are distributed to individual municipalities through the Ministry of Social Affairs and the Interior according to an equalisation mechanism to adjust for socio-economic differences between municipalities (e.g. considering differences in tax
base and demography). Within the overall framework of national legislation and the annual financial agreement, municipalities are autonomous to decide about the allocation of resources between different public services according to their needs (see Country Background Report for further details, and Chapter 2 for an analysis of school funding) (Houlberg et al., 2016).

Public finances under pressure

Like in many other countries, increasing social expenditures and decreasing tax revenues as a result of the financial and economic crisis have put pressure on public finances in Denmark, leading to a public budget deficit between 2009 and 2013. However, the public deficit remained one of the lowest among European countries and, in 2014, the deficit turned into a surplus again. Only three other EU countries recorded a budget surplus in that year, Germany, Estonia and Luxembourg. A surplus or a deficit on public finances impacts the level of public debt and, therefore, a country's future scope for fiscal policy and economic development. In 2014, public debt in Denmark amounted to 45.2% of GDP, compared to 86.8% in the EU28 and 91.9% in the Euro zone. Denmark, therefore, complied with the criteria of the European Economic and Monetary Union that prescribe that the public deficit of EU member countries must not exceed 3% and that public debt must not exceed 60% of GDP (Eurostat, 2016a).

In 2012, the Danish parliament introduced multi-annual expenditure ceilings for the central government, municipalities and regions through a budget law (Act no. 547). For municipalities, the budget law foresees financial sanctions of up to DKK 3 billion in case of overspending for both individual municipalities that contribute to the overspending and for all municipalities collectively. While municipalities had overrun their budgets in 2009,
they have kept their total service expenditure within the expenditure ceiling in both the budgets and the final accounts since 2011 and, in fact, underran their budgets by DKK 4 to 6 billion annually between 2011 and 2013. Municipalities have been pursuing an agenda of efficiency and expenditure reduction over the past years and have cut municipal service expenditure by DKK 12 billion between 2009 and 2013, i.e. 5% of the total service expenditures (Houlberg et al., 2016).

To improve public finances and to increase the supply of labour, Denmark has put in place a number of macro-structural reforms and initiatives in recent years, including reforms of disability pensions, a flexi-job scheme, a cash benefit system, a sickness benefit system along with a tax reform, a pension package, a growth package, and a comprehensive youth unemployment package (European Commission, 2016).

Structure and governance of the school system

Structure of the school system

The Danish school system is organised in three stages: non-compulsory day care for children from age 0-5, compulsory primary and lower secondary education for children from age 6-16, and upper secondary education for young people aged 16-19 (see Annex 1.2 for a diagram of the Danish education system and Houlberg et al., 2016 and Eurydice, 2016 for further information). This report focuses on public municipal primary and lower secondary education, i.e. the Folkeskole, only.

- All children in Denmark from the age of 26 weeks to the beginning of compulsory education have the right to receive non-compulsory day care. Day care can be provided through private child-minders and public or private nurseries, kindergartens and age-integrated institutions (Eurydice, 2016). Participation in early childhood education and care is very high by international standards: more than 95% of children aged 3 to 5 attend early childhood education and care (OECD average: 74.0% of 3-year-olds, 87.6% of 4-year-olds, and 94.8% of 5-year-olds) (OECD, 2015c).

- The entire period of compulsory education is provided in one single integrated structure. Since 2009, all children aged 6 begin their schooling with one year of compulsory pre-school (Year 0). Children then continue with 9 years of schooling which they complete with a compulsory school leaving examination. In Years 8 to 10, students have the option of changing to continuation schools (Efterskole), i.e. private boarding schools offering lower secondary education. Parents are free to decide if their children complete compulsory education at a Folkeskole, a private school or through home schooling (Eurydice, 2016). The majority of children attend a Folkeskole, but the share of students going to private schools has been increasing over the last few years (see Table 1.2). In 2013, 4.8% of all students in the Folkeskole attended a special needs school, compared to 5.8% in 2010 (Houlberg et al., 2016).

- Upper secondary education, or youth education as it is called in Denmark, is divided into general programmes qualifying students primarily for access to tertiary education
and vocational programmes qualifying students primarily for a career in a specific trade or industry. In 2013, 56.7% of upper secondary students were enrolled in a general programme and 43.3% of students in a vocational programme (OECD average: 53.6% and 46.4% respectively) (OECD, 2015c). In 2011, the government set itself the goal that 95% of each cohort should complete upper secondary education by 2015 as part of the government platform A Denmark that Stands Together.

❖ Students can choose between four general upper secondary programmes with different curricula. The three-year Upper Secondary School Leaving Examination (STX) programme and the two-year Higher Preparatory Examination (HF) programme offer a broad range of subjects in the fields of humanities, natural and social sciences. The three-year Higher Commercial Examination (HHX) and Higher Technical Examination (HTX) programmes focus on a combination of business and socio-economic studies and technological and scientific students with general subjects respectively.

❖ Vocational education and training (EUD) includes a vast range of programmes and is based on the dual training principle, i.e. periods in school alternating with periods of practical training in an enterprise: basic vocational education and training (EGU), vocational education and training (VET), vocational and general upper secondary education (EUX) and some maritime programmes. The EGU programme is a short basic vocational programme that combines practical training with theoretical education at a school. VET programmes also combine theoretical education at a secondary vocational college and practical training at a company in a number of different specialisations (e.g. carpentry, gardening, retail). Students must enter into a training agreement with a company approved by the social partners to complete this programme. The EUX programme is a combination of the VET and STX programmes and enables students to gain a vocational specialisation as well as a general upper secondary school leaving certificate (Houlberg et al., 2016).

After the end of the school day and during some school holidays, children and young people can attend different leisure or youth clubs at public or private schools (Skolefritidsordning og Fritidshjem [SFO] and Fritids- og ungdomsklubber) that offer a range of social and creative activities depending on their age.
**Distribution of responsibilities**

The Ministry for Children, Education and Gender Equality is responsible for the overall framework and objectives of day care, primary and lower secondary education, and upper secondary education. Within these general frameworks and national legislation, the financial and organisational operation of day care and public primary and lower secondary education, the Folkeskole, is the full responsibility of the municipalities (for a depiction of the governance of the Folkeskole, see Figure 1.5). Upper secondary schools have the status of self-governing institutions (see Houlberg et al., 2016, Appendix 3, for further details).

**Figure 1.5. Governance of the Folkeskole**

- **Parliament, government and Ministry for Children, Education and Gender Equality**
  - Set overall objectives and framework conditions for the Folkeskole;
  - implement legislation; negotiate overall budget for the Folkeskole.

- **Municipal district councils and the municipal school administration**
  - Responsible for the public schools; determine local objectives and framework conditions;
  - negotiate overall budget for the Folkeskole through KL/LGDK; distribute resources to individual schools.

- **School leaders and school boards**
  - Administrative and pedagogical responsibilities; determine principles for operating the school;
  - determine resource use within their school.

- **Teachers**
  - Plan and conduct teaching; carry out continuous assessment of students; co-operate with the home; etc.

- **Students (and parents)**
  - Receive education; co-operate with the school in various areas; consult on use of school resources through school board.


Public primary and lower secondary education is regulated through the Folkeskole Act. The Folkeskole Act sets out the overall goals of the Folkeskole, the responsibilities of the different layers of governance, the subjects to be taught and the learning goals for teaching in each subject (‘Common Objectives’). The Ministry for Children, Education and Gender Equality has the overall responsibility for setting the legal and financial governance framework, steering the Folkeskole, monitoring the overall quality of education, and ensuring that municipalities and schools carry out the government’s education policies. The ministry also sets national requirements and regulations for municipalities and schools (e.g. on assessment and evaluation, such as the implementation of national assessments in schools and the production of biannual quality reports by municipalities according to specified criteria).

Stakeholders influence the national policy making process through their interest associations (e.g. the early childhood and youth educator, teacher and school leader unions...
[BUPL, Danmarks Lærerforening and Skolelederforeningen], the School and Parents Organisation [Skole og Forældre], and the Association of Danish Students [Danske Skolelever]).

In its work, the Ministry for Children, Education and Gender Equality also co-operates with other ministries (e.g. for teacher education and professional development, for transitions across levels of education, and for inclusion), most notably with the Ministry of Higher Education and Science responsible for tertiary education and with the Ministry of Social Affairs and the Interior responsible for children with special needs.

Within the framework set by the Folkeskole Act and the regulations issued by the Ministry for Children, Education and Gender Equality, municipalities have full financial and organisational responsibility for the Folkeskole. Municipalities determine how their schools are organised, set local goals and objectives, determine the financial framework for their schools, specify the exact parameters for education (e.g. curricular plans, number of classes taught, additional classes, teacher-student ratios, etc.), supervise their schools and follow up on results. They can also launch their own special initiatives and programmes (e.g. organising local learning consultants). Municipalities can seek the support of their interest organisation, Local Government Denmark (LGDK), and exchange experiences through the association of municipal administrators responsible for culture, day care and education (Børne- og Kulturchefforeningen [BKF]).

Schools are responsible for providing education in line with the national aims for the Folkeskole and the requirements of their municipality, and for planning and organising their education programme. At individual schools, school principals hold the administrative and educational responsibility. They develop proposals for the activities in their school and for the budget within the financial framework laid down by the municipality. They are responsible for selecting, managing and supervising their staff and teachers, making decisions about their teachers’ working time, and distributing tasks and responsibilities. They also make all concrete decisions about their students and ensure that teaching is challenging, meets students’ needs and fosters student learning. Schools and teachers have relatively large autonomy on the content of teaching within the national framework that sets requirements for learning objectives and assessments, for example.

The school community is involved in the organisation and operation of schools through school boards made up of parents, students and teachers. School boards approve the school budget and teaching materials, and determine principles for running the school (e.g. on the organisation of teaching, the length of the school day, the offer of optional subjects, collaboration between the school and the home, information for parents about their children’s progress). School boards are consulted by the municipality on issues relating to their school. Optional pedagogical councils made up of all school staff with pedagogical functions can provide an advisory function for the school leadership at all schools. Student councils provide a platform for student voice in schools (Eurydice, 2016; Houlberg et al., 2016).

Compared to other OECD countries, schools in Denmark have an average level of decision-making power, while the local level plays a comparatively large role and the central level plays a comparatively small role. According to data collected for the OECD Education at a Glance 2012 publication, lower secondary schools make 44% of key decisions (OECD average: 41%), the local level makes 34% of the decisions (OECD average: 17%), and the central level makes 22% of the decisions (OECD average: 36%) (see Figure 1.6).³ Similar to many other OECD countries, schools hold a high degree of autonomy for the organisation of instruction (89%, OECD average: 75%). Decision-making for personnel management is shared
across all three levels, while decision-making for planning and structures is shared between the local and the central level only. For resource management decisions, only schools and the local level are involved in decision-making (OECD, 2012, see Annex 1.3).

While the national level has traditionally played a less important part in the governance of the Folkeskole, it has sought to take on a more prominent role in driving the quality of the education system by supporting a culture of performance management, evaluation and assessment and local capacity building (see Chapter 3). Examples for tools and processes put into place to facilitate soft steering include national performance goals and measures for student achievement and wellbeing; national learning progressions and curricular guidelines in the form of Common Objectives; compulsory examinations after Year 9; national assessments and student plans; reporting and documentation requirements in the form of biannual quality reports; the establishment of a learning consultant corps; the development of IT infrastructure that encourages the use of data; and the development of specialised institutions, such as the Danish Evaluation Institute (Danmarks Evalueringstitut, EVA) and specific units in the Ministry for Children, Education and Gender Equality that work to strengthen the role of evaluation and assessment and performance management. These tools and processes constitute the framework within which municipalities, schools, principals and teachers operate. For example, Common Objectives, national assessments and student plans all influence the ways in which teachers should plan their teaching (Houlberg et al., 2016).

At a national level, Denmark has created a number of institutions to monitor and evaluate the quality of education in the Folkeskole. This includes a school council (Skolerådet), an advisory council that provides guidance on questions of academic performance, student progress, and the pedagogical and didactic development of the Folkeskole, and the Danish Evaluation Institute (EVA), an independent agency conducting both officially commissioned and independent evaluations. The Quality and Supervision Agency (Kvalitets- og Tilsynsstyrelsen) responsible for administering national and international assessments, producing quality support materials and supervising public and private providers was replaced with an Agency for Education and Quality (Styrelsen for Undervisning og Kvalitet) in

---

Note: Countries are ranked in descending order of the percentage of decisions taken at the school level.
April 2015. For the Folkeskole, the new agency is primarily responsible for supporting quality and capacity development activities in areas such as the new learning consultant corps, including consultants working with inclusion and bilingual children as well as international supervisors, and the development and operation of assessments and examinations (Shewbridge et al., 2011; Houlberg et al., 2016). The agency is also responsible for the quality supervision for the Folkeskole.

Main features of the school system

Quality and equity of education

Denmark shows an average or above average performance in international student assessments depending on the subject and year level. Danish students participate in the IEA (International Association for the Evaluation of Educational Achievement) Progress in International Reading Literacy Study (PIRLS) in Year 4 and in the Trends in Mathematics and Science Study (TIMMS) in Year 8. In the 2011 round of assessments in mathematics and science, Danish students scored above the TIMMS scale centrepoint, but below the TIMMS Advanced and High International Benchmarks. Compared to its Nordic neighbours, Denmark outperformed Norway and Sweden in mathematics, and Norway in science, but stayed behind Finland in both mathematics and science, and behind Sweden in science. In the reading assessment, Danish students reached excellent results above the PIRLS scale centrepoint and the PIRLS High International Benchmark. This result places Denmark among the top eleven high-achieving countries. Danish students outperformed their Norwegian and Swedish peers, but remained behind the results of Finnish students. Almost all Danish Year 4 students reached a basic level of achievement in mathematics, science and reading (low benchmark), and a number of Danish students perform very highly (high and advanced benchmarks) (See Table 1.3). Over time, Denmark has increased its performance in mathematics and science (between 2007 and 2011) as well as in reading (between 2006 and 2011) (Martin et al., 2012; Mullis et al., 2012a; Mullis et al., 2012b).

At age 15, Danish students participate in the OECD Programme for International Student Assessment (PISA) in mathematics, reading and science. In the PISA 2012 assessment of mathematics, Danish students performed above the OECD average, but performance has steadily decreased since PISA 2003 across assessments. In reading and science, performance was around the OECD average in PISA 2012, and this has remained unchanged since PISA 2003 (OECD, 2014b). In problem-solving, Denmark also performed around the OECD average (OECD, 2014c).

Denmark has a comparatively small share of low-performing students, but also a relatively low proportion of top-performing students, and the difference in performance between the 90th and the 10th percentiles is comparatively small (see Table 1.4). For instance, in mathematics in PISA 2012, 16.8% of 15-year-olds performed below proficiency level 2, believed to be the mark of basic competency necessary for a successful transition to the labour market or tertiary education (OECD average: 23%), and 10% of 15-year-olds performed at proficiency level 5 or above (OECD average: 12.6%). The performance difference between the 90th and the 10th percentiles was 214 score points (OECD average: 239). Across assessments, the share of top-performing students has remained stable in science, but decreased since 2003 in mathematics (from 15.9% to 10%) and reading (from 8.1% to 5.4%). The share of low performing students was reduced in science and reading, but increased in mathematics (OECD, 2014b).
### Table 1.3. Performance of Danish students in TIMMS and PIRLS

Percentage of students in primary education reaching international benchmarks in mathematics, science and reading.

<table>
<thead>
<tr>
<th>International benchmark/Domain</th>
<th>Denmark (%)</th>
<th>International median (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Low</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics (TIMSS)</td>
<td>97</td>
<td>90</td>
</tr>
<tr>
<td>Science (TIMSS)</td>
<td>95</td>
<td>92</td>
</tr>
<tr>
<td>Reading (PIRLS)</td>
<td>99</td>
<td>95</td>
</tr>
<tr>
<td><strong>Intermediate</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics (TIMSS)</td>
<td>82</td>
<td>69</td>
</tr>
<tr>
<td>Science (TIMSS)</td>
<td>78</td>
<td>72</td>
</tr>
<tr>
<td>Reading (PIRLS)</td>
<td>88</td>
<td>80</td>
</tr>
<tr>
<td><strong>High</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics (TIMSS)</td>
<td>44</td>
<td>28</td>
</tr>
<tr>
<td>Science (TIMSS)</td>
<td>39</td>
<td>32</td>
</tr>
<tr>
<td>Reading (PIRLS)</td>
<td>55</td>
<td>44</td>
</tr>
<tr>
<td><strong>Advanced</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics (TIMSS)</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>Science (TIMSS)</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Reading (PIRLS)</td>
<td>12</td>
<td>8</td>
</tr>
</tbody>
</table>


### Table 1.4. Selected indicators of quality and equity in Danish education, based on PISA 2012 for mathematics and reading and PISA 2006 for science

<table>
<thead>
<tr>
<th></th>
<th>Denmark</th>
<th>OECD average</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Percentage of top performers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>10</td>
<td>12.6</td>
</tr>
<tr>
<td>Reading</td>
<td>5.4</td>
<td>8.4</td>
</tr>
<tr>
<td>Science</td>
<td>6.8</td>
<td>8.4</td>
</tr>
<tr>
<td><strong>Percentage of low performers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>16.8</td>
<td>23</td>
</tr>
<tr>
<td>Reading</td>
<td>14.6</td>
<td>18</td>
</tr>
<tr>
<td>Science</td>
<td>16.7</td>
<td>17.8</td>
</tr>
<tr>
<td><strong>Difference in performance between the 90th and 10th percentiles (in score points)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>214</td>
<td>239</td>
</tr>
<tr>
<td>Reading</td>
<td>216</td>
<td>242</td>
</tr>
<tr>
<td>Science</td>
<td>238</td>
<td>239</td>
</tr>
<tr>
<td><strong>Percentage of variance in performance explained by socio-economic status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>16.5</td>
<td>14.8</td>
</tr>
<tr>
<td>Reading</td>
<td>15.3</td>
<td>13.1</td>
</tr>
<tr>
<td>Science</td>
<td>15.7</td>
<td>14</td>
</tr>
<tr>
<td><strong>Percentage of immigrant students who are low performers in mathematics</strong></td>
<td>42</td>
<td>36</td>
</tr>
<tr>
<td><strong>Percentage of students who repeated a year</strong></td>
<td>4.7</td>
<td>12.4</td>
</tr>
</tbody>
</table>

Note: Top performers = students performing at PISA level 5 and above; low performers = students performing below PISA level 2.

Although the Danish education system has a number of features that promote equity, including a high proportion of students enrolled in early childhood education, low levels of year repetition and comprehensive schooling until age 16, students’ socio-economic background has a strong impact on performance in Denmark (see Table 1.4 and Figure 1.7). For example, in PISA 2012, 16.5% of the variance in mathematics performance in Denmark can be explained by socio-economic background, close to the OECD average of 14.8% (see Figure 1.7). Also similar to the average across OECD countries, a more socio-economically advantaged student in Denmark scores 39 points higher in mathematics – the equivalent of nearly one year of schooling – than a less-advantaged student. According to PISA 2012, education in Denmark is less equitable than in other Nordic countries, where the strength of the relationship between socio-economic background and performance is less pronounced. In Norway, only 7.4% of the variance in mathematics performance can be explained by socio-economic background, in Iceland only 7.7%, in Finland only 9.4%, and in Sweden only 10.6%. In Denmark, furthermore, only a small proportion of students beats the odds and manages to overcome difficult socio-economic circumstances and to exceed expectations (4.9%, compared to an OECD average of 6.4%) (OECD, 2013c).

**Figure 1.7. Student performance and equity, PISA 2012**

Performance differs relatively little between schools in Denmark. Similar to other Nordic countries with comprehensive schooling systems, between-school differences account for
less than 15% of the OECD average total variation in performance in Denmark. By contrast, across OECD countries, 37% of the overall performance differences are observed between schools. The performance differences that do exist between schools are relatively closely related to socio-economic disparities between schools: 70.9% of the performance differences between schools are explained by the socio-economic status of students and schools (OECD average: 62.8%). Performance differences within schools are around the OECD average, but these within-school differences are more strongly related to students’ socio-economic status: 65.8% of the total variation in performance is observed within schools (OECD average: 63.3%), and 10.5% of the performance difference can be explained by differences in students’ socio-economic status (OECD average: 5.1%). A one-unit increase in the PISA index of economic, social and cultural status is associated with a score-point difference of 31, one of the highest among OECD countries (OECD average: 19 points) (OECD, 2013c).

Students with an immigrant background are particularly at risk of underperformance in Denmark, and more so than in many other OECD countries. In the PISA 2012 mathematics assessment, students with an immigrant background scored an average of 66 points lower than their native peers before accounting for socio-economic background (OECD average: 34 points), and an average of 40 points after accounting for socio-economic differences (OECD average: 21 points). In fact, students with an immigrant background in Denmark were 2.43 times more likely to perform in the bottom quarter of the performance distribution than non-immigrant students (OECD average: 1.70 times more likely) (OECD, 2013c). Children with an immigrant background also participate less in early childhood education and care, which may contribute to later performance gaps. Children with an immigrant background in Denmark were roughly half as likely to participate in early childhood education and care as their non-immigrant peers, a fact holding true even after accounting for children’s socio-economic background (OECD, 2015d, Figure 4.14; European Commission/EACEA/Eurydice/Eurostat, 2014).

PISA 2012 also asked students to evaluate their sense of belonging at school as well as their happiness at and satisfaction with school. These subjective evaluations provide a good indication of whether education systems are able to foster overall student wellbeing. According to PISA 2012, in Denmark, a larger than average proportion of students agreed or strongly agreed with the statements that they feel happy at school and that they are satisfied with their school, and a larger than average proportion of students disagreed or strongly disagreed with the statements that they feel like an outsider and that they feel awkward and out of place at their school. However, a smaller than average share of students agreed or strongly agreed with the statements that they feel like they belong at school and that things are ideal at their school (see Tables 1.5 and 1.6) (OECD, 2013d).

**Attainment, adult skills and labour market outcomes**

Education attainment in Denmark is high and has been historically so. In 2014, 79.6% of 25-64 year-olds had attained at least an upper secondary education and, 35.8% of 25–64 year-olds had completed a tertiary degree (OECD average: 76.3% and 33.6% respectively). Among 55–64 year-olds, 71.6% had completed at least an upper secondary education and 29.1% had attained a tertiary qualification (OECD average: 66.2% and 25.1% respectively); among younger Danes (aged 25–34), 84.1% held at least an upper secondary qualification and 42.1% held a tertiary qualification (OECD average: 82.7% and 40.7%) (OECD, 2015c).
Results from the OECD 2012 Programme for the International Assessment of Adult Competencies (PIAAC) show that the skills of the adult Danish population aged 16-65 are slightly below the international average in literacy and above the international average in numeracy and problem solving, but generally lower than in other Nordic countries in all domains (see Table 1.7). Younger adults aged 16-24 performed less well than the 16-65 year-old population in PIAAC 2012 and scored only around or below the OECD average in all domains: performance in literacy was higher, but was still below the OECD average; performance in numeracy was lower at around the OECD average; and performance in problem-solving in technology-rich environments was higher, but also only around the OECD average. The proportion of low-skilled adults in Denmark is comparable to the OECD average, but higher than in other Nordic countries in literacy, and lower than the OECD average and comparable to other Nordic countries in numeracy (OECD, 2013b).

Like in all other OECD countries, people with high qualifications have the highest employment rates in Denmark, and, like in most countries, the lowest risk of being unemployed. In 2014, the percentage point difference in employment rates between people aged 25-64 with tertiary qualifications and those with below upper secondary education amounted to 24.6 percentage points (OECD average: 27.6 percentage points). And while 8.2% of people with below upper secondary education were unemployed in 2014, this applied to only 4.4% of tertiary graduates (OECD average: 12.8% and 5.1% respectively) (OECD, 2015c).

Among the younger generation (25-34 year-olds), employment rates decreased for all levels of attainment between 2000 and 2014, and unemployment rates for all levels of attainment increased in the same period. However, employment rates remained higher and unemployment rates remained lower than the OECD and the EU21 average in 2014. Compared to other Nordic countries, Danish young people with low qualifications (i.e. below upper secondary education) fare better on the labour market than their Finnish peers, but worse than low-qualified young people in Norway. 57% of 25-34 year-olds in Denmark were employed in 2014, compared to 52% in Finland, 65% in Sweden and 61% in Norway. While
14.7% of 25-34 year-olds in Denmark with below upper secondary education were unemployed in 2014, this was the case for 18.1% in Finland, 18.9% in Sweden, and for 11.8% in Norway. On the other hand, unemployment among young tertiary graduates is higher in Denmark than in other Nordic countries. In 2014, the unemployment rate of 24-35 year-old Danish tertiary graduates reached 7.2%, close to the OECD average of 7.5% and lower than the EU21 average of 8.7%, but higher than that for young Fins (6.2%), Norwegians (3.4%) and Swedes (3.9%) (OECD, 2015c).

Among 25-64 year-olds with upper secondary or post-secondary non-tertiary education as their highest level of attainment, graduates from vocational education and training (VET) have better labour market outcomes than graduates from general programmes. In 2014, 81% of individuals with a vocational upper secondary or post-secondary non-tertiary qualification were employed, 20 percentage points more than individuals with a general upper secondary education (OECD average: 77% and 7 percentage points difference). Unemployment also affects graduates from VET programmes less than graduates from general programmes (6.6% compared to 12.1%). These differences may be explained, at least in part, by the fact that people who study non-vocational tracks generally pursue education at the next education level, while those who study vocational tracks at the upper secondary level generally enter the labour market once they have obtained this qualification. Furthermore, a potential drawback may be that the skills that individuals acquire through VET might be of limited use in a rapidly changing labour market which may make it more difficult to adapt to changes in work environments (OECD, 2015c).

14.7% of 25-34 year-olds in Denmark with below upper secondary education were unemployed in 2014, this was the case for 18.1% in Finland, 18.9% in Sweden, and for 11.8% in Norway. On the other hand, unemployment among young tertiary graduates is higher in Denmark than in other Nordic countries. In 2014, the unemployment rate of 24-35 year-old Danish tertiary graduates reached 7.2%, close to the OECD average of 7.5% and lower than the EU21 average of 8.7%, but higher than that for young Fins (6.2%), Norwegians (3.4%) and Swedes (3.9%) (OECD, 2015c).

14.7% of 25-34 year-olds in Denmark with below upper secondary education were unemployed in 2014, this was the case for 18.1% in Finland, 18.9% in Sweden, and for 11.8% in Norway. On the other hand, unemployment among young tertiary graduates is higher in Denmark than in other Nordic countries. In 2014, the unemployment rate of 24-35 year-old Danish tertiary graduates reached 7.2%, close to the OECD average of 7.5% and lower than the EU21 average of 8.7%, but higher than that for young Fins (6.2%), Norwegians (3.4%) and Swedes (3.9%) (OECD, 2015c).
Policy priorities and recent developments

**Education as part of the 2011 and 2015 government programmes**

In November 2011, the Danish government led by the Social Democrats released its government programme entitled *A Denmark that Stands Together* (the full programme is available on the following website [www.stm.dk/multimedia/Regeringsgrundlag_uk_2011.pdf](http://www.stm.dk/multimedia/Regeringsgrundlag_uk_2011.pdf)). The programme established the key priorities for education, such as improving early childhood education and care and reforming primary and lower secondary schools in co-operation with teachers and parents. The programme set a number of objectives as well as measurable goals and targets: to increase the number of young people completing a vocational education and training programme; to reform education and training to increase growth and the labour supply; to launch an economic programme that includes funding for improvements in education; and to invest in research. The specific goals and targets stated that by 2020, 95% of a cohort should achieve an upper secondary education, 60% of a cohort should achieve a tertiary education, and 25% of a cohort should achieve a long tertiary education (OECD, 2015b).

In June 2015, the newly elected Danish government led by the Liberal Party (Venstre) published a new government programme with the name *Together for the Future* (the full programme can be accessed on [www.stm.dk/multimedia/Regeringsgrundlag_2016.pdf](http://www.stm.dk/multimedia/Regeringsgrundlag_2016.pdf)). The new government programme set out the government’s vision of improving day care by focussing on smoother transitions from day care to early childhood education and care/pre-school and by placing day care under the responsibility of the Ministry for Children, Education and Gender Equality. The government reaffirmed its commitment to the 2014 *Folkeskole* reform (see below) and promised stability for primary and lower secondary schools in this respect, but it also stated plans to put in place further measures to ensure the effective implementation of the reform. According to the programme, the government planned to review the process of inclusion in the *Folkeskole* and the collaboration between schools and youth clubs. The programme also set out plans to ensure that all students benefit from further learning opportunities through homework or other educational challenges. The government, furthermore, set out its plans to provide better opportunities for children with special needs by offering students with learning difficulties the opportunity to take part in a crash course to be ready for school, by giving children with special needs more freedom to choose private primary and lower-secondary schools, and by strengthening collaboration between schools and local associations. In upper secondary education/youth education, the government programme set out the goal of facilitating young people’s choices between general and vocational programmes and of reducing school dropout through greater coherence across upper secondary programmes.

**The 2014 reform of the *Folkeskole***

In June 2013, the Danish government introduced a reform of the *Folkeskole* based on a broad political agreement by the major political parties to improve public primary and lower secondary education. The reform has been implemented since the 2014/15 school year.

As basis of the *Folkeskole* reform, the government set three national goals that should contribute to setting a clear direction and a high level of ambition for the development of the *Folkeskole* while ensuring a clear framework for a systematic and continuous evaluation:

1. The *Folkeskole* must challenge all students to reach their full potential.
2. The *Folkeskole* must lower the significance of social background on academic results.
3. Trust in the Folkeskole and student wellbeing must be enhanced through respect for professional knowledge and practice in the Folkeskole.

These three national goals for the development of the Folkeskole are operationalised through a number of clear, simple and measurable targets:

- At least 80% of students must achieve “good” results (mark 3 or higher) at reading and mathematics in the national assessments. The baseline is the share of students achieving mark 3 or higher in the national assessments in 2012.8
- The number of high-performing students in Danish and mathematics must increase from year to year. The baseline is the percentage of students achieving the top mark 5 in the national assessments in 2012.9
- The number of low-performing students in reading and mathematics, independent of social background, must decrease from year to year. This target should focus on the percentage of students with parents with only compulsory or unknown education performing poorly in the national assessments.10
- The wellbeing of students as measured by a national survey must increase.11

The targets are measurable on national, municipal, school and class levels and are envisaged to become the basis for dialogue and follow-up regarding the development of students’ academic performance and wellbeing at all levels.

To fulfil the three national goals, the Folkeskole reform focuses broadly on three main areas of improvement:

- A longer and varied school day with more and improved teaching and learning (e.g. through more classes in Danish and mathematics, more classes in foreign languages and natural sciences/technology, greater involvement of local sports clubs, cultural centres and associations, a clarification and simplification of the Common Objectives, greater freedom for schools to offer electives, the introduction of elite sports and talent music classes, a review of the school leaving examination, and competency development for school boards to increase parental involvement).
- Better professional development of teachers, pedagogical staff and school principals (e.g. through the introduction of a requirement that all teachers must be fully qualified for the subjects they teach by 2020, through the provision of additional earmarked funding (DKK one billion) for the professional development of teachers and pedagogues (a profession similar to early childhood and care staff in other countries, but supporting all stages of human development more broadly) between 2014 and 2020, through the introduction of a national programme for the training and development of principals and the availability of DKK 60 million for the professional development of principals between 2013 and 2015, and the creation of a national body of approximately 80 learning consultants to advise municipalities and schools on quality development).
- Few and clear objectives and simplification of rules and regulations (e.g. through the annual publication of a written status account that forms the basis for the ongoing dialogue between the government, the municipalities and other stakeholders, through quality supervision and a revision of the results-based quality oversight process of the Ministry for Children, Education and Gender Equality, the municipal quality reports and individual student plans, facilitation of the common management of several schools and schools and youth clubs, and the expansion of school councils into Youth Education Guidance and Counselling).
**Act no. 409 on the utilisation of teachers’ working time**

In April 2013, the Danish parliament passed an Act specifying the framework for the utilisation of teachers’ working hours (Act no. 409). The Act was passed following the inability of the Danish Union of Teachers (DLF) and Local Government Denmark (LGDK) representing the municipalities as employers to reach a collective agreement and the four week long lockout of Folkeskole teachers by LGDK in spring 2013. As prospects for reaching an agreement seemed unrealistic and as the parliament considered it irresponsible to let the dispute continue, the parliament passed Act no. 409 to end the conflict, even though working conditions in Denmark are traditionally agreed upon between employers and employees without the interference of legal regulation.

Act no. 409 revised the previous agreement on teachers’ working time that had given all teachers a certain amount of preparation time for each class irrespective of their subject or experience. Act no. 409 intends to facilitate a better use of human resources in schools by encouraging teachers to use their preparation time in a more targeted and effective way, and to enable school leaders to move resources to where they are needed. For instance, under the new framework, school principals can give newly qualified teachers fewer and more experienced teachers more teaching hours. Under Act no. 409 and following the 2014 Folkeskole reform, it is expected that, on average, teachers teach about two clock hours more per week within their regular working hours (18.3 hours a week compared to 16.3 hours a week prior to the new framework). Spreading the annual standard of 1 680 working hours over 42 weeks, a Danish teacher works, on average, 40 hours a week (Astrup Bæk, 2014; KL, 2012).

Following the implementation of Act no. 409, the majority of municipalities have issued guidelines on the implementation of the law and school leaders typically announce these guidelines to their staff (e.g. regarding mandatory hours of presence and possibilities to work from home). More than half of the municipalities have introduced attendance requirements that require teachers to be present at school for a certain duration each day irrespective of their number of teaching hours. Various municipalities have introduced an upper limit for the number of teaching hours a teacher is supposed to perform. In general, it appears that municipalities have increased the number of classes taught per teacher, and those municipalities with already high rates of teaching hours per teacher continue to have comparatively high rates of teaching hours per teacher (Houlberg et al., 2016; Danish Ministry of Education, 2014; Danish Ministry of Education, 2013).

**Reforms to upper secondary education (youth education)**

Since the early 2000s, Denmark has implemented various reforms in the area of secondary education. Although this report focuses on primary and lower secondary education only, this section briefly outlines these reforms as contextual information for the analysis.

In 2003, the Danish parliament passed a reform of Danish upper secondary academically-orientated programmes to improve the quality of the four general upper secondary programmes (STX, HHX, HTX and HF) and to make curricula more coherent. The reform restructured programmes into a common curriculum over half a year followed by specialised curricula over the subsequent years.

In 2008, Denmark introduced a reform in vocational education and training (VET) to reduce dropout rates in these programmes. The reform redefined the structure of VET programmes into 12 main study areas with new plans of action and learning. Under the new system, students were enabled to choose among programmes with different degrees
of work-based learning and institutions were given greater flexibility to tailor programmes to students’ individual needs. Since 2010, students can combine a VET programme with a general academic examination to gain access to tertiary education.

Alongside the reform of the Folkeskole, Denmark has been implementing a further reform of vocational upper secondary education called “Better and more attractive vocational education and training programmes” (Bedre og mere attraktive erhvervsuddannelser). This reform came into force in 2015 and seeks to improve the quality and attractiveness of VET programmes. The following objectives are to be reached by 2020:

- to increase the proportion of young people entering a VET programme directly after finishing primary and lower secondary education to at least 25%
- to increase the share of students completing their VET programme
- to provide more professional development to teachers and staff
- to offer flexible VET education that caters to students with different levels of abilities
- to improve counselling to students before and during VET programmes to ensure successful transition to the labour market or higher education
- to collaborate closely with companies providing training places for apprentices (OECD, 2015b).

A further reform of general upper secondary education was in preparation at the time of drafting the report to create a coherent school system for children from age 0 to 18 and to achieve the goal of a 95% completion rate of upper secondary education among young people (Houlberg et al., 2016). The main elements of the reform proposed by the former government envisaged a reduction of the number of study combinations, a strengthening of the teaching of mathematics and natural sciences, and the assessment of students’ ability to co-operate and generate new ideas. In September 2015, the Minister for Children, Education and Gender Equality formed a new commission to look into how the transition from the Folkeskole to upper secondary education can become more relevant for the labour market and ensure a better balance between the number of youth that choose a general upper secondary education and those that choose a vocational pathway.

Changes to initial teacher education and funding for professional development

In 2012, Denmark implemented a major reform to its teacher education. Since 2013, teacher education in the form of bachelor’s degree programmes has been structured around modules that are geared towards competency objectives for each teaching practice. University colleges (Professionshøjskoler) have been granted greater autonomy in setting programme structures and in determining the content of modules for the development of different teacher profiles. In 2010, the Danish Ministry of Education initiated a recruitment campaign to attract more of the best students to the teaching profession (OECD, 2015b).

As already stated, the 2014 Folkeskole reform also includes the development of the teaching profession and school leadership as one of its core elements to achieve its overall targets. As part of the Folkeskole reform, DKK one billion have been made available for the competency development of teachers between 2014 and 2020 to ensure that teachers are qualified for the subjects they teach. Municipalities must ensure that 85% of teachers are fully qualified by 2015 and that at least 90% are fully qualified by 2018. Funds are distributed across municipalities based on the number of children in primary and lower secondary education. Municipalities can use funds for a range of priority areas, including competency
in the main subject, inclusion, classroom management, specialist competencies in areas such as reading, mathematics and Danish as a second language, and other priority areas such as the use of ICT Information and Communication Technologies) in classrooms (Undervisnings Ministeriet, 2013).

Private foundations have provided further funding for the professional development of teachers and school principals. For example, the A P Møller Foundation (A P Møller Fonden) made available DKK one billion in 2013 for the professional development of teachers and school principals. Schools, municipalities, associations and other actors in the Folkeskole can apply twice a year for funding (for further information, see www.apmollerfonde.dk/Folkeskolen.aspx).

**Greater inclusion of children with special educational needs**

Denmark has committed itself to the greater inclusion of children with special needs in the mainstream Folkeskole in line with international conventions such as the UN Convention on the Rights of Persons with Disabilities which Denmark ratified in 2006 and the Salamanca Statement on Inclusive Education which Denmark signed in 1994. As a large share of funding for the Folkeskole had been allocated to special needs education without clear evidence for benefits in terms of student learning, inclusion has also been seen as a way to make more efficient use of resources. To achieve greater inclusion, Denmark has implemented a number of measures in recent years.

In 2012, the central government and the municipalities represented by Local Government Denmark (LGDK) set clear targets and principles for the inclusion of children with special needs in mainstream education. Accordingly, Denmark seeks to raise the share of children in mainstream education, to improve academic performance and to maintain student wellbeing. A goal was set to increase the share of children included in mainstream schools to 96% by 2015. To support municipalities in achieving this goal, the central government and LGDK agreed on a number of initiatives, including: a new legislation on inclusive education in the Folkeskole; the continuous monitoring of the inclusion process; the creation of a National Inclusion Counselling Unit/Inclusion Development; an outgoing consulting unit that should support better inclusion in day care, school and leisure time facilities; the creation of a Centre for Inclusive Education and Special Needs Education; information campaigns; and the establishment of an Expert Monitoring Group for Inclusive Education (Danish Ministry of Education, 2013). The expert monitoring group has been tasked to monitor the transition rates and to analyse challenges and initiatives at the level of schools and municipalities, also concerning the use of human resources and special learning environments and resources; to identify the main problems and best practices in relation to the specific implementation of inclusion, for example in relation to specific groups of students; and to formulate recommendations for practical implementation that can immediately be used by the different actors, as well as suggestions for specific adjustments.

To create incentives for inclusion, many municipalities have decentralised the financial responsibility for special needs education to the school level. Whereas special needs education was typically financed through common pools in the municipality before this change, schools are now often required to transfer funds if they decide to exclude a student with special needs (Houlberg et al., 2016). In June 2016, the Danish government and LGDK agreed to create inclusive learning environments by focussing more on the individual child rather than the overall inclusion target of 96%.
The goal of inclusive education was reaffirmed in a government action plan on disability – One Society for All – which focuses on the overall scheme for policies concerning disability and which covers actions and initiatives in all relevant domains as well as the 2014 Folkeskole Reform (Danish Ministry of Education, 2013).

**Targeted programmes for bilingual students**

The integration of bilingual students with an immigrant background is a further policy priority in Denmark. Following national legislation, the Danish municipalities have implemented a number of initiatives to increase the performance and wellbeing of bilingual students. For instance, municipalities have put in place measures for early language stimulation in day care, for additional teaching in Danish as a second language (e.g. in a reception class, individual instruction or through team teaching), for the integration of Danish as a second language as a dimension in all subjects, for mother tongue instruction, and for the transition of bilingual students to upper secondary education. Following a change in legislation in 2006, a number of municipalities have also established transportation programmes to reduce the concentration of bilingual students in particular schools and school districts (Houlberg et al., 2016). In addition, the central government has established a task force for teaching bilingual children (now part of the learning consultant corps) that provides guidance to municipalities and schools on effective strategies to strengthen the language proficiency and academic results of bilingual students. This unit also provides guidance to municipalities on effective strategies to improving the language proficiency of bilingual children in day care, including through early language stimulation.

**Consolidation of the school offer**

Since 2009, several municipalities have consolidated their school offer to react to demographic changes and possibly as a consequence of the 2007 Local Government Reform. The school offer has been consolidated in both merged municipalities and municipalities that were not merged. The probability of school closure seems influenced by the number of students, population size, population density and the number of public schools. Municipalities have closed down smaller schools or reorganised the management of schools by joining several schools under the same school leadership. However, one challenge that municipalities face in the consolidation of their school offer is the possibility for private schools to emerge and to replace the public school that has been closed.

Between 2007 and 2013, a total of 270 out of 1580 municipal schools, i.e. more than one in five schools, were closed, and the average size of a Folkeskole across municipalities increased from 362 students to 442 students. In line with this trend towards fewer and larger schools, the average class size from 2009 to 2013 increased from 20.1 to 21.4 students per class. Considering demographic developments, this trend of school consolidation is likely to continue in the future (Houlberg et al., 2016).

**Notes**

1. Until the change of government in 2015, the Ministry of Children, Gender Equality, Integration and Social Affairs was responsible for setting the overall framework and policies for day care.

2. The Danish Folkeskole was founded in 1814. Until the end of the 20th century, only five major changes were made to the Folkeskole Act (1903, 1937, 1958, 1975, and 1993). Since the beginning of the 21st century, the Folkeskole Act has undergone a number of comprehensive changes. Most recently, a new comprehensive reform of the Folkeskole has been implemented since the school year 2014/15.
1. SCHOOL EDUCATION IN DENMARK

3. This indicator presents results from data collected in 2011 on decision making at the lower secondary level of education and updates the previous survey on this topic, which took place in 2007. This indicator shows where key decisions are made in public institutions at the lower secondary level of education. The indicator does not capture the totality of decisions made within a school system. Instead, a representative set of 46 key decisions, organised across four domains, are considered. Responses were compiled in each country by a panel of experts representing different levels of the decision-making process at the lower secondary level. Information on the composition of these panels and the methods and process used to complete the survey can be found in the “Notes on methodology” in Annex 3, available at www.oecd.org/edu/eag2012.

4. The four domains of decision-making defined by the OECD (2012) comprise the following areas: 

   **Organisation of instruction:** student admissions; student careers; instruction time; choice of textbooks; choice of software/learningware; grouping of students; additional support for students; teaching methods; day-to-day student assessment. **Personnel management:** hiring and dismissal of principals, teaching and non-teaching staff; duties and conditions of service of staff; salary scales of staff; influence over the careers of staff. **Planning and structures:** opening or closure of schools; creation or abolition of a year level; design of programmes of study; selection of programmes of study taught in a particular school; choice of subjects taught in a particular school; definition of course content; setting of qualifying examinations for a certificate or diploma; accreditation (examination content, marking and administration). **Resource management:** allocation and use of resources for teaching staff, non-teaching staff, capital and operating expenditure, professional development of principals and teachers.

5. For example, the Ministry for Children, Education and Gender Equality has set up a new data warehouse to facilitate educational monitoring to which municipalities and schools need to report certain data. The data warehouse includes around 35 indicators, such as results from national examinations and assessments, results from surveys on student wellbeing, and transition rates to upper secondary education.

6. The TIMSS achievement scales range from 0–1 000, although student performance typically ranges between 300 and 700. The scale centrepoint of 500 corresponds to the mean of the overall achievement distribution and functions as a point of reference that remains constant from assessment to assessment. 100 points on the scale correspond to the standard deviation. Along the scale, TIMSS reports achievement at four points as international benchmarks: Advanced International Benchmark (625), High International Benchmark (550), Intermediate International Benchmark (475), and Low International Benchmark (400).

7. For further details, see http://eng.uvm.dk/~media/UVM/Filer/English/PDF/131007%20folkeskolereformaf tale_ENG_RED.pdf and www.uvm.dk/~media/UVM/Filer/English/PDF/140708%20Improving%20the%20Public%20School.ashx?smarturl404=true.

8. In 2013/14, 74% of students in Year 2, 71% of students in Year 4, 72% of students in Year 6 and 76% of students in Year 8 achieved good results in Danish; in mathematics 64% of students in Year 3 and 69% of students in Year 6 achieved good results. In 2011/12, 73% of students in Year 2, 66% of students in Year 4, 69% of students in Year 6 and 74% of students in Year 8 achieved good results in Danish; in mathematics, 63% of students in Year 3 and 66% of students in Year 6 achieved good results (Danish Ministry for Children, Education and Gender Equality, 2016b).

9. In Danish, the share of high-performing students in Year 2 increased from 7% in 2011/12 to 8% in 2012/13, but remained stable in 2013/14. In Year 4, the share of high-performing students increased from 6% in 2011/12 to 7% in 2012/13 and to 8% in 2013/14. In Year 6, the share of high-performing students increased from 6% in 2011/12 to 7% in 2012/13 and remained stable in 2013/14. In Year 8, the share of high-performing students increased from 8% in 2011/12 to 9% in 2012/13 and to 11% in 2013/14. In mathematics, the share of high-performing students in Year 3 remained stable at 4% between 2011/12 and 2012/13 and increased to 5% in 2013/14. In Year 6, the share of high-performing students increased from 4% in 2011/12 to 6% in 2012/13 and remained stable in 2013/14 (Danish Ministry for Children, Education and Gender Equality, 2016b).

10. In Danish, the share of poor-performing students in Year 2 decreased from 11% in 2011/12 to 10% in 2012/13 and remained stable in 2013/14. In Year 4, the share of poor-performing students decreased from 14% in 2011/12 to 12% in 2012/13 and remained stable in 2013/14. In Year 6, the share of poor-performing students decreased from 12% in 2011/12 to 11% in 2012/13 and remained stable in 2013/14. In Year 8, the share of low-performing students decreased from 10% in 2011/12 to 9% in 2012/13 and remained stable in 2013/14. In mathematics, the share of poor-performing students in Year 3 remained stable at 15% between 2011/12 and 2013/14. In Year 6, the share of poor-performing students decreased from 17% in 2011/12 to 16% in 2012/13 and remained stable in 2013/14 (Danish Ministry for Children, Education and Gender Equality, 2016b).
11. The first wellbeing survey was carried out in 2014/15. Results are available on the website of the data warehouse of the Danish Ministry for Children, Education and Gender Equality (2016b).

12. Following a legislative change, special needs education now includes children in special classes or special schools as well as children with special needs in regular classes with the need for instruction in a special class of more than nine teaching hours per week. Children who need less than nine teaching hours of special instruction per week can benefit from individualised teaching in mainstream classes, a temporary subdivision of classes, additional lessons and other types of professional support, from two teachers in a class, from teacher assistants, or from individual support.

References


Danish Ministry for Children, Education and Gender Equality (2016b), Datavarehuset [Datawarehouse], www.uddannelsesstatistik.dk.


Danish Ministry of Education (2013), Agreement between the Danish Government (the Social Democrats, the Social-Liberal Party and the Socialist People’s Party), the Liberal Party of Denmark and the Danish People’s Party on an Improvement of Standards in the Danish Public School (Primary and Lower Secondary Education), Danish Ministry of Education, Copenhagen, http://eng.uvm.dk/-/media/UVM/Filer/English/PDF/131007%20folkeskolereformaftale_ENG_RED.pdf.


1. SCHOOL EDUCATION IN DENMARK


ANNEX 1.A1

The Danish education system
Figure 1.A1.1. **The Danish education system**

1. **SCHOOL EDUCATION IN DENMARK**

![Diagram of the Danish education system]

**Key:**
- Starting/ending age of compulsory education
- Recognized exit point of the education system
- Typical student flow
- Transfer from a programme to another
- Programme designed for part-time attendance
- Vocational/Professional orientation
- Single structure education (integrated ISCED levels)
- May be provided within one school structure
- Transfer at crossing lines is not possible
- Name of diploma, degree or certificate

ANNEX 1.A2

Distribution of decision-making
in public lower secondary education
Figure 1.A2.1. Decisions taken at each level of government in public lower secondary education, by domain, 2011

Note: Countries are ranked in descending order of the percentage of decisions about organisation of instruction taken at the school level. Source: OECD (2012), Education at a Glance 2012: OECD Indicators, http://dx.doi.org/10.1787/eag-2012-en, Table D6.2a and D6.2b.