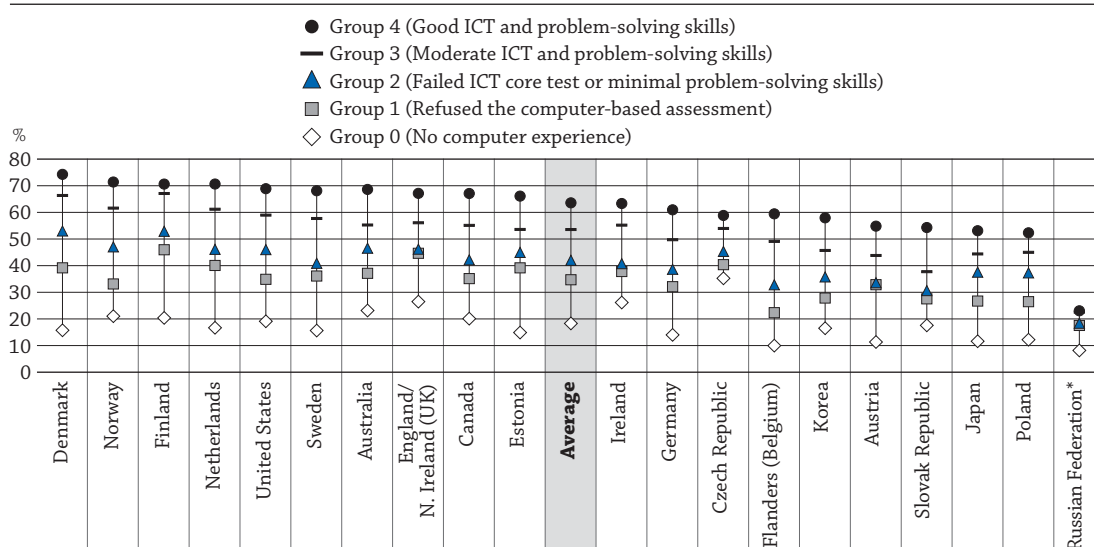


HOW MANY ADULTS PARTICIPATE IN EDUCATION AND LEARNING?

- Across OECD countries and sub-national entities that participated in the Survey of Adult Skills (PIAAC) in 2012, about 50% of all employed adults participate in employer-sponsored formal and/or non-formal education in a given year. The proportion ranges from more than 60% in Denmark, Finland, the Netherlands and Norway, to less than 40% in France, Italy, Poland, the Russian Federation and the Slovak Republic.
- About 60% of employed adults with good skills in information and communication technology (ICT) and in problem solving participate in employer-sponsored formal and/or non-formal education, while only 18% of adults who have no computer experience do.
- About 60% of workers in the most skilled occupations participate in employer-sponsored formal and/or non-formal education, while about 25% of workers in elementary occupations do.

Chart C6.1. Participation in employer-sponsored formal and/or non-formal education, by skills and readiness to use information and communication technologies for problem solving (2012)

Survey of Adult Skills, employed 25-64 year-olds



* See note on data for the Russian Federation in the *Methodology* section.

Countries are ranked in descending order of participation in employer-sponsored formal and/or non-formal education among people in Group 4 (Good ICT and problem-solving skills).

Source: OECD, Table C6.1 (P). See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).

StatLink <http://dx.doi.org/10.1787/888933284339>

Context

Adult learning can play an important role in helping adults to develop and maintain key information-processing skills, and acquire other knowledge and skills, throughout life. It is crucial to provide, and ensure access to, organised learning opportunities for adults beyond initial formal education, especially for workers who need to adapt to changes throughout their careers. The relevance of continued learning opportunities now extends to workers in both high- and low-skilled occupations. In high-technology sectors, workers need to update their competencies and keep pace with rapidly changing techniques. Workers in low-technology sectors and those performing low-skilled tasks must learn to be adaptable, since they are at higher risk of losing their job, as routine tasks are increasingly performed by machines, and companies may relocate to countries with lower labour costs (OECD, 2013). In general, the higher the productivity of a worker, the more interested an employer might be in investing in his or her human capital.

■ Other findings

- Participation in employer-sponsored formal and/or non-formal education in all countries is strongly related to proficiency levels in key skills such as literacy and numeracy as well as to educational attainment. These factors combine to create a virtuous circle for persons with high skills proficiency and educational attainment who tend to acquire yet more skills through attending adult education activities. The factors also combine to establish a vicious circle of low educational attainment, low skills proficiency, and lack of support for institutionalised learning to redress skills deficiencies.
- Participation rates in employer-sponsored formal and/or non-formal education are highest among workers who most frequently use reading, writing and numeracy skills at work.
- Across OECD countries and sub-national entities that participated in the Survey of Adult Skills, 57% of full-time workers with indefinite contracts participate in employer-sponsored formal and/or non-formal education while 33% of part-time workers with limited contracts do.
- In all countries, 25-34 year-old workers are more likely to participate in employer-sponsored formal and/or non-formal education than 55-64 year-old workers.

Analysis

Employer-sponsored formal and/or non-formal education

Employers support their employees' participation in education and training activities when they have an interest in investing in their employees' human capital. Employer support can take the form of time, i.e. providing educational activities that take place fully or partly during paid working hours, or financial support, i.e. giving grants to employees to participate in educational activities.

Across OECD countries and sub-national entities that participated in the Survey of Adult Skills, about 50% of all employed adults participate in employer-sponsored formal and/or non-formal education in a given year. The proportion ranges from more than 60% in Denmark, Finland, the Netherlands and Norway, to less than 40% in France, Italy, Poland, the Russian Federation and the Slovak Republic (Table C6.1 [P]).

The large variation in participation in adult learning activities suggests that there are significant differences in learning cultures, learning opportunities at work, and adult education structures. Results from the Survey of Adult Skills, a product of the OECD Programme for the International Assessment of Adult Competencies (PIAAC), show a clear relationship between the extent of participation in organised adult learning activities and the average level of key information-processing skills in a given country.

Participation as related to ICT skills and educational attainment

The 2012 Survey of Adult Skills measured adults' proficiency in using ICT to solve problems. Chart C6.1 shows that, across OECD countries and sub-national entities that participated in the Survey of Adult Skills, 63% of adults with good ICT and problem-solving skills participate in employer-sponsored formal and/or non-formal education, while only 18% of those who have no computer experience do. The most highly skilled adults are thus about three times more likely to participate in employer-sponsored formal and/or non-formal education than are the least skilled adults (Table C6.1 [P]).

All participating OECD countries and sub-national entities show increasing participation as the level of proficiency increases. The most skilled adults are more than three times more likely to participate in employer-sponsored formal and/or non-formal education than those with no skills, except in Australia, the Czech Republic, England (UK), Ireland, Northern Ireland (UK) and the Russian Federation, where the most-skilled adults are two or less than three times more likely to participate in such activities than adults with no skills. In the Czech Republic, England (UK), Ireland and Northern Ireland (UK) at least 25% of those with no computer experience participate in employer-sponsored formal and/or non-formal education. In Australia, Denmark, England (UK), Finland, the Netherlands, Norway, Sweden and the United States, about two out of three (67% or more) workers with good ICT and problem-solving skills receive support for further learning from their employers (Table C6.1 [P]).

The frequency with which adults use ICT and problem-solving skills at work is also related to participation in employer-sponsored formal and/or non-formal education. The ICT activities surveyed include: using e-mail, Internet, spreadsheets, word processors, programming languages; conducting transactions on line; and participating in online discussions (conferences, chats). The respondents indicated how often they engage in each activity: never; less than once a month; less than once a week, but at least once a month; at least once a week but not every day; or every day. The index created to measure frequency of use compares the frequency of the respondent's activities to the frequency of activities of all adults assessed.

Across OECD countries and sub-national entities that participated in the Survey of Adult Skills, the rate of participation in employer-sponsored formal and/or non-formal education increases from 36% among those who never engage in the ICT activities cited, to 67% among those who engage in these activities most often, on average. Meanwhile, at least 60% of adults who engage in these activities moderately or often (i.e. less than once a week but at least once a month, at least once a week but not every day, or every day) participate in employer-sponsored formal and/or non-formal education programmes, which suggests that there might be a ceiling effect (Table C6.3e, available on line).

Workers' educational attainment is also closely related to participation in employer-sponsored formal and/or non-formal education. Across OECD countries and sub-national entities that participated in the Survey of Adult Skills, workers with high educational attainment are about twice as likely to participate than are workers with low education (62% among those with tertiary education compared with 29% among those with below upper secondary education as their highest level of attainment). This difference is larger in countries with lower participation rates, in general (correlation coefficient = 0.86) (Table C6.2a).

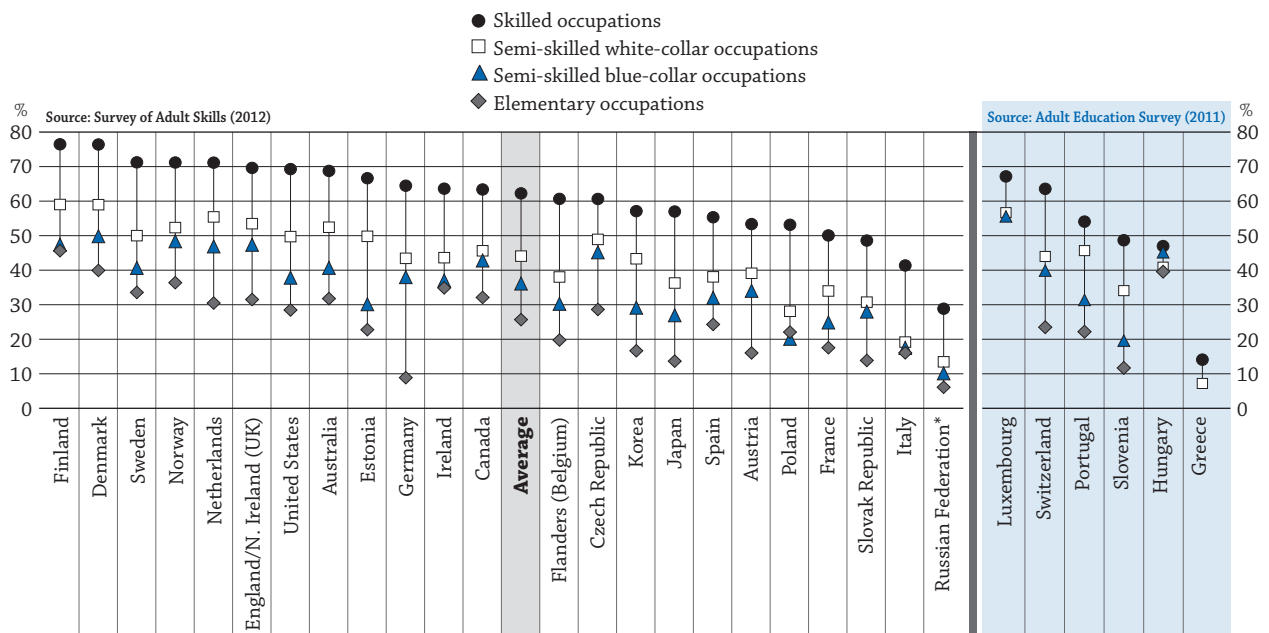
Participation as related to the work environment

The demands of the job also affect workers' need and wish for education and training. One indication of the level of skills demanded in a job is the occupation of the worker. The Survey of Adult Skills distinguishes among four groups of occupations: skilled occupations (managers, professionals, technicians and associate professionals); semi-skilled white-collar occupations (clerical support workers, service and sales workers); semi-skilled blue-collar occupations (skilled manual workers); and elementary occupations.

Chart C6.2 includes both information from the Survey of Adult Skills and information from the Adult Education Survey (AES) for countries that did not participate in the Survey of Adult Skills. The results are presented in separated sections as they are not directly comparable. On the left side of the chart, data from the Survey of Adult Skills are presenting data for year 2012 on formal and/or non-formal education while on the right side of the chart data from the AES are for year 2011 and refer to employer-sponsored, job-related, non-formal education and training.

On average, across OECD countries and sub-national entities that participated in the Survey of Adult Skills, 62% of workers in the most skilled occupations participate in employer-sponsored formal and/or non-formal education, while 26% of workers in elementary occupations do. The former group is thus more than twice as likely to participate than the latter group (Table 6.2c). The results support the thesis that participation in employer-sponsored formal and/or non-formal education is more likely among adults in occupations that require more skills. Workers' occupations have been identified as the single most important factor in determining the frequency with which adults use their skills in the workplace (OECD, 2013, p. 181).

Chart C6.2. Participation in employer-sponsored education, by occupation (2011, 2012)
Survey of Adult Skills and Adult Education Survey, employed 25-64 year-olds



Notes: The data for the countries having participated in the Survey of Adult Skills refer to “employer-sponsored formal and/or non-formal education”. The data for the countries having participated in the Eurostat Adult Education Survey (AES) refer to “employer-sponsored”, job-related, non-formal education and training”.

* See note on data for the Russian Federation in the *Methodology* section.

Countries are ranked in descending order of participation in employer-sponsored formal and/or non-formal education among people in skilled occupations.

Source: OECD, Table C6.2c. See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).

StatLink <http://dx.doi.org/10.1787/888933284342>

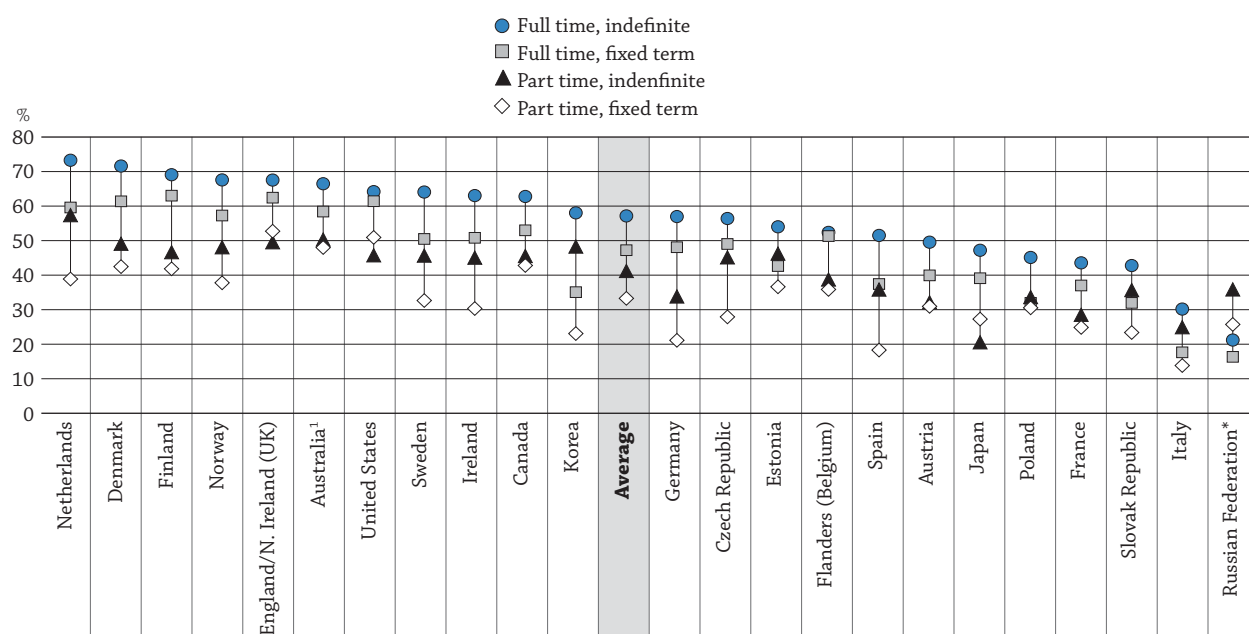
Workers in skilled occupations participate most often in employer-sponsored formal and/or non-formal education; workers in elementary occupations participate the least. For countries and sub-national entities that participated in the Survey of Adult Skills, in Italy and Poland, all workers who are not in skilled occupations participate at the same, relatively low, rate. Austria, Canada, the Czech Republic, Germany, Norway and the Slovak Republic show small differences between semi-skilled blue-collar and white-collar workers, while in most other countries

white-collar workers participate more in employer-sponsored formal and/or non-formal education. In Denmark, Finland and Norway, more than 35% of workers in elementary occupations participate in employer-sponsored formal and/or non-formal education, while more than 70% workers in skilled occupations do. Countries with the lowest participation for workers in skilled occupations are Austria, France, Italy, Japan, Korea, Poland, the Russian Federation, the Slovak Republic and Spain, where less than 60% of workers in skilled occupations participate in such learning activities. For countries that participated in the AES, the highest participation from workers in elementary occupation is found in Hungary, where 40% of workers in elementary occupations participate in employer-sponsored, job-related, non-formal education and training; for workers in skilled occupations, the highest proportion is found in Luxembourg, where about 67% of workers in skilled occupations participate in such learning activities (Table C6.2c).

Participation as related to type of employment contract and industry

Perhaps not surprising, part-time workers, those who work up to 30 hours per week, are less likely to participate in formal and/or non-formal education, especially employer-sponsored participation, than full-time workers. Across OECD countries and sub-national entities that participated in the Survey of Adult Skills, 52% of full-time workers, those who work 30 hours per week or more, participate in such education, while 35% of part-time workers do. Workers on limited contracts also tend to participate less (43%) than workers with unlimited contracts (55%) (Table C6.2d).

Chart C6.3. Participation in employer-sponsored formal and/or non-formal education, by working hours and contract type (2012)
Survey of Adult Skills, employed 25-64 year-olds



1. For Australia, data based on full time/part time are using a variable which is topped at 60 hours per week while there is no upper limit for other countries.

* See note on data for the Russian Federation in the *Methodology* section.

Countries are ranked in descending order of participation in employer-sponsored formal and/or non-formal education among people who work full time and have an indefinite contract.

Source: OECD, Table C6.2d. See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).

StatLink <http://dx.doi.org/10.1787/888933284355>

Chart C6.3 shows the effect on participation of the two variables above combined. Employers see less of a risk investing in full-time workers with unlimited contracts, since they will probably stay longer in the firm and repay the investment with greater productivity. The opposite is true for part-time workers with limited contracts. The results confirm this: across OECD countries and sub-national entities that participated in the Survey of Adult Skills, 57% of full-time workers with unlimited contracts participate in employer-sponsored formal and/or non-formal education, while only 33% of part-time workers with limited contracts do (Table 6.2d).

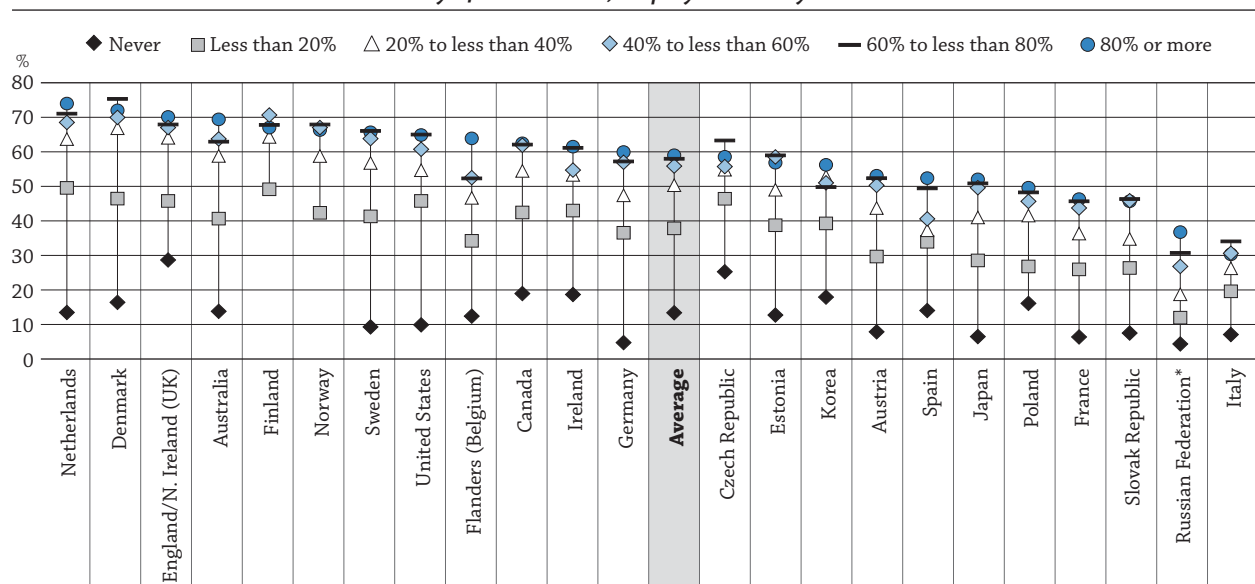
The classification of industries used in the Survey of Adult Skills (i.e. resource industries, goods-producing industries, lower-tier services and upper-tier services) reflects the skills demands of the broad categories. As may be expected, workers in upper-tier service industries have the highest participation rates in all countries, while employees in resource industries have the lowest participation rates in most countries. Across participating OECD countries and sub-national entities, 59% of workers in upper-tier services participate in such education, while 36% of workers in resource industries do. Participation rates in the goods-producing industries and the lower-tier services vary, presumably reflecting the skills demands of the goods-producing industries in the countries (Table C6.2e, available on line). See Annex 3 for more details on the type of industries (www.oecd.org/education/education-at-a-glance-19991487.htm).

Participation as related to other types of learning at work

A further indication of the degree in which the working environment is also a learning environment is the availability of other learning activities at the workplace. The index that measures this includes learning new things from supervisors or co-workers; learning-by-doing; and keeping up-to-date with new products or services. Chart C6.4 shows that workers who learn more at work through other activities participate most in employer-sponsored education. It also shows that there is a ceiling effect: while the participation rate rises steeply between those who never learn at work to those who occasionally learn at work, it tends to level off among those who frequently learn at work through other activities. This ceiling effect can also be observed in the three single variables that constitute the index, i.e. it is not due to the construction of the index (Table C6.3a).

Chart C6.4. Participation in employer-sponsored formal and/or non-formal education, by use of learning at work (2012)

Survey of Adult Skills, employed 25-64 year-olds



* See note on data for the Russian Federation in the *Methodology* section.

Countries are ranked in descending order of participation in employer-sponsored formal and/or non-formal education among people who have an index of learning at work of 80% or more.

Source: OECD, Table C6.3a. See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).

StatLink <http://dx.doi.org/10.1787/888933284364>

Across OECD countries and sub-national entities that participated in the Survey of Adult Skills, 13% of the workers who indicated that they never engage in any of the learning activities participate in employer-sponsored formal and/or non-formal education, while 59% of workers who engage in other learning activities the most often do. The latter group is four times more likely to participate than the former group. In France, Germany, Japan, the Russian Federation and Sweden, workers' participation in employer-sponsored formal and/or non-formal education differs by a magnitude of more than seven times, depending on their engagement in other learning activities at work. These countries show low rates of participation among workers who never engage in such learning activities. Conversely, many countries with relatively high rates of participation in employer-sponsored

formal and/or non-formal education (over 16%) among workers who never engage in other learning activities at work show relatively small differences (less than four times) in participation in other learning activities at work. These countries and sub-national entities are Canada, the Czech Republic, England (UK), Ireland, Korea, Northern Ireland (UK) and Poland (Table C6.3a).

Participation as related to the use of information-processing skills at work

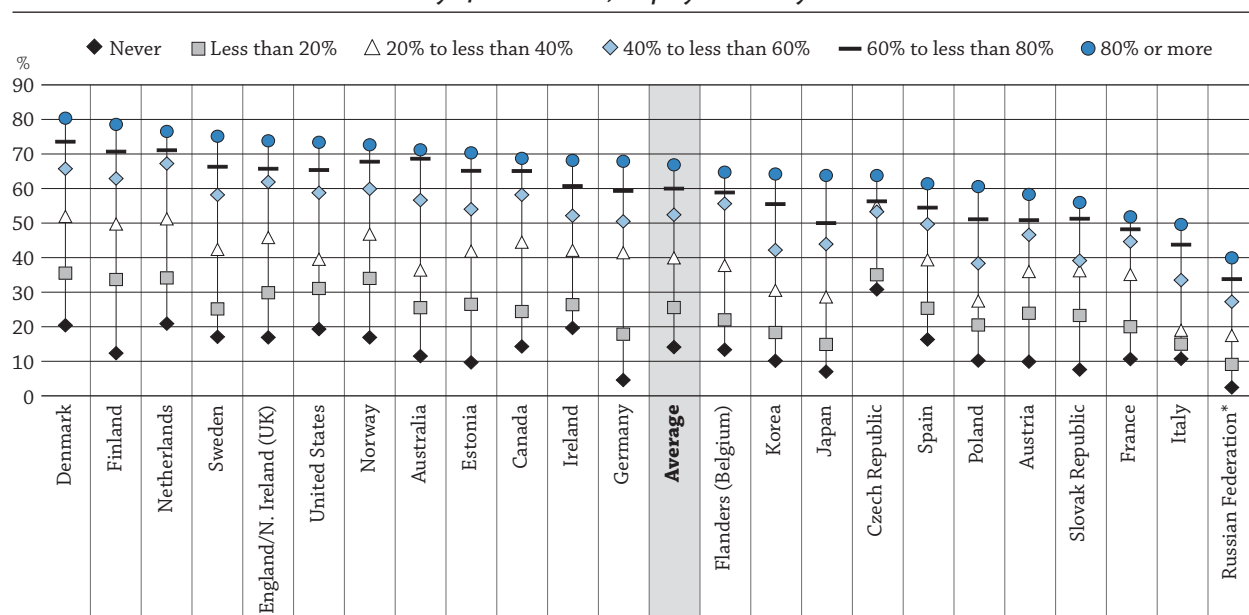
The Survey of Adult Skills asked adults to indicate the frequency with which they use various skills at work. These skills were then grouped into indicies as information-processing skills (including reading, writing, numeracy, ICT and problem-solving skills) and other generic skills (including task discretion, learning at work, influencing skills, co-operative skills, self-organising skills, dexterity, and physical skills) (OECD, 2013).

All of the information-processing skills measured show a fairly strong relationship with participation in employer-sponsored formal and/or non-formal education. The results confirm the general hypothesis of higher participation in employer-sponsored formal and/or non-formal education of adults with higher skills use (Tables C6.3b to C6.3e, available on line).

The index of reading at work that was created to measure that activity includes eight different tasks. Chart C6.5 shows that across OECD countries and sub-national entities that participated in the Survey of Adult Skills, 67% of adults who read most frequently at work participate in employer-sponsored formal and/or non-formal education. By contrast, only 14% of those who reported that they never read at work participate. Participation in employer-sponsored formal and/or non-formal education rises steadily the more frequently people read at work (Table C6.3b, available on line).

Chart C6.5. Participation in employer-sponsored formal and/or non-formal education, by use of reading skills at work (2012)

Survey of Adult Skills, employed 25-64 year-olds



* See note on data for the Russian Federation in the Methodology section.

Countries are ranked in descending order of participation in employer-sponsored formal and/or non-formal education among people who have an index of use of reading skills at work of 80% or more.

Source: OECD, Table C6.3b, available on line. See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).

StatLink <http://dx.doi.org/10.1787/888933284377>

In Denmark, Finland, the Netherlands and Sweden more than three out of four workers who read frequently at work participate in employer-sponsored formal and/or non-formal education (75% or more). At the other extreme, in Austria, Estonia, Germany, Japan, the Russian Federation and the Slovak Republic, fewer than one in ten (less than 10%) of the workers who never read at the workplace participate in such learning activities (Table C6.3b, available on line).

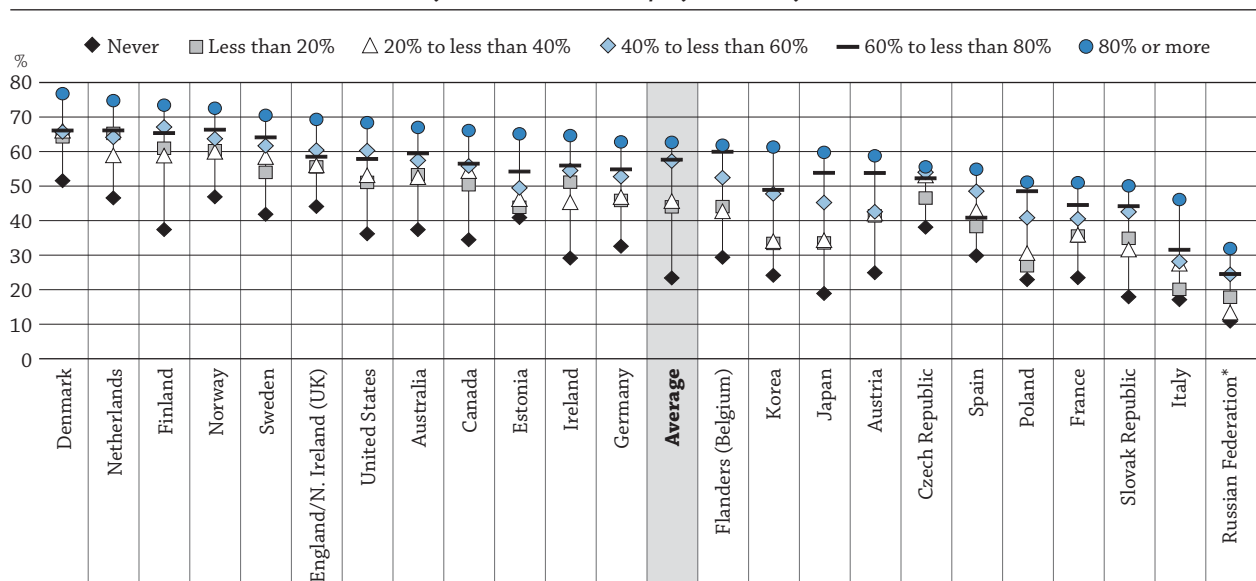
Across OECD countries and sub-national entities that participated in the Survey of Adult Skills, 19% of the workers who never write at work participate in employer-sponsored formal and/or non-formal education, compared to 67% of those who write the mostly frequently at work. Participation rates tend to rise as adults write more at work (Table C6.3c, available on line).

Similar results are found when considering the use of numeracy skills at work. On average across OECD countries and sub-national entities that participated in the Survey of Adult Skills, 63% of workers who use their numeracy skills most frequently at work participate in employer-sponsored formal and/or non-formal education, compared to 33% of those who never use such skills (Table C6.3d, available on line).

Participation as related to the use of certain generic skills at work

Chart C6.6 shows that using influencing skills at work are strongly related to participation in employer-sponsored formal and/or non-formal education. Participation rates rise steadily as the use of these skills at work increases – from 33% among workers who never use influencing skills at work to 63% among workers who use these skills most frequently. The latter are thus twice as likely to participate in employer-sponsored education as the former (Table C6.3f, available on line).

Chart C6.6. Participation in employer-sponsored formal and/or non-formal education, by use of influencing skills at work (2012)
Survey of Adult Skills, employed 25-64 year-olds



* See note on data for the Russian Federation in the *Methodology* section.

Countries are ranked in descending order of participation in employer-sponsored formal and/or non-formal education among people who have an index of use of influencing skills at work of 80% or more.

Source: OECD, Table C6.3f, available on line. See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).

StatLink  <http://dx.doi.org/10.1787/888933284386>

For most countries participation in employer-sponsored formal and/or non-formal education rises steadily with the frequency of the workers' use of influencing skills at work. In Austria, the Czech Republic, Flanders (Belgium), Germany and Poland the participation rates of the two groups with the highest frequency of use of influencing skills are close together (5 percentage-point difference or less), suggesting a mild ceiling effect (Table C6.3f, available on line).

Workers who never use task-discretion skills (choosing or changing the sequence of job tasks, the speed of work, working hours; and deciding how to do the job) at work participate least in employer-sponsored formal and/or non-formal education. Across OECD countries and sub-national entities that participated in the Survey of Adult Skills, only 29% of such workers participate, on average. In most countries, the participation rate rises steeply between those who never use task-discretion skills at work and those who use those skills occasionally at work, but falls for those who use those skills the most (Table C6.3g, available on line).

Definitions

Adults refers to 25-64 year-olds.

Education and training: **Formal** education is planned education provided in the system of schools, colleges, universities and other formal educational institutions that normally constitutes a continuous “ladder” of full-time education for children and young people. The providers may be public or private. **Non-formal** education is sustained educational activity that does not correspond exactly to the definition of formal education. Non-formal education may take place both within and outside educational institutions and cater to individuals of all ages. Depending on country contexts, it may cover education programmes in adult literacy, basic education for out-of-school children, life skills, work skills, and general culture. The Survey of Adult Skills uses a list of possible non-formal education activities, including open or distance-learning courses, private lessons, organised sessions for on-the-job training, and workshops or seminars to prompt respondents to list all of their learning activities during the previous 12 months. Some of these learning activities might be of short duration.

Employer-sponsored formal and/or non-formal education: Employer support can be offered in the form of time (i.e. educational activities that take place fully or partly during paid working hours), or financial support (giving grants to employees to participate in educational activities).

Generic skills at work: **Learning at work** corresponds to learning new things from supervisors or co-workers; learning-by-doing; and keeping up-to-date with new products or services; **influencing skills** corresponds to instructing, teaching or training people; making speeches or presentations; selling products or services; advising people; planning others’ activities; persuading or influencing others; and negotiating; **task discretion** corresponds to choosing or changing the sequence of job tasks, the speed of work, working hours; and deciding how to do the job; and **co-operative skills** corresponds to co-operating or collaborating with co-workers.

Index of: use of learning at work, use of reading skills at work, use of writing skills at work, use of numeracy skills at work, use of ICT skills at work, use of influencing skills at work, use of task discretion at work, and use of co-operative skills at work: The indices are categorised as Warm’s mean weighted likelihood estimation (WLE). It is derived from variables that are based on a Likert scale from “Never” to “Every day”. For these skills-use variables, numerical comparisons between the use of different skills are possible: a value of 0 indicates that the skill is never used; a value of 1 indicates that it is used less than once a month; a value of 2 indicates that the skill is used less than once a week but at least once a month; a value of 3 indicates that it is used at least once a week but not every day; and a value of 4 indicates that it is used every day. The categories should therefore be interpreted based on the frequency of the activity, with “Never” being the least frequent and “80% or more” being the most frequent. For more details on the index, see page 143 of *OECD Skills Outlook 2013: First Results from the Survey of Adult Skills* (OECD, 2013).

Industry type: resource industries; goods-producing industries; lower-tier services; and upper-tier services are defined by the variable ISIC2C. See Annex 3 for the detailed list of industries included in each group.

Information-processing skills: **Reading** corresponds to reading documents (directions, instructions, letters, memos, e-mails, articles, books, manuals, bills, invoices, diagrams, maps); **writing** corresponds to writing documents (letters, memos, e-mails, articles, reports, forms); **numeracy** corresponds to calculating prices, costs or budgets; use of fractions, decimals or percentages; use of calculators; preparing graphs or tables; algebra or formulas; use of advanced mathematics or statistics (calculus, trigonometry, regressions); and **ICT skills** corresponds to using e-mail, Internet, spreadsheets, word processors, programming languages; conducting transactions on line; and participating in online discussions (conferences, chats).

Levels of education: **Below upper secondary** corresponds to ISCED-97 Levels 0, 1, 2 and 3C short programmes; **upper secondary or post-secondary non-tertiary** corresponds to ISCED-97 Levels 3A, 3B, 3C long programmes, and Level 4; and **tertiary** corresponds to ISCED-97 Levels 5A, 5B and 6.

Occupation: **Skilled occupations** include legislators, senior officials and managers (ISCO 1), professionals (ISCO 2), technicians and associate professionals (ISCO 3); **semi-skilled white-collar occupations** include clerks (ISCO 4), service workers, and shop and market sales workers (ISCO 5); **semi-skilled blue-collar occupations** include skilled agricultural and fishery workers (ISCO 6), craft and related trades workers (ISCO 7), and plant and machine operators and assemblers (ISCO 8), and **elementary occupations** include low-skilled occupations (ISCO 9).

Skill groups refer to skills and readiness to use information and communication technologies (ICT) for problem solving in technology-rich environments. Each group is described in terms of the characteristics of the types of

tasks that can be successfully completed by adults and the related scores in the assessment of problem solving in technology-rich environments in the Survey of Adult Skills.

- Group 0 (no computer experience)
- Group 1 (refused the computer-based assessment)
- Group 2 (failed ICT core test or minimal problem-solving skills – scored below Level 1 in the problem solving in technology-rich environments assessment)
- Group 3 (moderate ICT and problem-solving skills – scored at Level 1 in the problem solving in technology-rich environments assessment)
- Group 4 (good ICT and problem-solving skills – scored at Level 2 or Level 3 in the problem solving in technology-rich environments assessment)

Working hours and contract type: **Full time** refers to more than 30 hours per week and **fixed-term contract** includes fixed-term contract, temporary employment agency contract, and an apprenticeship or other training scheme.

Methodology

All data are based on the Survey of Adult Skills (PIAAC) (2012). PIAAC is the OECD Programme for the International Assessment of Adult Competencies.

A number of skills-use variables are taken directly from questions asked in the background questionnaire of the Survey of Adult Skills. Other variables have been derived based on more than one question from the background questionnaire. These variables have been transformed so that they have a mean of 2 and a standard deviation of 1 across the pooled sample of all participating countries, thus allowing for meaningful comparisons across countries (OECD, 2013, p. 143). For more detailed information, see the *Technical Report of the Survey of Adult Skills* (OECD, 2014, Chapter 20) and see Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).

Note regarding data from the Russian Federation in the Survey of Adult Skills (PIAAC)


Readers should note that the sample for the Russian Federation does not include the population of the Moscow municipal area. The data published, therefore, do not represent the entire resident population aged 16-65 in Russia but rather the population of Russia *excluding* the population residing in the Moscow municipal area. More detailed information regarding the data from the Russian Federation as well as that of other countries can be found in the *Technical Report of the Survey of Adult Skills* (OECD, 2014).

References

OECD (2014), *Technical Report of the Survey of Adult Skills*, www.oecd.org/site/piaac/Technical%20Report_17OCT13.pdf, pre-publication copy.

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

Indicator C6 Tables

StatLink  <http://dx.doi.org/10.1787/888933286024>

WEB	Table C6.1 (L)	Participation in employer-sponsored formal and/or non-formal education, by literacy proficiency level (2012)
WEB	Table C6.1 (N)	Participation in employer-sponsored formal and/or non-formal education, by numeracy proficiency level (2012)
	Table C6.1 (P)	Participation in employer-sponsored formal and/or non-formal education, by skills and readiness to use information and communication technologies for problem solving (2012)
	Table C6.2a	Participation in employer-sponsored education, by educational attainment (2011, 2012)
WEB	Table C6.2b	Participation in employer-sponsored education, by gender and age group (2011, 2012)
	Table C6.2c	Participation in employer-sponsored education, by occupation (2011, 2012)
	Table C6.2d	Participation in employer-sponsored formal and/or non-formal education, by working hours and contract type (2012)
WEB	Table C6.2e	Participation in employer-sponsored formal and/or non-formal education, by industry (2012)

...

	Table C6.3a	Participation in employer-sponsored formal and/or non-formal education, by use of learning at work (2012)
WEB	Table C6.3b	Participation in employer-sponsored formal and/or non-formal education, by use of reading skills at work (2012)
WEB	Table C6.3c	Participation in employer-sponsored formal and/or non-formal education, by use of writing skills at work (2012)
WEB	Table C6.3d	Participation in employer-sponsored formal and/or non-formal education, by use of numeracy skills at work (2012)
WEB	Table C6.3e	Participation in employer-sponsored formal and/or non-formal education, by use of ICT skills at work (2012)
WEB	Table C6.3f	Participation in employer-sponsored formal and/or non-formal education, by use of influencing skills at work (2012)
WEB	Table C6.3g	Participation in employer-sponsored formal and/or non-formal education, by use of task discretion at work (2012)

Table C6.1 (P). **Participation in employer-sponsored formal and/or non-formal education, by skills and readiness to use information and communication technologies for problem solving (2012)**

Survey of Adult Skills, employed 25-64 year-olds

C6

	Group 0 (No computer experience)		Group 1 (Refused the computer-based assessment)		Group 2 (Failed ICT core test or minimal problem-solving skills)		Group 3 (Moderate ICT and problem-solving skills)		Group 4 (Good ICT and problem-solving skills)		All skills groups	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OECD												
National entities												
Australia	23	(5.6)	37	(2.3)	46	(2.7)	55	(1.8)	68	(1.5)	56	(1.0)
Austria	11	(2.6)	33	(2.6)	34	(2.6)	44	(2.0)	55	(1.9)	43	(0.8)
Canada	20	(2.7)	35	(2.6)	42	(1.4)	55	(1.2)	67	(1.1)	54	(0.6)
Czech Republic	35	(5.6)	40	(3.3)	45	(3.5)	54	(2.7)	59	(2.5)	51	(1.4)
Denmark	16	(5.3)	39	(3.1)	53	(2.3)	66	(1.5)	74	(1.2)	65	(0.8)
Estonia	15	(2.1)	39	(1.8)	45	(2.1)	53	(1.5)	66	(1.5)	50	(0.8)
Finland	20	(6.2)	46	(2.8)	53	(2.4)	67	(1.6)	70	(1.2)	64	(0.8)
France	m	m	m	m	m	m	m	m	m	m	37	(0.7)
Germany	14	(2.4)	32	(3.7)	39	(2.3)	50	(2.0)	61	(1.6)	48	(1.1)
Ireland	26	(3.3)	38	(2.3)	41	(2.7)	55	(2.0)	63	(2.0)	50	(0.9)
Italy	m	m	m	m	m	m	m	m	m	m	26	(1.1)
Japan	12	(1.9)	27	(2.2)	37	(2.4)	44	(2.4)	53	(1.6)	41	(0.9)
Korea	16	(1.6)	28	(2.7)	36	(2.1)	46	(1.9)	58	(2.5)	41	(0.9)
Netherlands	17	(5.3)	40	(5.0)	46	(3.0)	61	(1.6)	70	(1.4)	62	(0.9)
Norway	21	(8.5)	33	(3.1)	47	(2.7)	61	(1.9)	71	(1.3)	61	(0.9)
Poland	12	(1.8)	26	(1.9)	37	(2.4)	45	(2.5)	52	(2.5)	35	(1.0)
Slovak Republic	18	(2.0)	27	(2.7)	31	(3.0)	38	(2.0)	54	(2.1)	37	(1.0)
Spain	m	m	m	m	m	m	m	m	m	m	41	(0.9)
Sweden	16	(7.8)	36	(3.8)	41	(2.4)	58	(2.1)	68	(1.3)	58	(0.8)
United States	19	(4.5)	35	(3.8)	46	(3.0)	59	(2.1)	69	(1.6)	56	(1.3)
Sub-national entities												
Flanders (Belgium)	10	(2.6)	22	(3.4)	33	(2.3)	49	(1.7)	59	(1.5)	47	(0.9)
England (UK)	27	(5.9)	45	(4.0)	46	(2.4)	56	(2.1)	67	(1.6)	57	(1.1)
Northern Ireland (UK)	25	(4.5)	42	(9.4)	43	(3.1)	57	(2.4)	64	(2.7)	53	(1.3)
England/N. Ireland (UK)	26	(5.4)	45	(3.9)	46	(2.4)	56	(2.0)	67	(1.6)	57	(1.1)
Average	18	(1.0)	35	(0.7)	42	(0.6)	53	(0.4)	63	(0.4)	49	(0.2)
Partners												
Russian Federation*	8	(1.8)	18	(6.7)	18	(2.8)	23	(2.0)	23	(2.3)	19	(1.5)

Notes: Participation in education or training during previous 12 months. The category "All skills groups" corresponds to the average participation in employer-sponsored formal and/or non-formal education for the adults across all skills groups.

* See note on data for the Russian Federation in the *Methodology* section.

Source: OECD. Survey of Adult Skills (PIAAC) (2012). See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).

Please refer to the Reader's Guide for information concerning symbols for missing data and abbreviations.


StatLink  <http://dx.doi.org/10.1787/888933286032>

Table C6.2a. **Participation in employer-sponsored education, by educational attainment (2011, 2012)***Employed 25-64 year-olds*

	Formal and/or non-formal education, Survey of Adult Skills (2012)							
	Below upper secondary		Upper secondary or post-secondary non-tertiary		Tertiary		All levels of education	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
OECD								
National entities								
Australia	37	(1.9)	52	(1.4)	70	(1.2)	56	(1.0)
Austria	25	(2.1)	42	(1.1)	57	(2.1)	43	(0.8)
Canada	30	(1.9)	48	(1.0)	62	(0.8)	54	(0.6)
Czech Republic	33	(3.8)	50	(1.6)	59	(3.2)	51	(1.4)
Denmark	46	(2.2)	61	(1.3)	76	(1.0)	65	(0.8)
Estonia	30	(2.2)	41	(1.2)	63	(1.0)	50	(0.8)
Finland	39	(3.0)	57	(1.3)	74	(1.1)	64	(0.8)
France	21	(1.4)	34	(1.1)	51	(1.2)	37	(0.7)
Germany	20	(2.9)	43	(1.4)	61	(1.6)	48	(1.1)
Ireland	32	(2.2)	43	(1.4)	64	(1.5)	50	(0.9)
Italy	15	(1.8)	28	(1.4)	48	(2.4)	26	(1.1)
Japan	22	(2.5)	32	(1.4)	52	(1.2)	41	(0.9)
Korea	18	(1.4)	33	(1.3)	58	(1.4)	41	(0.9)
Netherlands	44	(1.7)	60	(1.5)	74	(1.2)	62	(0.9)
Norway	43	(2.2)	58	(1.7)	72	(1.1)	61	(0.9)
Poland	18	(3.2)	25	(1.2)	53	(1.8)	35	(1.0)
Slovak Republic	12	(2.1)	33	(1.4)	55	(1.7)	37	(1.0)
Spain	25	(1.4)	40	(2.4)	56	(1.3)	41	(0.9)
Sweden	38	(2.9)	56	(1.2)	69	(1.2)	58	(0.8)
United States	25	(3.2)	49	(1.7)	70	(1.3)	56	(1.3)
Sub-national entities								
Flanders (Belgium)	24	(2.5)	38	(1.5)	61	(1.5)	47	(0.9)
England (UK)	41	(2.6)	55	(1.5)	67	(1.6)	57	(1.1)
Northern Ireland (UK)	31	(2.5)	54	(2.4)	67	(1.8)	53	(1.3)
England/N. Ireland (UK)	41	(2.5)	55	(1.5)	67	(1.5)	57	(1.1)
Average	29	(0.5)	44	(0.3)	62	(0.3)	49	(0.2)
Partners								
Russian Federation*	11	(7.6)	9	(1.6)	23	(1.5)	19	(1.5)
	Job-related non-formal education, Adult Education Survey (2011)							
	Below upper secondary		Upper secondary or post-secondary non-tertiary		Tertiary		All levels of education	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
OECD								
Greece	0	m	3	m	12	m	5	m
Hungary	17	m	29	m	40	m	29	m
Luxembourg	36	m	49	m	55	m	48	m
Portugal	21	m	41	m	50	m	29	m
Slovenia	6	m	20	m	46	m	23	m
Switzerland	17	m	42	m	60	m	45	m

Notes: Participation in education or training during previous 12 months. The category "All levels of education" corresponds to the average participation in employer-sponsored formal and/or non-formal education for the adults across all education levels.

* See note on data for the Russian Federation in the *Methodology* section.

Source: OECD. Survey of Adult Skills (PIAAC) (2012) and Adult Education Survey (AES) (2011). See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).

Please refer to the Reader's Guide for information concerning symbols for missing data and abbreviations.


StatLink  <http://dx.doi.org/10.1787/888933286042>

Table C6.2c. **Participation in employer-sponsored education, by occupation (2011, 2012)***Survey of Adult Skills, employed 25-64 year-olds*

	Formal and/or non-formal education, Survey of Adult Skills (2012)							
	Skilled occupations		Semi-skilled white-collar occupations		Semi-skilled blue-collar occupations		Elementary occupations	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
OECD								
National entities								
Australia	69	(1.3)	52	(2.1)	41	(2.0)	32	(2.8)
Austria	53	(1.4)	39	(1.6)	34	(2.2)	16	(2.7)
Canada	63	(0.8)	46	(1.4)	43	(1.5)	32	(2.7)
Czech Republic	61	(2.4)	49	(3.2)	45	(2.3)	29	(5.6)
Denmark	76	(0.9)	59	(1.7)	50	(2.2)	40	(3.0)
Estonia	67	(1.0)	50	(2.0)	30	(1.2)	23	(2.2)
Finland	76	(1.0)	59	(1.7)	47	(1.6)	46	(4.4)
France	50	(1.1)	34	(1.3)	25	(1.4)	18	(1.7)
Germany	64	(1.5)	43	(1.8)	38	(2.0)	9	(1.9)
Ireland	64	(1.3)	44	(1.8)	37	(2.5)	35	(3.6)
Italy	41	(1.8)	19	(2.1)	18	(2.3)	16	(3.2)
Japan	57	(1.4)	36	(1.5)	27	(2.0)	14	(3.3)
Korea	57	(1.8)	43	(1.6)	29	(1.7)	17	(2.0)
Netherlands	71	(0.9)	55	(1.9)	47	(2.6)	30	(3.6)
Norway	71	(1.2)	52	(2.1)	48	(2.5)	36	(4.7)
Poland	53	(1.6)	28	(2.1)	20	(1.5)	22	(3.8)
Slovak Republic	49	(1.3)	31	(2.2)	28	(1.7)	14	(2.4)
Spain	55	(1.6)	38	(1.7)	32	(1.6)	24	(2.6)
Sweden	71	(1.2)	50	(1.7)	41	(2.2)	34	(5.5)
United States	69	(1.4)	50	(2.1)	38	(2.7)	28	(3.9)
Sub-national entities								
Flanders (Belgium)	61	(1.4)	38	(1.8)	30	(2.3)	20	(2.7)
England (UK)	70	(1.5)	53	(1.8)	48	(2.7)	31	(3.5)
Northern Ireland (UK)	66	(2.2)	55	(2.0)	34	(3.5)	34	(4.1)
England/N. Ireland (UK)	70	(1.5)	53	(1.8)	47	(2.6)	32	(3.4)
Average	62	(0.3)	44	(0.4)	36	(0.4)	26	(0.7)
Partners								
Russian Federation*	29	(2.9)	13	(2.0)	10	(2.2)	6	(4.6)
	Job-related non-formal education, Adult Education Survey (2011)							
	Skilled occupations		Semi-skilled white-collar occupations		Semi-skilled blue-collar occupations		Elementary occupations	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
OECD								
Greece	14	m	7	m	0	m	0	m
Hungary	47	m	41	m	45	m	40	m
Luxembourg	67	m	57	m	56	m	0	m
Portugal	54	m	46	m	31	m	22	m
Slovenia	49	m	34	m	20	m	12	m
Switzerland	64	m	44	m	40	m	24	m

Note: Participation in education or training during previous 12 months.

* See note on data for the Russian Federation in the *Methodology* section.Source: OECD. Survey of Adult Skills (PIAAC) (2012) and Adult Education Survey (AES) (2011). See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).

Please refer to the Reader's Guide for information concerning symbols for missing data and abbreviations.

StatLink  <http://dx.doi.org/10.1787/888933286050>

Table C6.2d. **Participation in employer-sponsored formal and/or non-formal education, by working hours and contract type (2012)***Survey of Adult Skills, employed 25-64 year-olds*

	Working hours by contract type							
	Full time, indefinite		Full time, fixed term		Part time, indefinite		Part time, fixed term	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.
	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
OECD								
National entities								
Australia ¹	67	(1.3)	58	(1.9)	50	(2.5)	48	(3.0)
Austria	50	(1.1)	40	(3.8)	32	(2.4)	31	(5.4)
Canada	63	(0.9)	53	(2.2)	46	(2.9)	43	(3.9)
Czech Republic	56	(1.8)	49	(4.7)	45	(7.7)	28	(7.3)
Denmark	72	(0.9)	61	(2.9)	49	(2.8)	42	(6.8)
Estonia	54	(1.0)	43	(2.4)	46	(3.2)	37	(4.4)
Finland	69	(0.8)	63	(2.6)	47	(3.7)	42	(5.8)
France	44	(0.9)	37	(3.1)	29	(2.0)	25	(4.0)
Germany	57	(1.3)	48	(3.7)	34	(2.5)	21	(3.3)
Ireland	63	(1.5)	51	(2.9)	45	(3.3)	30	(3.0)
Italy	30	(1.5)	18	(3.0)	25	(3.4)	14	(4.9)
Japan	47	(1.2)	39	(3.2)	21	(2.1)	27	(3.0)
Korea	58	(1.4)	35	(1.6)	48	(5.2)	23	(3.3)
Netherlands	73	(1.2)	60	(3.5)	57	(1.8)	39	(3.8)
Norway	68	(1.1)	57	(3.7)	48	(3.0)	38	(4.9)
Poland	45	(1.5)	32	(2.0)	34	(4.7)	31	(4.7)
Slovak Republic	43	(1.2)	32	(2.9)	36	(6.7)	23	(7.5)
Spain	52	(1.1)	37	(2.5)	36	(4.0)	18	(3.5)
Sweden	64	(0.9)	51	(3.8)	46	(4.1)	33	(5.1)
United States	64	(1.8)	61	(1.8)	46	(6.6)	51	(3.7)
Sub-national entities								
Flanders (Belgium)	52	(1.3)	51	(5.4)	39	(2.3)	36	(8.9)
England (UK)	68	(1.4)	63	(3.4)	50	(2.7)	53	(5.2)
Northern Ireland (UK)	65	(1.9)	49	(3.7)	48	(3.1)	40	(5.3)
England/N. Ireland (UK)	68	(1.3)	62	(3.3)	50	(2.6)	53	(5.0)
Average	57	(0.3)	47	(0.7)	41	(0.8)	33	(1.1)
Partners								
Russian Federation*	21	(1.8)	16	(2.7)	36	(5.2)	26	(2.8)

Notes: Participation in education or training during previous 12 months. Additional columns on working hours and contract type are available for consultation on line (see *StatLink* below).

1. For Australia, data based on full time/part time are using a variable which is topped at 60 hours per week while there is no upper limit for other countries.

* See note on data for the Russian Federation in the *Methodology* section.

Source: OECD. Survey of Adult Skills (PIAAC) (2012). See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).

Please refer to the Reader's Guide for information concerning symbols for missing data and abbreviations.


StatLink  <http://dx.doi.org/10.1787/888933286060>

Table C6.3a. **Participation in employer-sponsored formal and/or non-formal education, by use of learning at work (2012)***Survey of Adult Skills, employed 25-64 year-olds*


		Index of learning at work ¹											
		Never		Less than 20%		20% to less than 40%		40% to less than 60%		60% to less than 80%		80% or more	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	National entities												
	Australia	14	(4.3)	41	(2.6)	59	(2.5)	64	(1.8)	63	(2.2)	69	(2.1)
	Austria	8	(4.4)	30	(1.9)	44	(1.8)	50	(1.9)	52	(2.3)	53	(3.1)
	Canada	19	(3.3)	42	(1.9)	54	(1.5)	62	(1.2)	62	(1.3)	62	(1.4)
	Czech Republic	25	(7.0)	46	(2.8)	55	(3.2)	56	(2.9)	63	(3.6)	59	(4.3)
	Denmark	16	(6.1)	46	(2.2)	67	(1.6)	70	(1.7)	75	(1.6)	72	(1.8)
	Estonia	13	(3.0)	39	(1.8)	49	(1.7)	59	(1.5)	59	(2.1)	57	(1.8)
	Finland	c	c	49	(2.4)	64	(2.1)	71	(1.6)	68	(1.9)	67	(2.0)
	France	6	(1.9)	26	(1.7)	36	(1.7)	44	(1.8)	46	(1.7)	46	(1.6)
	Germany	5	(2.8)	37	(2.1)	47	(2.0)	57	(1.9)	57	(2.6)	60	(3.1)
	Ireland	19	(4.6)	43	(2.1)	53	(2.5)	55	(2.5)	61	(2.2)	62	(2.1)
	Italy	7	(3.1)	20	(2.2)	26	(2.2)	31	(2.6)	34	(3.0)	30	(2.9)
	Japan	6	(2.2)	29	(1.7)	41	(2.0)	50	(1.7)	51	(2.1)	52	(3.5)
	Korea	18	(2.1)	39	(1.6)	53	(2.0)	51	(2.4)	50	(2.9)	56	(4.1)
	Netherlands	13	(4.0)	50	(2.1)	64	(2.0)	69	(1.9)	71	(2.0)	74	(2.5)
	Norway	c	c	42	(3.0)	59	(2.0)	67	(1.4)	68	(1.7)	66	(1.9)
	Poland	16	(3.6)	27	(1.7)	42	(2.4)	46	(3.3)	48	(2.4)	50	(2.8)
	Slovak Republic	8	(2.8)	26	(1.9)	35	(2.4)	46	(2.2)	46	(2.4)	46	(2.6)
	Spain	14	(3.4)	34	(2.7)	37	(2.6)	41	(2.8)	49	(2.5)	52	(1.5)
Sweden	9	(5.8)	41	(2.6)	57	(2.2)	64	(1.7)	66	(1.9)	66	(2.1)	
United States	10	(4.4)	46	(3.1)	55	(2.7)	61	(2.2)	65	(2.1)	65	(1.7)	
Sub-national entities													
Flanders (Belgium)	12	(4.1)	34	(2.1)	47	(1.8)	53	(1.7)	52	(2.6)	64	(2.4)	
England (UK)	29	(5.9)	46	(2.4)	64	(2.6)	67	(2.1)	68	(2.3)	70	(2.5)	
Northern Ireland (UK)	20	(5.5)	44	(2.8)	60	(2.9)	65	(3.1)	66	(3.5)	62	(3.9)	
England/N. Ireland (UK)	29	(5.6)	46	(2.4)	64	(2.5)	67	(2.0)	68	(2.2)	70	(2.4)	
Average	13	(0.9)	38	(0.5)	50	(0.5)	56	(0.4)	58	(0.5)	59	(0.5)	
Partners	Russian Federation*	4	(2.0)	12	(2.3)	19	(2.2)	27	(3.3)	31	(3.4)	37	(4.1)

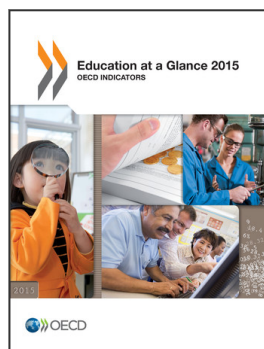
Note: Participation in education or training during previous 12 months.

1. The index of learning at work is categorised as Warm's mean weighted likelihood estimation (WLE). It is derived from variables that are based on a Likert scale from "Never" to "Every day". The categories should therefore be interpreted based on the frequency of the activity, with "Never" being the least frequent and "80% or more" being the most frequent. For more details on the index, see page 143 of the *OECD Skills Outlook 2013: First Results from the Survey of Adult Skills*. (<http://dx.doi.org/10.1787/9789264204256-en>).

* See note on data for the Russian Federation in the *Methodology* section.Source: OECD. Survey of Adult Skills (PIAAC) (2012). See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).

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