Chapter 1

Policy options for better education

Across OECD countries and beyond, the need for innovation, knowledge and skills to promote growth and development is well recognised. Inequalities are intensifying, with youth employment growing and the more disadvantaged falling behind in some countries (OECD, 2014a). Governments face increasing pressure to define and implement education policies, as they seek to improve the quality, equity and effectiveness of their education systems. They understand that more resources do not necessarily mean better outcomes – those resources need to be invested in the best possible ways. To respond to their concrete contexts and challenges, policy makers need better access to information on the full range of policy options available.

The *Education Policy Outlook* aims to help policy makers and others make choices in education reform, building on comparative and contextualised analysis. It is based on a framework designed to analyse and compare education policies implemented across OECD countries. To the authors' knowledge, this is the first comprehensive systematic study of education policies at the international level. It is intended to serve as a source of information, while maintaining the premise that policy design and implementation have multiple contextual dimensions that feed into the reality of policy processes (Ball et al., 2012), which makes them unique to every education system and situation.

This edition of the *Education Policy Outlook* reviews education policy options adopted across OECD countries between 2008 and 2014. Part I reviews the range of policy options across different policy areas. Part II focuses on ways to support effective implementation through analysis of reforms in evaluation and assessment, innovative learning environments, and school improvement, and also explores the engagement of teacher unions and business and industry representatives in developing and implementing education policy. Part III presents education policy country snapshots for the 34 OECD member countries.

Need for effective education policy reforms

Globalisation, innovation and growth have an important human capital component, and the comparative advantage of many OECD countries has become their capacity to have highly skilled people that can work in knowledge-based professions (OECD, 2011a). In addition, education contributes to social cohesion, better health and enhanced participation in civic and democratic aspects of society. Ensuring that education and training are of high quality and that education systems are equitable can contribute to growth and progress (OECD, 2012a). Governments need to make sustained efforts to adapt and improve their education systems.

From different factors influencing the need to invest in education, three major socio-demographic, economic and technological trends directly shape how education systems function and the types of policy responses that may be implemented (OECD, 2013a):

● Growing importance of international trade: Economic activity has become globally interconnected on an unprecedented scale, bringing people, goods, and services together faster than ever. The total volume of world trade increased more than tenfold
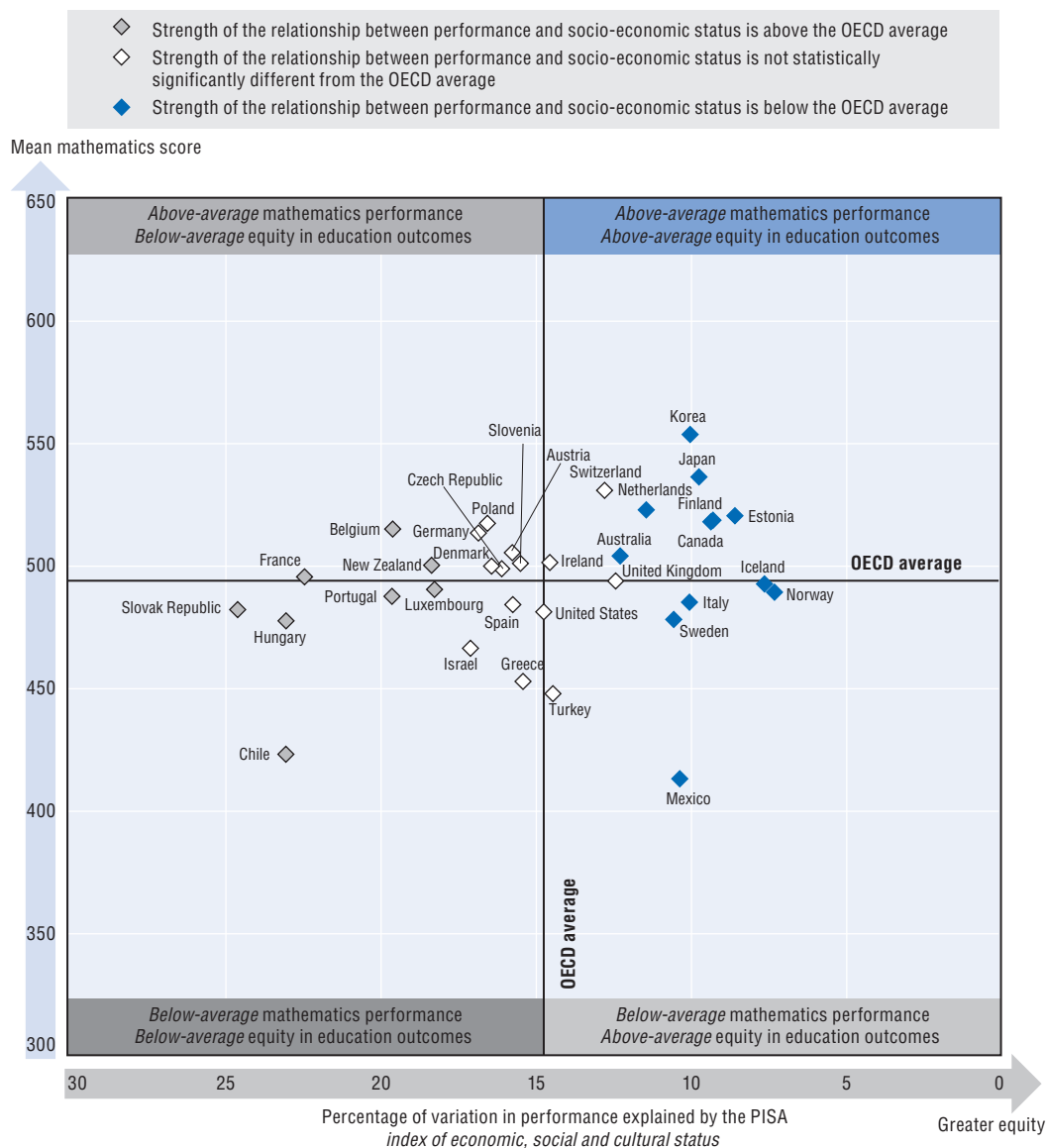
since the 1970s, from USD 334 billion in 1970 to USD 3 910 billion in 2010. This growing integration of economies has an impact on strategies for national competitiveness, innovation, employment and skills (OECD, 2013a). In education, this global economic integration creates both a need and an opportunity to develop new curricula to provide students with the skills required in a globalised economy. These curricula have to foster competencies like language skills, problem-solving in international environments and creativity, especially in vocational and higher education programmes.

● More diverse communities: Migration has become much more common, particularly towards affluent countries. The mobility of individuals, families and human capital is facilitated by technological advances and driven by trade and skills imperatives. Migrants represent 11.5% of the population on average in OECD countries, but this proportion varies considerably from one country to another and has increased markedly in some countries. This implies that communities are changing, reflecting the increasing diversity of their citizens. This diversity has a strong impact on schools, forcing us to rethink the role of classrooms, teachers, parents and others – both within schools and in the community as a whole. Students with immigrant backgrounds can face issues of integration and language learning. Education systems also have to deal with transferability of skills and experience so that they can adequately recognise prior learning and qualifications of immigrant students. Newly migrated students may also face learning difficulties that strengthen inequalities in education outcomes and make them among those most likely to cope with precariousness and exclusion.

● The digital society: Rapid technological development has changed the way we interact with each other and our communities. User-generated content has made the Internet a participatory experience and has redefined knowledge as well as community, with social networking playing an ever increasing role. Schools and teachers face the challenges of educating and guiding students through the positive and negative aspects of the virtual world (OECD, 2013a). Participatory and collaborative models from the Internet have an impact on formal learning systems. Open education platforms modify learning methods and give access to quality resources to a larger population (OECD, 2007). These new tools also enrich learning environments and can be used to improve learning in the classroom and beyond (OECD, 2013a). Information and communication technologies (ICT) offer opportunities to store and share data, foster dialogue among education professionals, and strengthen feedback mechanisms and evaluation procedures (OECD 2013b). In this way, ICT can help to engage all stakeholders in school improvement – students, teachers, school leaders and communities.

These factors contribute to the need to invest in quality education outcomes. In our fast-changing knowledge economies, with globalisation, heightened competition, changing labour markets and employment instability, citizens have to learn skills for the jobs of today, tomorrow and the years to come. The reality across OECD countries shows a varied picture, with progress and challenges (Figure 1.1 and Table 1.1).

Achieving equity and quality in an education system is possible. Among OECD countries, Korea, Japan, the Netherlands, Finland, Canada, Estonia and Australia combine high performance and high levels of equity, as shown in the upper right quadrant of Figure 1.1. These systems manage to mitigate the impact of students' background on mathematics performance (the percentage of variation in performance explained by the PISA index of economic, social and cultural status [ESCS]) while delivering high-quality

Figure 1.1. **Student performance and equity (2012)**

Student performance in mathematics and strength of relationship with ESCS

◇ Strength of the relationship between performance and socio-economic status is above the OECD average

◇ Strength of the relationship between performance and socio-economic status is not statistically significantly different from the OECD average

◆ Strength of the relationship between performance and socio-economic status is below the OECD average

Source: OECD (2013a), *PISA 2012 Results: Excellence through Equity (Volume II): Giving Every Student the Chance to Succeed*, Table II.2.1.

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results. Education systems that are equitable can not only redress the effect of broader social and economic inequalities, but also allow all individuals to take full advantage of education and training irrespective of their background (OECD, 2013c).

In addition, education systems need to be fair, and ensure that youth reach a minimum level of achievement. The picture here, however, is less positive. Around 23% of 15-year-olds across OECD (almost one in four) performed below Level 2 in mathematics on PISA 2012 and around 20% of 15-year-olds (one in five) performed below Level 2 in reading. Level 2 is considered the baseline level of reading or math proficiency at which students begin to demonstrate the skills that will enable them to participate effectively and

Table 1.1. **Annualised change in PISA performance across OECD countries, 2000-12**

▲ improved mean performance, = unchanged mean performance, – decreased mean performance

	Reading (2000-2012)	Mathematics (2003-2012)	Science (2006-2012)
Israel	▲	▲	▲
Poland	▲	▲	▲
Portugal	▲	▲	▲
Turkey	▲	▲	▲
Chile	▲	▲	=
Germany	▲	▲	=
Italy	▲	=	▲
Japan	=	▲	▲
Korea	=	▲	▲
Mexico	▲	▲	=
OECD average	-	▲	▲
Estonia	=	▲	=
Greece	▲	=	=
Switzerland	=	▲	=
Luxembourg	-	▲	=
Hungary	-	▲	=
Ireland	=	-	▲
Austria	=	=	=
Norway	=	=	=
Spain	=	=	=
United Kingdom	=	=	=
United States	=	=	=
Belgium	-	=	=
Czech Republic	-	=	=
Denmark	-	=	=
France	-	=	=
Netherlands	-	=	=
Australia	-	-	=
Slovak Republic	-	=	-
Slovenia	-	-	=
Canada	-	-	-
Finland	-	-	-
Iceland	-	-	-
New Zealand	-	-	-
Sweden	-	-	-

Notes: Countries/economies in which the annualised change in performance is statistically significant. Countries and economies are ranked in order of their positive change in mean score across PISA cycles.
*Source:* OECD, *PISA 2012 Database*, Tables I.2.3b, I.4.3b and I.5.3b.

productively in life. Those lacking these basic skills at age 15 may drop out, or may not finish upper secondary education and enter the workforce unprepared, requiring additional support and struggling more than their peers.

At the same time, progress is possible for countries with different performance levels. Countries with lower initial levels of skills, such as Mexico, Chile, Israel, Turkey and Portugal, have improved in at least two subjects assessed in PISA (Table 1.1). Other countries with near-average or high levels of skills, including Germany, Italy, Japan and Poland, have also made important progress in at least two domains. In some countries, both equity and performance in education have improved or remained stable. Between 2003 and 2013, Germany, Turkey and Mexico improved both their mathematics

performance and equity levels, while Norway, Switzerland and the United States improved their equity levels without change in performance. Performance has remained stable or declined in other countries. Defining and adopting policies adapted to context and particular challenges can, over the long term, lead to higher and more equitable student performance.

There has also been progress in education attainment. Rates have increased over the past decades for both males and females, although dropout remains high. On average, 82% of younger adults (25-34 year-olds) have attained at least upper secondary education, compared to 64% of older adults (55-64 year-olds) (Figure 1.2). This implies an increase in the number of adults having attained at least an upper-secondary education in most OECD countries. Evidence shows that completing upper secondary offers better chances to prevent unemployment and to find rewarding and better paying jobs. Women's access to higher education has also increased significantly, with 84% of younger women having attained at least upper secondary education, compared to 61% of older women (OECD, 2014a). However, dropout or non-completion rates remain high in some countries. On average, at least 18% of young adults across OECD countries have not completed upper secondary education, and that figure rises to 25% in Italy, Spain, Portugal, Turkey and Mexico.

Figure 1.2. **Population with at least upper secondary attainment, by age group (2012)**
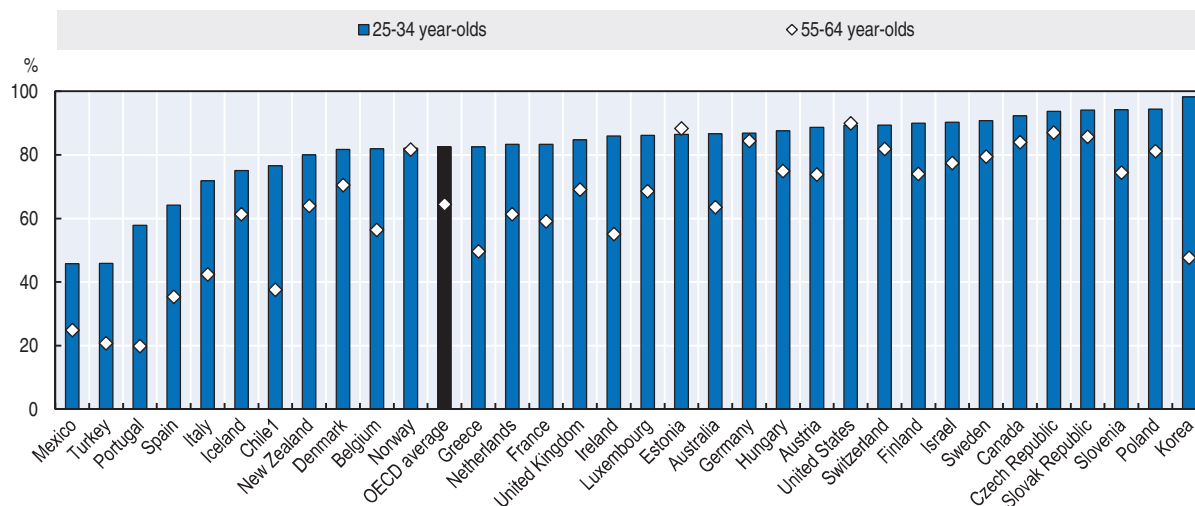
*Note:* These calculations exclude ISCED 3C short programmes. Data are missing for Japan.
1. Year of reference 2011.
Source: OECD (2014), *Education at a Glance 2014: OECD Indicators*, OECD Publishing, Paris, Table A1.2a.

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The comparison of adults' skills across generations also demonstrates improvements in educational systems and outcomes. Among the 22 OECD national and sub-national entities participating in the OECD Survey of Adult Skills, younger adults (25-34 year-olds) showed higher proficiency in numeracy than older adults (55-65 year-olds), with average scores of 279.4 for 25-34 year-olds and 252.7 points for 55-65 year-olds (Figure 1.3). The generational difference in numeracy performance varies from 10.2 points in England and Northern Ireland (United Kingdom) to 48.9 in Korea, with an average difference of 26.7 points. As low-skilled tasks become increasingly automated, these information-processing skills seem necessary to gain and maintain employment. Moreover, in a

Figure 1.3. **Mean numeracy proficiency of adults by age group (2012)**
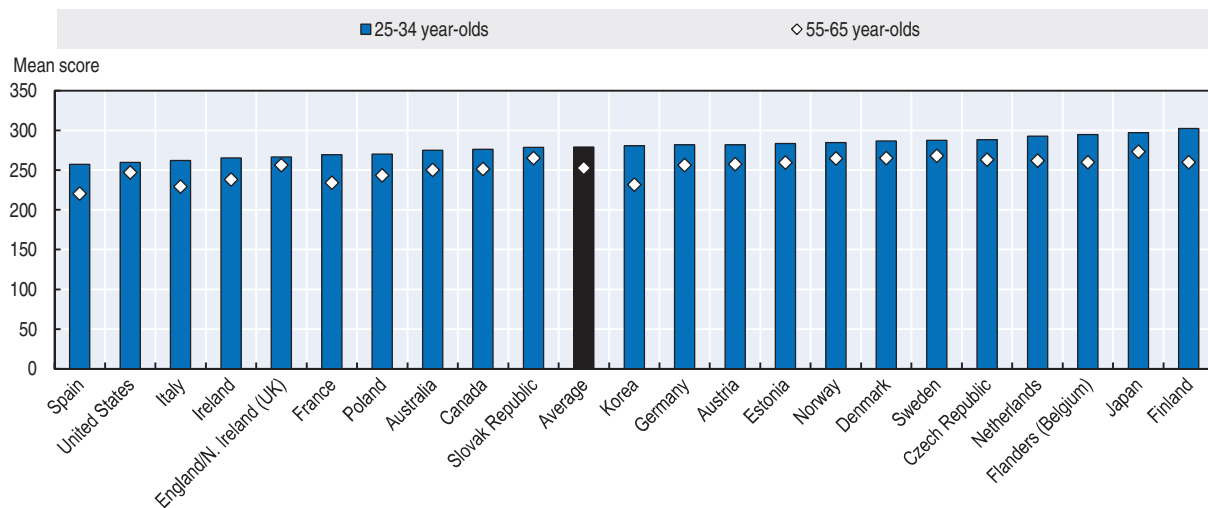
Source: OECD (2013), *OECD Skills Outlook 2013: First Results from the Survey of Adult Skills*, OECD Publishing, Table A3.2 (N).

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knowledge economy, highly skilled citizens are more likely to achieve their goals and develop the knowledge and potential to participate fully in society (OECD, 2013d).

Overall, while progress is apparent across OECD countries, there are still many young people with low levels of skills and knowledge, low completion rates in some countries and trends pushing for new and better investments to deliver education that responds to the needs of students, economies and societies in the future.

Exploring policy options to improve education

From a policy perspective, education systems can do more to deliver education that contributes to developing stronger skills and better outcomes for their citizens: raising overall literacy and numeracy skills and ensuring completion to at least upper secondary to ensure effective transitions into further education or the labour market. Education policy reforms that are targeted, contextualised and sustained over time can help meet these objectives.

There is a growing body of evidence on the different factors that contribute to education improvement. A number of international reports have reviewed the factors that contribute to quality education (Hattie, 2009; Fullan, 2010; Levin, 2008, 2010; Hargreaves and Shirley, 2009; Mourshed et al., 2010; OECD, 2012a; OECD, 2012b; Schleicher, 2012). While each of these reports adds its own specific focus to the quest for what makes good systems perform as they do, many agree on a range of policy areas that deliver high yield:

● investing in teaching and teachers

● setting high standards for all students

● using data to follow student progress

● building capacity of those engaged in the education process

● recognising the key role of school leadership

● supporting disadvantaged students and schools

● ensuring sound policy making with consistent accountability mechanisms.

Many of these reports focus on high performing school systems or analysis of the variables that make a difference in improving school outcomes. They propose ways to motivate education systems to achieve high performance and highlight the importance of taking into account specificities of governance and context to ensure success. A study that measures policy and country outcomes in cognitive tests internationally has aimed to estimate the role of different policies. It proposes that the more formal education students have and the younger they are in receiving it (including all the factors that contribute to positive discipline in the classroom), the higher their abilities will be (Rindermann and Ceci, 2009). However, across the international literature, there is no systematic comparative analysis of education policies adopted across countries or their impact.

In addition, much evidence highlights the importance of contextual factors in policy development and implementation. The political or economic situation and institutional structures of each country and its education system have a strong influence on the way policies are introduced and sustained. Policy reforms will differ according to social, cultural and economic contexts and in different political structures: dynamics in federal systems will not be the same as those in majoritarian or other parliamentary models (OECD, 2010a). Context is key in the process of policy design and implementation. There is no assurance that a specific policy from one country might have similar results in another.

In fact, education systems extend from local schools and independent universities to national ministries in capitals. Education policy is becoming increasingly complex with many different stakeholders engaged and a tendency towards greater decentralisation and accountability. The responsibilities of institutions and different levels of government vary from country to country, as do the relative importance and independence of non-public providers.

This implies that policy making needs to a) be aligned to the governance structure and b) take into account the respective responsibilities of different actors (Fazekas and Burns, 2012). Federal systems such as Austria, Australia, Canada, Germany or Switzerland, where states or provinces are responsible for delivering education, may look for different options to steer the system and require different types of policies or institutional arrangements.

Many factors highlight the need to systematise the knowledge base on education policy reform:

- With an increased focus on raising education outcomes across countries, policy makers seek better knowledge of policy options to consider.
- Heightened accountability for the results and achievements of education systems calls for better use of the national and international comparative knowledge base available to formulate policy.
- A growing consensus on policy areas that are key for improvement requires a more in-depth and comparative analysis of these specific areas.
- The recognition that context and implementation processes are critical for success in education policy reform calls for policy makers to have better knowledge on how to respond.

Together, these factors provide the foundation for the OECD *Education Policy Outlook* series (Box 1.1). This analysis of education policies and practices across OECD countries can help to systematise and improve the knowledge base on education reform and provide

responses for education policy makers and practitioners as they work to strengthen the results of their education systems.

Box 1.1. **About the *Education Policy Outlook***

The *OECD Education Policy Outlook* series was developed starting in 2012. It offers comparative analysis of education policy reforms across OECD countries, providing policy makers with clear and accessible information on policies adopted to respond to challenges in education systems today: strengthening equity and quality, preparing students for the future, and improving schools, evaluation and assessment, governance and funding. A range of products are available to assist policy makers, analysts and education stakeholders in their quest for education improvement:

● The Education Policy Outlook Country Profiles provide a unique assessment of OECD countries' education policies by reviewing their current context, challenges and reforms. The profiles include links to relevant sources and a statistical annex capturing the main education indicators (including PISA data). Seventeen country policy profiles have been published over 2013-14 (*www.oecd.org/edu/profiles.htm*).

● The *Education Policy Outlook* biennial reports (the first, this volume, in 2015) explores trends and reforms across OECD countries, including comparative insight into policies and the reform process itself.

● The *Education Policy Outlook Reforms Finder* (*www.oecd.org/edu/reformsfinder.htm*) is a pilot multi-criteria search engine on education policies adopted across OECD countries. Users will be able to search based on their particular needs and interests, generate charts and maps, and easily save, embed and share them with others.

Source: OECD (2012c), *www.oecd.org/edu/policyoutlook.htm*.

The *Education Policy Outlook* framework for analysis: Policy levers

The *Education Policy Outlook* has devised a comparative framework to analyse education policies across different areas, taking into account the country context. It has done so by aligning OECD education policy work with country reform strategies, resulting in a set of policy levers that policy makers can use to progress in their work to raise student outcomes.

Policy levers refer to the governing instruments which policy makers have at their disposal to direct, manage and shape change in public services, the range of functional mechanisms through which government and its agencies seek to implement policies (Rivzi and Lingard, 2010). In education, policy levers aim to gradually "steer" the system towards better education outcomes. Their selection is not neutral or automatic – it can be political and depend, for example, on the objectives established, the analysis of potential benefits or the capacity of impact foreseen (Steer et al., 2007; Smith, 2002).

To review education policy trends and actions in countries, the OECD has organised the knowledge around six policy levers for which there is analysis derived from major projects at OECD and selected evidence regarding their contribution to improving performance and equity. The levers are grouped in three categories:

● Students: How to raise outcomes for all in terms of equity and quality and preparing students for the future (refers to outputs of the education system).

● Institutions: How to raise the quality of instruction through school improvement and evaluation and assessment (refers to quality of the inputs).

● Systems: How to align governance and funding of education systems to be effective.

This framework used to analyse and compare policies implemented across OECD countries from 2008 through 2014, is explained more in detail in Table 1.2 and the section that follows.

Table 1.2. *Education Policy Outlook policy levers*

Policy levers	Definition	Policy options	Policies
Students: Raising outcomes			
Equity (and quality)	Policies to ensure that personal or social circumstances do not hinder achieving educational potential (fairness) and that all individuals reach at least a basic minimum level of skills (inclusion)	Investing early on	Provision of quality early childhood education and care
		Tackling system level policies	Avoiding grade repetition, early tracking and student selection; managing school choice; developing funding strategies that address students' and schools' needs; designing upper secondary pathways to ensure completion.
		Supporting low-performing disadvantaged schools and students	Supporting school leadership; stimulating positive school climates; strengthening the quality of teachers; ensuring effective classroom learning strategies; linking schools with parents and community.
Preparing students for the future	Policies to help prepare students for further education or the labour market	Upper secondary	Flexibility in choice; ensuring quality across programmes; engaging communities, parents and the private sector; ensuring effective transitions into the labour market or further education.
		VET	Matching skills offered by VET programmes with labour market needs; adequate career guidance; quality of teachers; providing workplace training; tools for stakeholder engagement.
		Tertiary education	Steering tertiary education; matching funding with priorities; assuring quality and equity; enhancing the role of tertiary education in research and innovation; strengthening links with the labour market; shaping internationalisation strategies.
		Transitions	Transitions across education pathways and links to the labour market.
Institutions: Enhancing quality			
School improvement	Policies to strengthen delivery of education in schools that can influence student achievement	Learning environments	Class size; curriculum; instruction time; learning strategies; interactions in schools.
		High quality teachers	Recruitment, selection and induction; salary and working conditions; initial training; professional development opportunities and career paths.
		School leaders	Attracting, developing and retaining school principals in the profession; support and networks.
Evaluation and assessment	Policies to support measurement and improvement of school system's outcomes	System evaluation	Evaluation of the system as a whole and of sub-national education systems; programme and policy evaluation.
		School evaluation	Internal school evaluation; external school evaluations; school leadership.
		Teacher appraisal	Probationary periods; developmental appraisal; performance management; appraisal for accountability and improvement purposes.
		Student assessment	Formative assessments; summative assessments.
		Evaluation and assessment frameworks	Co-ordinated arrangements: governance, configuration/architecture; competencies and skills; use of results; implementation strategies and factors.
Systems: Governing effectively			
Governance	Ensuring effective planning, implementation and delivery of policies	Formal structures	Type of government; organisation of education system; locus of decision making.
		Setting objectives	Definitions of national education goals or priorities.
		Stakeholder process	Relevant institutions and engagement with stakeholders.
Funding	Policies to ensure effective and efficient investment in education systems	Economic resources in the education system	Public expenditure: GDP and share by education level.
		Use of resources	Time resources; human resources; material resources by education level.

Source: OECD (2012c), *Proposal for an Education Policy Outlook* (EDU/EDPC(2012)17/REV1).

Students: Raising outcomes for all

Equity

There is a growing body of evidence that shows that the highest-performing education systems are those that combine equity and quality. Equity in education is achieved when personal or social circumstances, such as gender, ethnic origin or family background, do not hinder achieving educational potential (fairness) and all individuals reach at least a basic minimum level of skills (inclusion) (OECD, 2012a).

Addressing these inequities (e.g. students' background, geographic inequalities, etc.) and school failure can strengthen the capacity of individuals and societies to respond to recession and contribute to economic growth and social well-being. Conversely, poorly educated societies can limit economies' capacities to produce, grow and innovate. Investing early on and in good quality education up to completion of secondary education is among the most profitable policies. This can be done by:

- Providing early childhood education and care (ECEC) (ages 0 to 6/7 across OECD countries): While ECEC is not compulsory in most OECD education systems, evidence shows that children who participated in early childhood education tend to perform better academically. ECEC has been linked to improvements in child well-being, reduction of poverty, increased intergenerational social mobility, more female labour market participation, increased fertility rates and better social and economic development. Key to improving access are goals and regulations, funding and other incentives to raise the quality of provision, such as improving qualifications, training and working conditions (OECD, 2012d).

- Tackling system-level policies that hinder equity in education includes avoiding grade repetition, early tracking and student selection, managing school choice, developing funding strategies that address students' and schools' needs, and designing upper secondary pathways to ensure completion (OECD, 2012a).

- Measures to improve low-performing disadvantaged schools include strengthening and supporting school leadership, stimulating and supporting school climate and learning environments, strengthening the quality of teachers, ensuring effective classroom learning strategies, and linking schools with parents and the community.

Preparing students for the future

In today's knowledge-based economies and societies, ensuring that students have the skills required to enter the labour market is key across OECD countries. After comprehensive school and lower secondary education, students enter more complex and differentiated study programmes as they progress through secondary education towards employment. At age 16 at the latest, students in all OECD countries leave the comprehensive education system to access more specific instruction, either upper secondary or vocational education and training (VET) that can lead to tertiary education and/or the labour market. More vulnerable students may be at higher risk of receiving inadequate support for their specific learning needs at this stage, disengaging from their studies or dropping out. A challenge countries face is being inclusive while at the same time fostering the development of students' specific profiles according to their chosen pathways (OECD, 2011b).

This lever analyses how upper secondary, VET and tertiary education are addressing students' current needs to help prepare them for the future.

a) Upper secondary education (from age 15 to 20 across OECD countries): In most OECD countries, the majority of the population has upper secondary education, although it is generally not part of the compulsory system. Challenges remain to provide relevant education to prepare young adults for work or education and, at the same time, develop their capacity for further learning. Incentives to remain in school beyond the end of compulsory education and to graduate from upper secondary education could help reduce the risk of unemployment and other forms of exclusion for young adults who do not have sufficient education (OECD, 2004; OECD, 2010b; OECD, 2014a).

b) Vocational Education and Training (from age 15 across OECD countries): This area of education refers to the education and training programmes created at upper secondary (initial) or post-secondary level that generally lead to a specific job or type of job. OECD related studies propose the need to foster improvement at the initial VET level. For example, governments can work on: ensuring that the skills offered through VET programmes correspond to labour market needs; providing adequate career guidance for all; improving the quality of teachers through appropriate education and experience; making use of workplace training; developing tools for stakeholder engagement; and greater transparency to support system improvement (OECD, 2010b; OECD 2014b).

c) Tertiary education (from age 17 across OECD countries): Tertiary education has been expanding in recent years and a major study on tertiary education defined key areas for improvement (OECD, 2008). Today more than one-third of young adults complete tertiary-type A education in OECD countries (OECD, 2014a). This expansion has also brought a diversification of studies, due to the need to better address the connection between education, the labour market and the external world, improve social and geographical access to education, and cater to less theory-based training needs. This poses challenges of quality, equity, internationalisation, adequate funding and implementation of policies targeted at this level of education (OECD, 2008a; OECD, 2008b). A key issue to review is how to assure and improve quality.

Enhancing quality in institutions

School improvement

This policy lever relates to how to strengthen the key factors in schools that influence and support student achievement, such as high-quality teachers, good school leadership, and adequate learning environments and curriculum. Evidence shows that high-quality teaching has a strong influence on raising student performance (OECD, 2005; Schleicher, 2012). Therefore, a priority must be improving the way systems attract, develop and retain high-quality teachers at schools. This can be related to recruitment, selection and induction processes; salary and working conditions; initial training and professional development opportunities; and career paths available to teachers. It can also include feedback and assessment and working collaboratively.

At the same time, the role of school leaders has evolved to prioritise a more pedagogical function, as evidence points to their key contribution to student learning when they focus on developing teachers and setting the conditions and environment for quality learning. In a context of increasing autonomy and accountability, their role is also becoming progressively more complex, but the support they receive may not be evolving accordingly (Pont, Nusche and

Moorman, 2008; Schleicher, 2012). Among the key policy levers for them to contribute to raise student performance are to clarify the role of effective school leaders, to distribute this role, to ensure school leadership development throughout their careers – and to ensure that school leadership is an attractive profession that can draw and retain high-quality candidates.

In addition to teachers and learning professionals, it is also important to consider the conditions shaping the environments in which learning takes place (Dumont, Istance and Benavides, 2010). This refers to the structural school-level conditions that affect the way in which students and teachers interact. Factors such as class size, learning time at school, instruction time, the curriculum or share of instruction in the curriculum by subject are tangible policies used across countries to improve the learning process.

Evaluation and assessment

Evaluation and assessment have become a key policy issue in education, as countries are looking for ways to measure student progress and to evaluate the performance of those engaged in the education process – teachers, schools and their leaders – to help improve education systems. With decentralisation, an increased focus on results, and pressures for accountability, evaluation and assessment have become ways in which ministries/departments of education and policy makers measure progress, and parents and societies gain more information on results of schooling. Evaluation and assessment are seen as key to both improvement and accountability in school systems, and as instrumental to define strategies that can improve school practices with the ultimate goal of enhancing student outcomes (OECD, 2013b).

Evaluation and assessment frameworks are co-ordinated arrangements that seek to support the improvement of a school system's student outcomes. They bring together student assessment, teacher appraisal, school evaluation, and system evaluation, seeking coherent alignment towards student learning objectives. Countries can use these tools to steer the system, as indicators of progress and especially to better understand how to provide the support needed for improvement. The different dimensions of evaluation and assessment frameworks (OECD, 2013b) used in the analysis undertaken by the *Education Policy Outlook* include:

- System evaluation: How governments at national or sub-national levels evaluate progress towards education goals and overall performance. This can include evaluation of the system as a whole, evaluation of sub-national education systems, and programme and policy evaluation.

- School evaluation: Policy makers can design approaches to evaluate individual schools as organisations. This can include internal school evaluation (schools' self-evaluation), external school evaluation (school reviews, school inspections) and school leadership.

- Teacher appraisal: More countries are introducing ways to assess and evaluate teachers to judge their performance. Among different options: a probationary period, formative appraisal, performance management, appraisal for accountability purposes and teacher registration or certification.

- Student assessment: Student assessment refers to how student progress is measured and planned in a systematic way to measure evidence of learning and make judgments about student learning. Policy options include student formative assessments as learning is taking place to identify aspects to deepen and shape in subsequent learning, and student summative assessments; summarising learning that has taken place to record, grade or certify achievements.

Systems: Governance and funding effectively

Governance

In a context where decision-making is increasingly shared among different stakeholders, countries and their policy makers need to understand better how to optimise structures and dynamics to achieve clear results. The concept of governance addresses this need to understand how "means" and "processes" come together for a country's policy making. Governance refers not only to the formal structures in place in a system, but also to how governments set priorities and interactions among actors contribute to shape the success of policy making (World Bank, 1994; Hewitt de Alcántara, 1998; Cerna, 2013).

Effective governance can be viewed in two key dimensions. The first is related to what institutions/actors are involved in a decision-making process and how these are expected to interact. The second refers to how governments carry out policies, and how they set priorities, plan and implement new policies through a mix of leverage and consultation (Fazekas and Burns, 2012; OECD, 2011c). In the scope of the *Education Policy Outlook*, governance can be analysed by reviewing the formal structures and processes in place to deliver education policy and the stakeholder engagement process for policy making. In terms of formal structures, the policy-relevant issues for comparison are the type of government (federal or unitary), the organisation of the education system policy-making process (institutions/actors that intervene in policy design and delivery) and how education is delivered (public, private with public support, or private).

The degree of decentralisation in decision-making across the system has also become a key issue in governance. As greater decentralisation has devolved responsibilities to local authorities, schools and their families, ministries of education and their related institutions have taken on a guiding and support role, which has changed policy-making dynamics and incentives and the role of regional and local governments. In terms of those involved in the process of policy making, stakeholder engagement refers to how governments and actors interact in more informal and dynamic aspects. It includes participation and engagement of stakeholders and how they interact with governments to influence the policy making process. The role of representatives of the teaching profession, for example, and the process of consultation with stakeholders are key in governance.

Funding approaches

The context of the economic crisis and the growing pressure for transparency, accountability and better education outcomes confirm the challenge that countries face to do more with less. The way available resources are used affects student learning opportunities and is a key policy lever to influence outcomes. Funding refers not only to the amount of resources expended on the education system, but more importantly (as evidence on student performance shows) to how these resources are invested and distributed – according to needs, priorities and capacities to use them efficiently (OECD, 2012a; OECD, 2012e; OECD, 2013e; OECD, 2014a).

Key to understanding an education system is looking at the economic resources invested and how they are allocated within the national education agenda. The degree of public investment in education (in terms of GDP, share by education levels and educational institutions, and participation of private sources) provides a picture of how the system operates and where priorities are set. In addition, it is important to analyse how resources are allocated both across the system and at the institutional level.

An overview of selected policies and reforms introduced across OECD

Using this framework to analyse the reforms adopted across OECD education systems from 2008 through 2014 shows that countries have developed a wide range of policies adapted to their context to respond to their concrete challenges. The analysis drew on a rich source of qualitative data (Box 1.2) that is further developed in Part I and Part III of this report.

Box 1.2. **The *Education Policy Outlook* data on policies and reforms**

The *Education Policy Outlook* 2015 edition builds on a data set of education policies introduced by OECD countries between 2008 and 2014, drawn from the following sources:

- The Education Policy Outlook Country Profiles: These reports provide an assessment of OECD countries' education policies, reviewing their current context, challenges and reforms. They include links to relevant sources and a statistical annex capturing main education indicators. The documents have been drafted by the OECD Directorate for Education and Skills and validated by countries (*www.oecd.org/edu/profiles.htm*).

- The Education Policy Outlook Country Snapshots: Presented in Part III of this report, they are based on a snapshot survey designed for this publication by the OECD Secretariat and completed and reported by countries and the OECD. They provide a succinct overview of the education context, issues and reforms implemented in each OECD country.

- The OECD Directorate for Education and Skills knowledge base: Quantitative data and indicators providing comparable data on education systems across OECD member and partner countries and economies include PISA, *Education at a Glance*, TALIS and PIAAC. Qualitative knowledge comes from a range of thematic and country reviews which cover topics such as teacher policy, school leadership, evaluation and assessment, education infrastructure, early childhood education, tertiary education and governance. Much of this knowledge can be accessed directly through the OECD Education GPS (*http://gpseducation.oecd.org*).

Classified in a database, the data includes around 450 policies introduced in OECD countries between 2008 and 2014. It is important to point out some caveats to the database that will be object of further refinement in future editions of the Outlook: This is a qualitative exercise, based on country responses and OECD categorisation. There is an imbalance in terms of country policies included, as the reforms refer to Education Policy Outlook Country Profiles completed by OECD for 17 countries and shorter country snapshots for countries without profiles. Once all 34 member Country Profiles are completed by OECD, the aim will be to correct this imbalance. It is also important to note that the dataset may not cover policy areas that have not been a recent focus of OECD analysis (such as ICT in education, special needs education, and lifelong or adult learning). Also consistency of data gathering may vary across countries. In future editions of the *Education Policy Outlook*, the process for gathering and including policies and data will be refined and enriched. Also, inaccuracies that may still arise in the coutries' policies information despite the OECD Secretariat's efforts will also be corrected.

The data set also includes descriptive information, such as year of implementation, education level targeted, main actors in charge of implementation and information on the impact evaluation if available. The data set will be available online in a pilot tool in development called the Reforms Finder (*www.oecd.org/edu/reformsfinder.htm*).

Key reform areas where the most policies were reported include Preparing students for the future (29%) and School improvement (24%), followed by Equity and quality (16%), Evaluation and assessment (12%) and Funding (12%) and Governance (9%) (Figure 1.4). Under the range of policy options, key reform areas include enhancing equity, developing the teaching profession, modifying curriculum, strengthening evaluation and assessment, finding different options to fund education, and targeting specific levels of education, such as vocational education and training or tertiary.

Figure 1.4. **Distribution of education policies by policy lever, 2008-14**
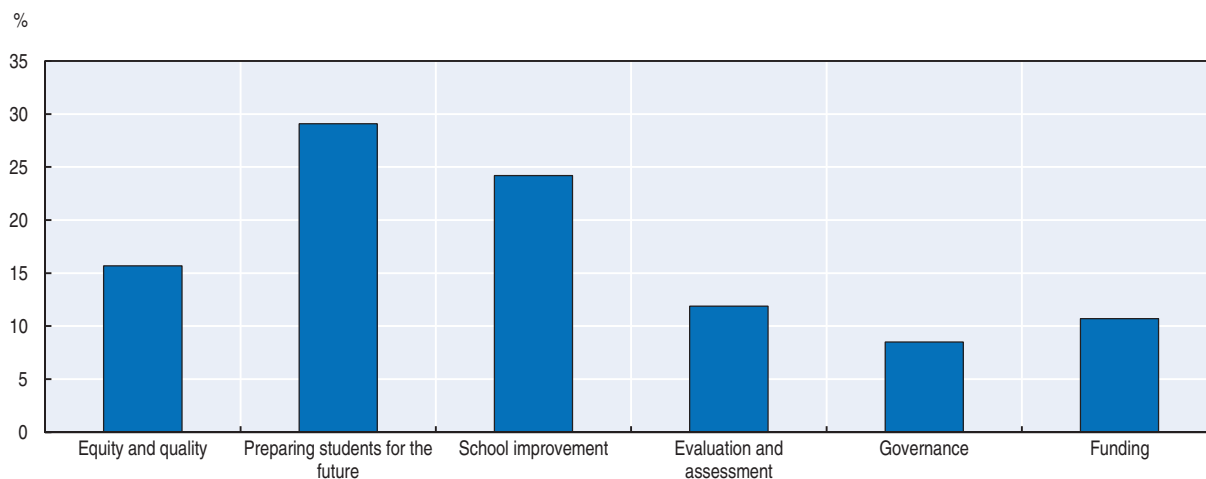
Methodological note: Classification of the policies was undertaken using OECD Secretariat methodology and analysis: variables and their codes were defined based on an initial analysis and policies inputted into a databank, with final revision of classification. The databank contains a large sample of education policies from OECD countries across a set of policy areas. The data is based on a snapshot survey completed by countries and Education Policy Outlook Country Profiles which have been revised by member countries.
Source: OECD, *Education Policy Outlook Reforms Finder*, 2014, *www.oecd.org/edu/reformsfinder.htm*.

StatLink 🔗 *http://dx.doi.org/10.1787/888933171377*

In addition to policy levers, it is important to classify policies according to their scope. Countries are implementing policies of different nature, breadth and focus in all areas analysed. The *Education Policy Outlook* also classifies education policies by their scope of intervention to provide a better understanding of the different approaches available to policy makers, enable a level of comparability of qualitative education inputs and facilitate peer-learning among education policy makers. The classification is descriptive, based on an empirical approach using the dataset as its starting point. It does not take into account for purposes of comparison the political context in which policies are developed. Policies have been classified according to the following definitions of scope of intervention:

● Comprehensive policies are overarching general strategies using various, if not all, policy tools available under a particular lever. Aiming for systemic change within a policy lever, they can take the form of general strategies-setting goals and priorities or the introduction of new governance systems or new structures.

● Content policies are those that define or reform the content knowledge produced under a specific policy lever. They can be of different nature, such as curriculum or standards.

● Targeted policies are those that target a concrete aspect of a policy lever.

Of the policy options analysed for this report, almost half (47%) are targeted policies. In three policy levers, this was the prioritised approach to make policy: School improvement (59%), Evaluation and assessment (57%) and Funding (81%) (Figure 1.5). A comprehensive policy approach was adopted for around half of the policies analysed under Equity and quality (54%) and Governance (47%). Content policies were more common under Preparing students for the future policy lever (33%), mainly in the form of curriculum guidelines or qualification frameworks.

Figure 1.5. **Distribution of education policies by scope, 2008-14**

Methodological note: Classification of the policies was undertaken using OECD Secretariat methodology and analysis: variables and their codes were defined based on an initial analysis and policies inputted into a databank, with final revision of classification. The databank contains a large sample of education policies from OECD countries across a set of policy areas. The data is based on a snapshot survey completed by countries and Education Policy Outlook Country Profiles which have been revised by member countries.
Source: OECD, *Education Policy Outlook Reforms Finder*, 2014, *www.oecd.org/edu/reformsfinder.htm*.

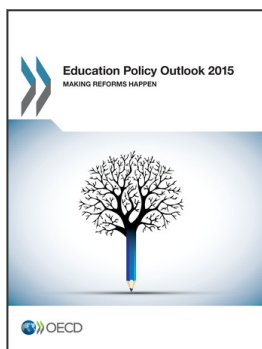StatLink ᩒᩔᒧ *http://dx.doi.org/10.1787/888933171386*

Finally, it is important to point out that measuring policy impact through consistent quantitative and qualitative indicators would allow for more accountability and strengthened knowledge for policy makers to make more evidence-based policy choices. However, OECD countries do not yet systematically include policy evaluation in the policy-making process. Within the limited time span of this study (2008-14), only 10% of policies in the dataset have been reported to be evaluated for their impact.

As information from countries on impact evaluation is currently limited, the 2015 edition of the *Education Policy Outlook* report does not explore the impact of the policies examined, but instead reviews the policy intent (as expressed by policy makers) to classify them within the framework. Future editions of this report may focus on impact evaluation.

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