Chapter 1

The role of education and skills in today's world

Today's socio-economic climate brings new challenges that affect the future of children and youth. Although access to education has improved considerably, a good education no longer secures a job; youth have been particularly affected by rising unemployment following the economic crisis. Problems such as obesity and declining civic engagement are also increasing while the ageing population and the environmental outlook are worrying. Moreover, inequalities in labour market and social outcomes tend to be widening. Education has strong potential to address these challenges by enhancing a variety of skills. Cognitive skills matter, but social and emotional skills, such as perseverance, self-control and resilience are just as important. All of these skills need to be fostered for individuals and societies to prosper.

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.

"The greatest glory in living lies not in never falling, but in rising every time we fall."

Nelson Mandela

The objectives of this report

Children need a balanced set of cognitive, social and emotional capabilities to adapt to today's demanding, changing and unpredictable world. Those who are able to flexibly respond to the economic, social and technological challenges of the 21st century are those with higher chances of achieving prosperous, healthy and happy lives. In particular, social and emotional skills matter for facing the unexpected, coping with multiple demands, controlling impulses and working effectively with others.

Contrary to popular misconceptions, children are not born with a fixed set of abilities with little room for improvement. Children are not born as a "maths person", a "creative person" or an "attentive person". Children start their lives with considerable potential to develop these abilities, and whether they flourish or not depends on the learning contexts they are exposed to during childhood and adolescence. Evidence suggests the brain has vast plasticity with an enormous capacity to learn, change and develop during this period. Skills are malleable; they can be developed through practice and reinforced through daily experiences. Cognitive, social and emotional skills may develop independently, but they can also influence each other as individuals progressively develop skills. For instance, children with self-control are more likely to finish reading a book, complete a maths assignment or follow through on a science project, all of which contribute to further enhancing cognitive skills.

Many policy makers, teachers and parents know that social and emotional skills are crucial for children's future prospects. Nevertheless, they generally lack information on the specific types of skills that need to be nurtured, and how best to promote them.

Hence, this report presents evidence on:

- which (and how) social and emotional skills drive individuals' future economic and social prospects
- which (and how) learning contexts shape the development of children's social and emotional skills
- the extent to which education stakeholders acknowledge the importance of fostering social and emotional skills and deliver policies, practices and assessments to encourage their enhancement.

This report concludes by contrasting current education policies and practices with existing evidence on which skills and learning contexts matter and how to enhance these skills. The report then proposes what policy makers, school administrators and researchers can do to bridge the gaps to better enhance children's skills to achieve positive lifetime outcomes and to contribute to societal prosperity.

Today's socio-economic landscape

The current socio-economic climate needs strong and innovative approaches to enhance individual well-being and social progress

The recent economic crisis has brought considerable damage to our society, with youth being one of the most affected groups. Today, young people face numerous challenges in achieving economic independence and life satisfaction. The global trends are also imposing new challenges, such as ageing populations, fragmented families, mistrust and environmental threats. Moreover, inequality is on the rise in a number of socio-economic dimensions. This section provides a snapshot of the current socio-economic landscape across OECD countries and partner economies.

One of the biggest societal achievements of recent decades has been the increase in educational attainment. In 2012, close to 40% of 25-34 year-olds had finished tertiary education and only 17% had no upper secondary level education (OECD, 2014). This is an important achievement as high educational attainment is positively related to a number of desirable socio-economic outcomes. However, during recent years it has become clear that educational qualifications are no longer sufficient to find and keep a job, especially during hard economic times. At the same time, employers are also struggling to find employees with the right set of skills.

Unemployment rates are high in most OECD countries. They increased markedly with the recent crisis, and in many countries remain at record levels. Individuals with low educational attainment were hit hardest, especially youth (Figure 1.1). On average across the OECD, youth unemployment rates rose more than 4 percentage points (from 12.0% to 16.3%) between 2007 and 2012 (OECD, 2013a). The transition from school to work has become increasingly more difficult for the new generations, irrespective of their level of education. However, it is less-educated youth who have been struggling the most (OECD, 2014). Approaches to improving young people's employment prospects should consider fostering social and emotional skills, such as perseverance, responsibility and motivation. Evidence suggests the importance of these types of skills in succeeding in the labour market (Kautz et al., 2014).

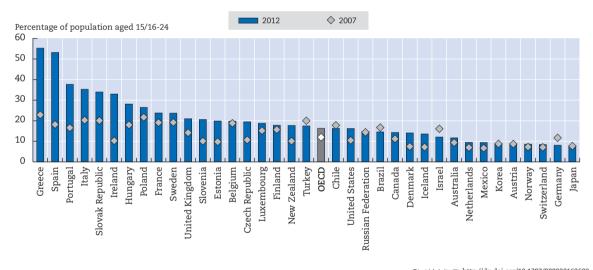


Figure 1.1. Youth unemployment is at its highest in many OECD countries

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Note: Countries are ranked in descending order of youth unemployment in 2012.

Source: OECD (2013a), Online OECD Employment Database, www.oecd.org/employment/database (accessed 12 February 2014).

Health concerns are mounting as well. Decreasing levels of physical activity at work, home and during leisure time is one of the main factors contributing to rising rates of obesity (OECD, 2010a, 2013b). Rates vary widely across countries, but they have been steadily increasing since 1980 for both adults and children across most countries. Today, in 20 out of 34 OECD countries, the rate of overweight and obese adults is over 50% (OECD, 2013b). Child obesity is also high (Figure 1.2), with over 20% of 5-17 year-olds being classified as overweight or obese (OECD, 2013b). Obesity is a major health concern given it is a risk factor for numerous physical (including diabetes and cardiovascular diseases), mental (including poor self-esteem and anxiety) and social problems (such as bullying). Approaches that foster social and emotional skills can contribute to tackling obesity by enabling individuals to follow healthier lifestyles, remain fit, control their impulses and maintain strong personal relationships (OECD, 2010b).

Late 2000s or latest year available Percentage of children aged 5-17 years who are overweight or obese 50 40 30 Brazil France Slovenia Chile Spain Luxembourg Korea Ireland Israel OECD Japan New Zealand United States Hungary Canada United Kingdom Australia Finland Germany South Africa Denmark Switzerland Austria **Iceland** Sweden Russian Federation Estonia Netherlands Belgium Republic Republic Czech Slovak

Figure 1.2. One in five children are affected by excess weight

StatLink http://dx.doi.org/10.1787/888933163630

Note: Countries are ranked in descending order of overweight in late 2000s. Estimates are based on national surveys of measured weight and height. Figures represent an unweighted average of the prevalence for boys and girls. Early 2000s data missing for: Australia, Finland, France, Ireland, Israel, Korea, Luxembourg, Mexico, New Zealand, Switzerland and the United States. Late 2000s data missing for: Austria, Poland and the Russian Federation. Source: OECD (2011a), OECD Health at a Glance 2011: OECD Indicators, OECD Publishing, Paris, http://dx.doi.org/10.1787/health_glance-2011-en and OECD (2013b), OECD Health at a Glance 2013: OECD Indicators, OECD Publishing, Paris, http://dx.doi.org/10.1787/health_glance-2013-en.

Bullying among young people is a serious, common social problem that can have repercussions through adulthood. Around one in ten adolescent boys in OECD countries report being bullied at school¹ (Figure 1.3); and a similar share report bullying others (Currie et al., 2012). There is no indication that levels of bullying at school have increased since the HBSC study (Health and Behaviour of School-aged Children) started collecting these data in 1994. However, new forms of bullying, such as online and phone bullying that have emerged with digital social networking, are not captured in this study. And, although online bullying is less prevalent than offline bullying, it can cause a higher intensity of harm than offline bullying (Livingstone et al., 2011). Interventions that promote self-esteem, managing emotions such as anger and aggression, and building resilience may help reduce bullying involvement as well as long-term health and social costs (Wolke et al., 2013).

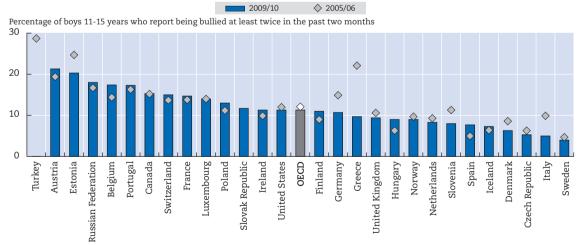


Figure 1.3. One in ten boys report being bullied at school

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Note: Countries are ranked in descending order of bullying in 2009/10. Data for Australia, Chile, Israel, Japan, Korea, Mexico, New Zealand, the Slovak Republic (2005/06) and Turkey (2009/10) are missing. Data for the United Kingdom do not include Northern Ireland.

Source: Data for 2005/06: Currie, C. et al. (2008), Inequalities in Young People's Health: HBSC International Report from the 2005/2006 Survey, Regional Office for Europe, WHO (World Health Organization) Publishing, Copenhagen. Data for 2009/10: Currie, C. et al. (2012), Social Determinants of Health and Well-being Among Young People: HBSC International Report from the 2009/2010 Survey, Regional Office for Europe, WHO Publishing, Copenhagen.

Civic and social engagement have declined across OECD countries. Levels of trust in national governments and institutions have dropped in most OECD countries after the global economic crisis (OECD, 2013c). Countries with high unemployment rates have experienced the greatest decrease in levels of trust (OECD, 2013c). Similarly, voting has fallen in the majority of OECD countries (Figure 1.4). On the positive side, helping strangers and doing voluntary work show an opposite trend: they have increased since the onset of the crisis. Some signs indicate people may be turning more towards family and friends for support rather than to institutions.

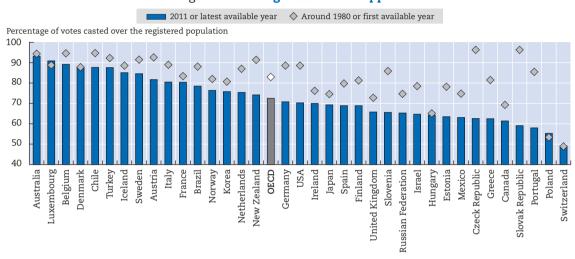


Figure 1.4. Voting rates have dropped

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Note: Countries are ranked in descending order of voting rates in 2011 or latest available year. For some countries, turnout for presidential elections and regional elections may be higher than for national parliamentary elections, perhaps because those elected through these ballots are constitutionally more important for how those countries are run. Moreover, relatively frequent elections may reduce turnout (e.g. Switzerland).

Source: OECD (2013c), "Well-being and the global financial crisis", in How's Life? 2013: Measuring Well-being, OECD Publishing, Paris, http://dx.doi.org/10.1787/how life-2013-7-en.

Life satisfaction has also fallen, especially in countries hardest hit by the crisis (OECD, 2013c). This may have been driven by a number of factors, but higher unemployment rates are likely to play an important role (OECD, 2013c). Unemployment leads not only to material loss and mental stress, but also to a loss of other work-related benefits such as self-esteem and social relationships. Moreover, recent surveys suggest that people's optimism about their future life satisfaction has fallen in the years following the crisis (OECD, 2013c).

Inequalities in economic and social outcomes are evident across OECD countries and partner economies. Income inequalities widened in most OECD countries between the mid-1980s and late 2000s and with the crisis, the gaps have widened (OECD, 2008; 2011b). Unequal distribution of income translates into unequal access to goods and services, including education and health. Not surprisingly, education and health outcomes follow a social gradient: the lower the socio-economic background, the worse their educational performance and health (WHO, 2008). Social mobility is therefore becoming increasingly difficult to achieve. Today young people are more dependent on their skills and motivation for future success. Children from less affluent backgrounds need additional support to develop the social and emotional skills that will help them achieve the same life chances as their more advantaged peers.

Long-term trends will set additional challenges

Population ageing combined with changes in family size, family structure, parental employment and environmental threats are putting additional pressures on governments, families and society in general. Furthermore, technological progress has had a major impact on the way people study, work and socialise, and will continue to transform our societies.

Increased life expectancy together with decreasing fertility rates is leading to ageing populations. This means there will be an increasing number of dependents for a smaller number of economically active people, which could lead to higher spending for governments and society in areas such as health, pensions and long-term care. In 2011, OECD citizens could expect to live more than 80 years, a staggering ten-year gain since 1970 (OECD, 2013b). At the same time, families in OECD countries are below or close to the replacement level of two children per woman (OECD, 2013d).

The nature of family support – both monetary and non-monetary – is changing as families grow smaller and less stable, and more women work. Today, in most OECD countries, dual-earner families are the norm. Two out of three women with children under the age of 15 are working in OECD countries (OECD, 2013d). This trend is likely to continue with more women finishing tertiary education and female career expectations on the rise (OECD, 2012a). Smaller families mean there are fewer people with whom to share the provision of care and support for children and the elderly. Additionally, the increase of non-traditional families and of female employment means families will further struggle to provide and receive the support needed. Family formation trends together with population ageing are setting substantial challenges to intra- and intergenerational solidarity. Raising socially responsible and committed citizens can help cope with the challenges of reduced family networks.

Environmental pressure is another major challenge societies need to confront and to address. The OECD has highlighted key issues that require urgent attention to stop over-exploiting and depleting the planet's natural resources. These include: disruptive climate change, continued loss of biodiversity, freshwater availability and the health impact of urban air pollution (OECD, 2012b). Environmentally responsible and actively engaged citizens are crucial to reducing the footprint society leaves on the planet.

Furthermore, globalisation and technological progress will continue to bring changes that will trigger further inequalities. These, in turn, will lead to a more unequal distribution of resources and support, with less affluent families becoming less capable of providing the goods and services needed for education. Therefore, unless additional efforts are made, less affluent children will continue to lose out in relation to their more advantaged peers, and social mobility will be harder to achieve. Our globalised world needs individuals who can understand the impact of their actions on others and that can quickly adapt and thrive amidst the unforeseen challenges of tomorrow.

Today's policy challenges are numerous and hence require better policies to buck the trend and improve future prospects. Recent economic hardship amplified the fact that in a competitive global market, educational qualifications are not enough to find and keep a good-quality job. It is clear that a broader range of skills is needed to succeed in the labour market, to maintain a family, to raise children, to lead a healthy lifestyle, to provide support to others and to be an active member of society. There is growing interest from policy makers in understanding how these types of skills can be fostered among children and young people.

The role of education and skills in addressing today's challenges

Education can positively influence economic and social outcomes ...

Without doubt, education can improve individuals' socio-economic outcomes and foster social progress. Better-educated people are on average more likely to be employed, to report good health, to lead healthier lifestyles, to participate more actively in society and to exhibit higher levels of satisfaction than their less-educated peers (OECD, 2010b; 2014). This positive relationship holds even after accounting for age, gender and socio-economic background. The size of the relationship, however, varies across indicators and across education levels, and is not linear (OECD, 2010b). Moreover, the evidence on the causal effects and causal pathways of education on social outcomes is still limited (OECD, 2010b).

Previous OECD work has shown the potentially important role of education in promoting positive life outcomes. Education, for instance, can provide protection against unemployment and inactivity: employment rates are highest among people with tertiary education and lowest among those without upper secondary education (OECD, 2014). Similarly, the share of highly educated (i.e. with tertiary education) individuals neither in employment nor in education or training (NEETs) is lower than the corresponding share of low-skilled youth (i.e. without upper secondary education): around 13% compared with around 16% across OECD countries (OECD, 2014).

Likewise, positive health outcomes are strongly related to educational attainment. For instance, life expectancy differs markedly by educational level (especially among men). Highly educated 30-year-olds in a typical OECD country can expect to live longer than their less-educated counterparts: by eight years for men and four years for women (OECD, 2012c). Similarly, tertiary-educated adults are on average less likely to be obese than adults with lower levels of education (OECD, 2012c). Gains in health outcomes are also observed at the upper secondary level. Individuals who completed their upper secondary education are, on average, more likely to have positive outcomes on self-reported health and mental health. They are also less likely to engage in risky behaviour, such as smoking and drinking (OECD, 2010b; 2012c).

Civic and social engagement also shows positive links with education. Better-educated individuals are on average more likely to volunteer, to be interested in politics, to vote and to trust others than their less educated peers (OECD, 2010b). The voting gap between adults (25-64 year-olds) in OECD countries with high and low levels of education is 14.8 percentage points (OECD, 2012c). Civic and social engagement is likely to be influenced not only by individuals' own level of education, but also by the education levels of family members, peers and the community.

Recent evidence from the OECD's Survey of Adult Skills demonstrates the strong positive association between educational attainment and social outcomes, including self-reported health, volunteering, interpersonal trust and political efficacy (OECD, 2013e; 2014). For example, in terms of self-reported health, the proportion of adults who report being in "good health" is 23 percentage points higher among those with tertiary education than among those with below upper secondary education (OECD, 2014).

... by developing individuals' skills

Education can contribute to improving social outcomes by helping individuals develop skills. Previous OECD work has shown that a considerable share of the return on education is explained by the development of cognitive, social and emotional skills (Box 1.1). Results from other OECD studies, including the Programme for International Student Assessment (PISA) and the OECD's Survey of Adult Skills also show the importance of skills in achieving positive outcomes (OECD, 2013e; 2013f).

Box 1.1. OECD's Social Outcomes of Learning (SOL) project

The OECD has been evaluating the role of learning in improving social outcomes such as health and social cohesion since 2005. The Social Outcomes of Learning (SOL) project explored the relationships, causal links, causal mechanisms and contexts under which education is likely to promote healthy lifestyles and active civic and social engagement (CSE). The first phase (2005-07) of the project developed a conceptual framework and mapped the available evidence pertaining to diverse domains of health and CSE: *Understanding the Social Outcomes of Learning* (OECD, 2007). The second phase (2008-09) focused on particular sub-domains of health (i.e. obesity, mental health and drinking) and CSE (i.e. volunteering, political interest and trust/tolerance) to evaluate whether, to what extent, for whom, how and under what conditions education can contribute to improving these social outcome measures: *Improving Health and Social Cohesion through Education* (OECD, 2010b).

The main findings of the SOL project were:

- Education formal, informal and non-formal can contribute to improving social progress and wellbeing, mainly through increased competencies or skills.
- Skills cognitive, social and emotional are important pathways through which education affects social outcomes.
- Education is among the most cost-effective strategies to address social challenges such as health, civic
 engagement and crime.
- The power of education is limited if children's cognitive, social and emotional skills are not developed at an early stage.
- Parents, teachers, school administrators and the community play an important role in promoting healthy lifestyles and active citizenship.
- Policy coherence across sectors and levels of education is needed.

The study also signalled a number of knowledge gaps:

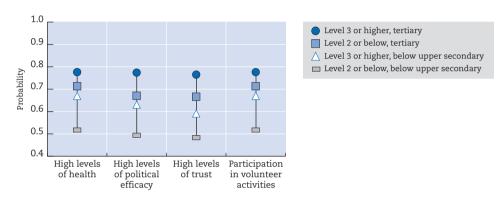
- The evidence on causal effects of education and causal pathways is limited. Most studies on causality concentrate on secondary schools, with very few studies at pre-school, primary and tertiary levels.
- Little is known about the curricular approaches that enhance the cognitive and social and emotional skills needed to promote social progress.
- There is limited availability of longitudinal micro-data, which is essential to understand the complex relationships between learning contexts, skills and outcomes.
- There is little evidence of the influence of education on social domains such as ecological behaviour.

Education can help provide a variety of skills that empower individuals to better meet the challenges of daily life. Cognitive skills such as reading, numeracy and scientific literacy allow people to better understand information, to make decisions and to solve problems. Social and emotional skills such as perseverance, emotional stability and sociability also matter in achieving positive outcomes. These skills allow people to better translate intentions into actions; establish positive relationships with family, friends and the community; and avoid engaging in unhealthy lifestyles and risky behaviours. Social and emotional skills are as important as cognitive skills in shaping outcomes (Heckman, Stixrud and Urzua, 2006; Kautz et al., 2014).

At the same time, the latest results from PISA 2012 show that higher self-belief, motivation and expectations² are associated with better performance in literacy (OECD, 2013g). For instance, girls' lower performance in maths literacy is associated with lower confidence in their ability to succeed in school than their male peers. In top-performing countries, the smaller gender gap in mathematics is associated with stronger beliefs in children's abilities (OECD, 2013f). East-Asian countries stood among the most successful education systems in PISA 2012, which may be partly driven by the cultural value of "effort" as a key ingredient of success. Similarly, evidence from the OECD's Survey of Adult Skills shows the importance of literacy and numeracy skills as well as qualifications in predicting labour market outcomes, health, volunteering and political participation (OECD, 2013e).

Figure 1.5 shows the probability of adults reporting positive social outcomes according to their educational level and their level of literacy proficiency³ across participating countries⁴. Having high levels of both literacy skills and educational levels is associated with the highest probability of experiencing positive social outcomes. However, having only high levels of education is not sufficient to experience the highest probabilities of positive outcomes. The chances of adults with tertiary education and low levels of literacy skills are closer to those with low levels of education but with high levels of literacy skills. Hence, educational attainment is necessary to enhance positive outcomes in society, but skills also matter. The impact of education can be further heightened with more skills.

Figure 1.5. High levels of literacy increase the probability of experiencing positive social outcomes



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Note: Estimates presented here represent the average of OECD participating countries. Literacy Level 2 or below means that respondents can read brief texts on familiar topics; understand basic vocabulary; determine the meaning of sentences; compare and contrast information; and make low-level inferences. Literacy Level 3 or higher means respondents can at least understand and respond appropriately to dense or lengthy texts, including continuous, non-continuous, mixed, or multiple pages (OECD, 2013e).

Source: OECD (2013e), OECD Skills Outlook 2013: First Results from the Survey of Adult Skills, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264204256-en.

Education and skills can also play an important role in reducing socio-economic inequalities

Education played a central role in counteracting the growth of income inequality during the past decade (OECD, 2011b). The rise in the number of tertiary education graduates helped offset the disparities generated by other factors such as changes in the labour market and technological progress. Access to, and participation in, tertiary education is, however, still strongly associated with socio-economic background.

Young people from disadvantaged backgrounds find it harder to complete their education and perform well at school. The PISA 2012 findings show all countries have gaps in performance by socio-economic status, although some countries have narrower gaps than others. For instance, in mathematics, socio-economically advantaged children scored on average 90 points more than their less-affluent peers, a gap equivalent to two years of schooling (OECD, 2013f). In most countries, these disparities have barely changed since PISA started assessing students' performance in 2000 (OECD, 2013f).

Performance gaps start early in life. The cognitive, social and emotional skills developed during the first years of life set the basis of future potential; skills are built on skill foundations developed early on. While strong foundations in the early years increase the chances of positive outcomes, weak foundations are more likely to lead to struggles. There are cumulative effects on what children learn and what they don't. Skills, however, are malleable and it is possible to change diverging trajectories over the course of a lifetime. Early investments in skill formation are more likely to be efficient in raising socio-economic outcomes and reducing inequalities (Kautz et al., 2014).

Towards a more holistic approach

Recent years have shown increasing awareness of the need to consider a more holistic approach to the factors that drive the well-being and progress of societies. Macroeconomic statistics can only paint a partial picture of living standards and their distribution across different groups within society. For example, during the years of economic growth, increased levels of GDP were not always accompanied by higher levels of satisfaction. It was clear then – and even more so now – that it is necessary to develop measures that better reflect the wide range of factors that matter for individuals and their well-being. Economic prosperity matters for life satisfaction, and for well-being more broadly, but it is not the only thing that counts. Other factors, such as relationships, health, social support, personal safety, housing and environmental conditions are also relevant (Layard, 2005; OECD 2011c; 2013c).

The OECD has been at the forefront of the international work on measuring well-being and social progress for more than ten years (Box 1.2). Its goal is to inform policies on how to achieve better living standards, more equal societies, increased levels of trust and social engagement, and higher levels of life satisfaction. As discussed above, education can play an important role in meeting these goals by enhancing individual's cognitive, social and emotional skills. There is a need to inform policy makers, teachers and parents of the type of cognitive and socio-emotional skills that need to be nurtured and how to do so.

Box 1.2. OECD's activities on well-being and social progress

- OECD Better Life Initiative. This initiative was launched in 2011 for the 50th anniversary of the OECD and aims to develop measures that better capture the wide range of outcomes that together form people's well-being. The Better Life Index is an interactive webtool that involves citizens in the measurement of well-being and social progress. It allows people to develop their own index to compare the well-being of their country with that of other OECD and partner countries. The index covers income and wealth, jobs and earnings, housing conditions, health status, work-life balance, education and skills, social connections, civic engagement and governance, environmental quality, personal security, and subjective well-being (www.oecdbetterlifeindex.org). How's Life? is a biennial report that provides an overall picture of well-being and social progress in OECD and partner countries. It examines numerous indicators in three dimensions: material conditions, quality of life and sustainability.
- Society at a Glance. A biennial report first published in 2001. It aims at answering whether societies are progressing and whether the actions to promote progress have been effective. It provides an overview of a wide range of social indicators, such as demography and family characteristics, employment and unemployment, poverty and inequality, health status, trust and tolerance. Data are presented for OECD countries and partner economies (www.oecd.org/els/societyataglance.htm).
- Doing Better for Children. This report launched in 2009 is the OECD's first publication with a multidimensional approach to well-being (OECD, 2009). The report looked at how children in OECD countries fared across several dimensions of child well-being: material well-being; housing and environment; education; health; risk behaviours; and quality of school life. In view of a strong demand for indicators of children, the OECD developed a Child Well-being Module, a dataset with age-specific child well-being information on policies; family and community contexts; and outcomes (www.oecd.org/social/family/database/CWBM).

Over the next years, the OECD will carry on its work in this area. In addition, a High Level Expert Group has been set up to continue the work of the Stiglitz-Sen-Fitoussi Commission on the Measurement of Economic Performance and Social Progress.

New Approaches to Economic Challenges (NAEC) is another prominent OECD activity that takes a holistic approach to address diverse socio-economic challenges. Building on the OECD's rich knowledge-base, this activity reflects on the roots of and lessons from the global crisis with the aim to refine the OECD's analytical framework. Launched at the 2012 OECD Ministerial Council Meeting (MCM), NAEC seeks to incorporate multidimensionality into policy design, by helping countries identify trade-offs, complementarities and unintended consequences of policy choices. It also analyses the factors that prevented authorities from identifying and addressing the accumulated tensions, regulatory failures and global imbalances that facilitated the crisis.

Conclusion

During the past 30 years, important gains have been made in some indicators of social progress, especially in access to, and participation in, education. However, many other indicators have not shown such marked improvements and gains have not been equally distributed. Moreover, the recent economic crisis has slowed, or even reversed, the progress made. Together with existing global trends, these events have imposed new challenges to individuals' future well-being and social progress.

Education can contribute to raising motivated, engaged and responsible citizens by enhancing skills that matter. Cognitive ability such as literacy and problem-solving are crucial. However, young people with a strong social and emotional foundation can better thrive in a highly dynamic and skill-driven labour market by persevering and working hard. They are more likely to avoid physical and mental illness by controlling their impulses, leading healthy lifestyles and maintaining strong interpersonal relationships. They are better able to provide social support and be actively engaged in society and in actions that protect the environment, by cultivating empathy, altruism and caring. They can also be more prepared to weather the storms of life such as job loss, family disintegration, hospitalisation or victimisation, by managing their emotions and adapting to change.

There is a need to rethink policies to better address what young people need, and to prepare them to face the challenges of the modern world. Investing in education and skills is one of the key policies for addressing today's numerous socio-economic challenges, and for ensuring prosperous, healthy, engaged, responsible and happy citizens.

Notes

- 1. Figure 1.3 presents bullying prevalence rates for boys only. Bullying and being bullied is more common among boys than among girls (around 6 % in the case of girls, both for bullying and being bullied).
- 2. PISA 2012 examines students' self-reports on perseverance; openness to problem solving; perceived control over success in mathematics and in schools; perceived self-responsibility failing in mathematics and intrinsic and instrumental motivation to learn mathematics. Most of these measures are constructed to capture students' perceptions and motivations towards success or failure in mathematics and school. They are not meant to measure more general personality traits.
- 3. The Programme for the International Assessment of Adult Competencies (PIAAC) defines literacy as: understanding, evaluating, using and engaging with written texts to participate in society, to achieve one's goals, and to develop one's knowledge and potential (OECD, 2013e). Literacy Level 2 or below means that respondents can read brief texts on familiar topics, understand basic vocabulary, determine the meaning of sentences, compare and contrast information and make low-level inferences. Literacy Level 3 or higher means respondents can at least understand and respond appropriately to dense or lengthy texts, including continuous, non-continuous, mixed, or multiple pages (OECD, 2013e).
- 4. The OECD countries that participated in the Survey of Adult Skills were: Australia, Austria, Belgium (Flanders), Canada, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Ireland, Italy, Japan, Korea, the Netherlands, Norway, Poland, the Russian Federation, the Slovak Republic, Spain, Sweden, the United Kingdom (England and Northern Ireland) and the United States.

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