



Relationship and Convergence of Practices National Standards: Math, Science, Career & Technical, Literacy

The Common Convergence Practices among the national standards are strongly supported by the WICOR strategies of AVID. The practices represent foundational elements of STEM preparation for students.

Common Convergence Practices

- ❖ **Critical thinking, questioning, defining problems, perseverance (MP1, SEP1,5, CCTC 8, ELA-ST9)**
- ❖ **Precision, planning investigations, following complex procedures (MP6, SEP3, CCTC7, ELA-ST 3)**
- ❖ **Develop and use models (MP4, SEP2)**
- ❖ **Reason abstractly, construct explanations, evaluate and integrate information (MP2, SEP6, CCTC4, ELA-ST 2, 7, 8)**
- ❖ **Apply academic and technical skills, make use of structure, analyze and interpret data (MP7, SEP4, CCTC2, ELA-ST8)**
- ❖ **Communicate effectively and with reason, viable arguments supported by evidence (MP3, SEP7,8, CCTC4, ELA-ST1)**

Mathematical Practices (MP)	Science and Engineering Practices (SEP) (Framework for NGSS)	Common Career Technical Core Practices (CCTC)	CCSS ELA-Literacy, Gr11-12 Science & Technical Subjects (ELA-ST)
<ul style="list-style-type: none"> • MP1. Make sense of problems and persevere in solving them • MP2. Reason abstractly and quantitatively • MP3. Construct viable arguments and critique the reasoning of others • MP4. Model with mathematics • MP5. Use appropriate tools strategically • MP6. Attend to precision • MP7. Look for and make use of structure • MP8. Look for and express regularity in repeated reasoning 	<ul style="list-style-type: none"> • SEP1. Asking questions and defining problems • SEP2. Developing and using models • SEP3. Planning and carrying out investigations • SEP4. Analyzing and interpreting data • SEP5. Using mathematics and computational thinking • SEP6. Constructing explanations and designing solutions • SEP7. Engaging in argument from evidence • SEP8. Obtaining, evaluating, and communicating information 	<ul style="list-style-type: none"> • CCTC1. Act as a responsible and contributing citizen and employee • CCTC2. Apply appropriate academic and technical skills • CCTC3. Attend to personal health and financial well-being • CCTC4. Communicate clearly, effective and with reason • CCTC5. Consider the environmental, social and economic impacts of decisions • CCTC6. Demonstrate creativity and innovation • CCTC7. Employ valid and reliable research strategies • CCTC8. Utilize critical thinking to make sense of problems and persevere in solving them • CCTC9. Model integrity, ethical leadership and effective management • CCTC10. Plan education and career path aligned to personal goals. • CCTC11. Use technology to enhance productivity • CCTC12. Work productively in teams while using cultural/global competence 	<ul style="list-style-type: none"> • ELA-ST1. Cite specific text evidence; analysis of science and technical texts • ELA-ST2. Determine the central ideas or conclusions of a text; explain; summarize • ELA-ST3. Follow precisely complex multistep procedures • ELA-ST4. Determine meaning of symbols, key terms and domain-specific words • ELA-ST5. Analyze text structures • ELA-ST6. Analyze author's purpose in describing explanations, procedures, experiments • ELA-ST7. Integrate and evaluate multiple sources of information • ELA-ST8. Evaluate hypotheses, data, analysis, and conclusions • ELA-ST9. Synthesize information from a range of sources • ELA-ST10. Read and comprehend science and technical texts

SURVEY OF ADULT SKILLS
FIRST RESULTS

UNITED STATES

Key issues

- **Larger proportions of adults in the United States than in other countries have poor literacy and numeracy skills, and the proportion of adults with poor skills in problem solving in technology-rich environments is slightly larger than the average, despite the relatively high educational attainment among adults in the United States.**
- **Socio-economic background has a stronger impact on adult literacy skills in the United States than in other countries. Black and Hispanic adults are substantially over-represented in the low-skilled population.**
- **Literacy skills are linked not only to employment outcomes, but also to personal and social well-being. In the United States, the odds of being in poor health are four times greater for low-skilled adults than for those with the highest proficiency – double the average across participating countries.**

The survey

The Survey of Adult Skills (PIAAC) provides a picture of adults' proficiency in three key information-processing skills:

- literacy – the ability of understand and respond appropriately to written texts;
- numeracy – the ability to use numerical and mathematical concepts; and
- problem solving in information-rich environments – the capacity to access, interpret and analyse information found, transformed and communicated in digital environments.

Proficiency is described in terms of a scale of 500 points divided into levels. Each level summarizes what a person with a particular score can do. In literacy and numeracy there are five proficiency levels and problem solving there are three.

The survey also provides a rich array of information regarding respondents' use of skills at work and in everyday life, their education, their linguistic and social backgrounds, their participation in the labor market and other aspects of their well-being.

The Survey of Adult Skills was conducted in the United States from 1 August 2011 to 31 March 2012. Some 5010 adults aged 16 to 65 were surveyed in the United States.

Time for the US to Reskill: What the Survey of Adult Skills Says

Alongside the publication of the results from the Survey of Adult Skills, the OECD will publish a special report on the U.S. entitled, *Time for the US to Reskill: What the Survey of Adult Skills Says*, at the request of OVAE in the U.S. Department of Education.

The report describes the main findings of the Survey of Adult Skills for the United States and compares them with the results from a set of key comparison countries. The implications of the results – in terms of labor market outcomes, such as employment and wages, and social outcomes, such as health and citizenship, are considered. Potential explanations for the U.S. results are then assessed in relation to outcomes of basic schooling, age factors and educational attainment. Low-skilled adults are discussed in depth. The report also assesses the policy implications of the U.S. results and tenders policy recommendations.

This country note draws on results published in the report. For more information on the report, see *OECD (2013), Time for the U.S. to Reskill? : What the Survey of Adult Skills Says*, OECD Skills Studies, OECD Publishing.

<http://dx.doi.org/10.1787/9789264204904-en>

Note: Figures in this country note compare the United States with the average across participating countries and a set of key comparison countries.

U.S. performance is weak in literacy, very poor in numeracy, but only slightly below average in problem solving in technology-rich environments.

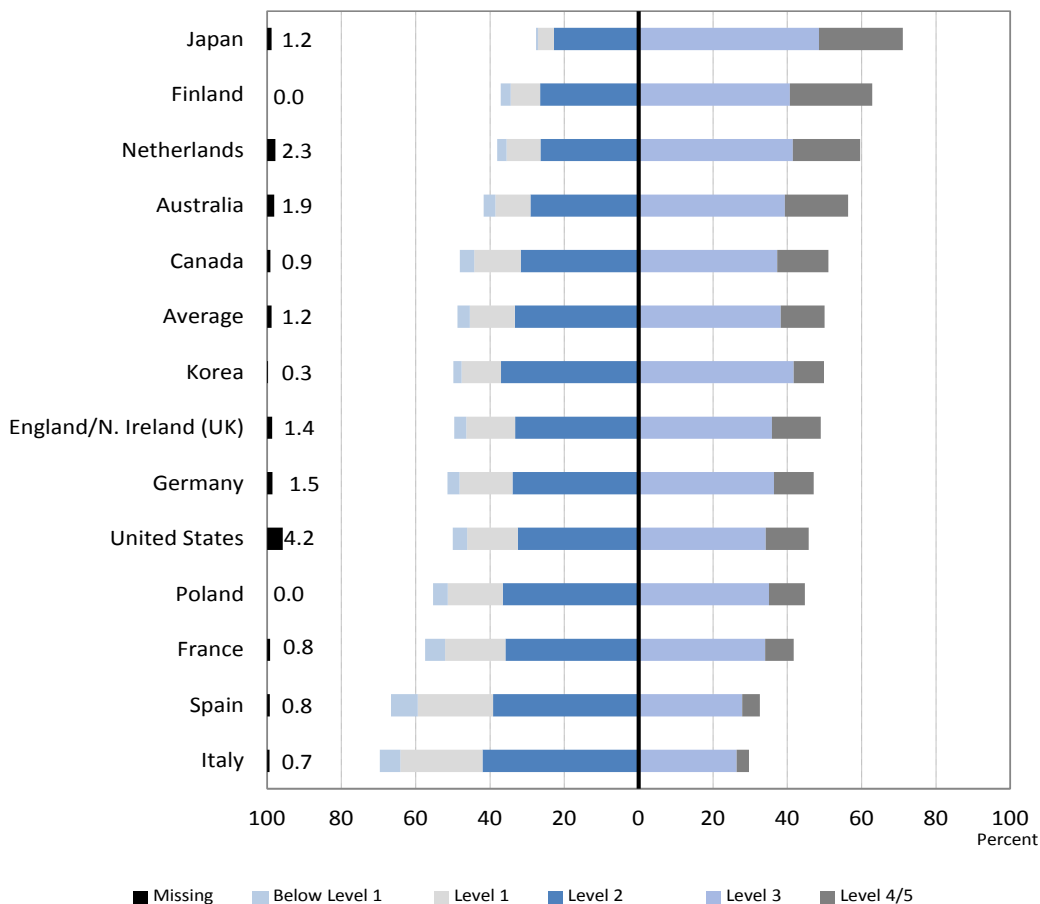
In **literacy**, 12% of US adults score at the highest levels (Level 4/5) – close to the average across participating countries, but a smaller proportion than in Finland and Japan (about 22%). At Level 4, adults can integrate, interpret and synthesize information from complex or lengthy texts that contain conditional and/or competing information (for more details on what adults can do at each proficiency level, see the table at the end of this note). Meanwhile, one in six adults in the United States scores below Level 2, in literacy – a larger-than-average proportion – compared with one in 20 adults who score at this level in Japan. The average literacy score among adults in the US (270 points, which corresponds to proficiency Level 2) is similar to that in Germany and England/Northern Ireland (UK). This score is higher than the average in France, Italy, Poland and Spain, but lower than that in Australia, Canada and Japan. About one in three (34%) adults scores at Level 3 in literacy, and one in three (33%) attains Level 2.

In **numeracy**, only 8% of adults score at Level 4/5, below the average of 13%. By contrast, 19% of adults in Japan and Finland achieve the highest levels of proficiency. At the other end of the performance spectrum, nearly one in three adults in the United States scores below Level 2 in numeracy. The average score in the United States (253 points, corresponding to Level 2) is higher than that in only two comparison countries (Italy and Spain) and similar to that in France. One in four adults (26%) scores at Level 3 and one in three adults (33%) scores at Level 2.

In **problem solving in technology-rich environments**, nearly one in three adults (31%) score at least at Level 2, slightly below the average across all participating countries (34%) and close to Korea's average (30%). The Netherlands and Finland are among the top performers in this domain, with about 42% of adults performing at Level 2 and above. Around one in three adults in the United States scores at Level 1 proficiency. The remaining one third is evenly divided between those who score lower than Level 1 in problem solving and those who were unable to display any skills in this domain.

Literacy proficiency among adults


Percentage of adults scoring at each proficiency level in literacy



How to read this chart: This chart shows the share of adults at different levels of literacy proficiency. For example, in the United States 34.2% of adults scored at Level 3 and 11.5% of adults scored at Level 4/5. Countries closer to the top of the chart have proportionately more adults who score at higher levels of literacy. The black bar on the left edge of the chart shows the share of adults for whom no literacy score was imputed.

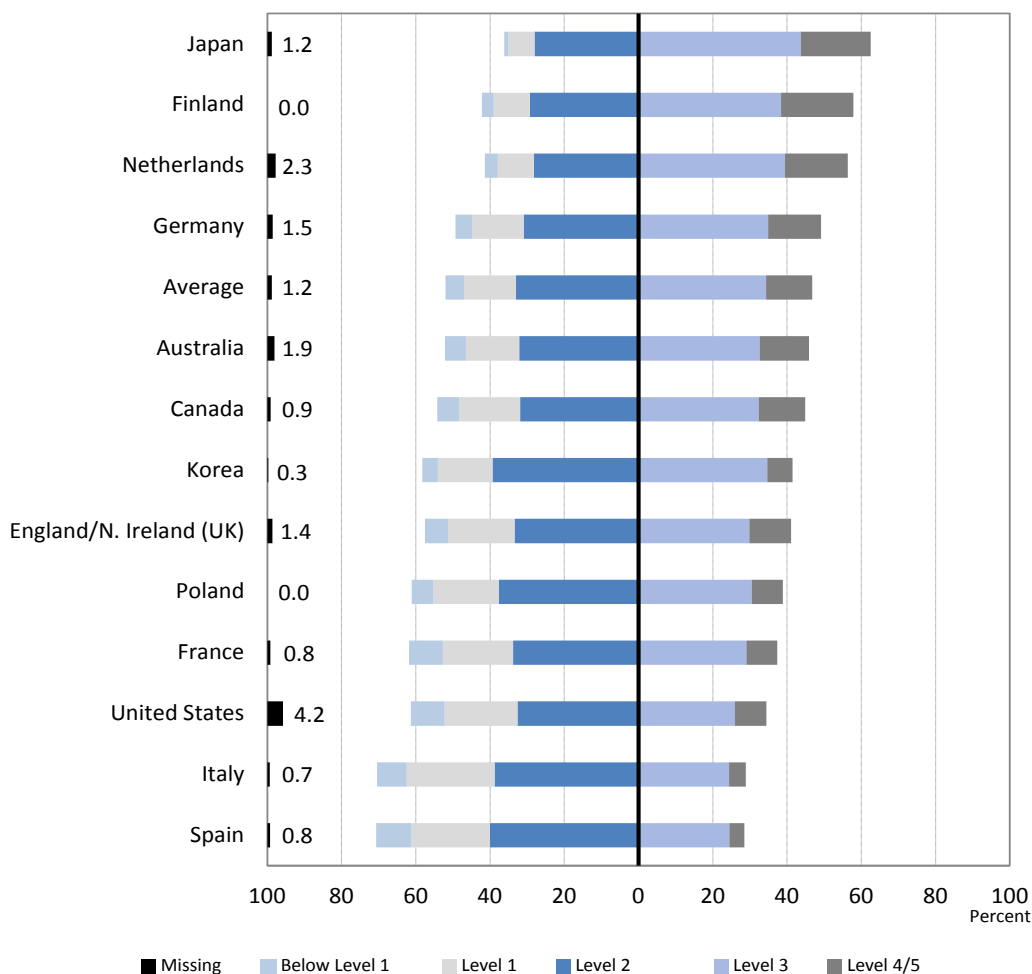
Notes: Countries are ranked in descending order of the combined percentage of adults scoring at Level 3 and Level 4 or 5. Adults in the missing category were not able to provide enough background information to impute proficiency scores because of language difficulties, or learning or mental disabilities (referred to as literacy-related non-response).

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink  <http://dx.doi.org/10.1787/888932905856>

Numeracy proficiency among adults

Percentage of adults scoring at each proficiency level in numeracy



How to read this chart: This chart shows the share of adults at different levels of numeracy proficiency. For example, in the United States 25.9% of adults scored at Level 3 and 8.5% of adults scored at Level 4/5. Countries closer to the top of the chart have proportionately more adults who score at higher levels of numeracy. The black bar on the left edge of the chart shows the share of adults for whom no numeracy score was computed.

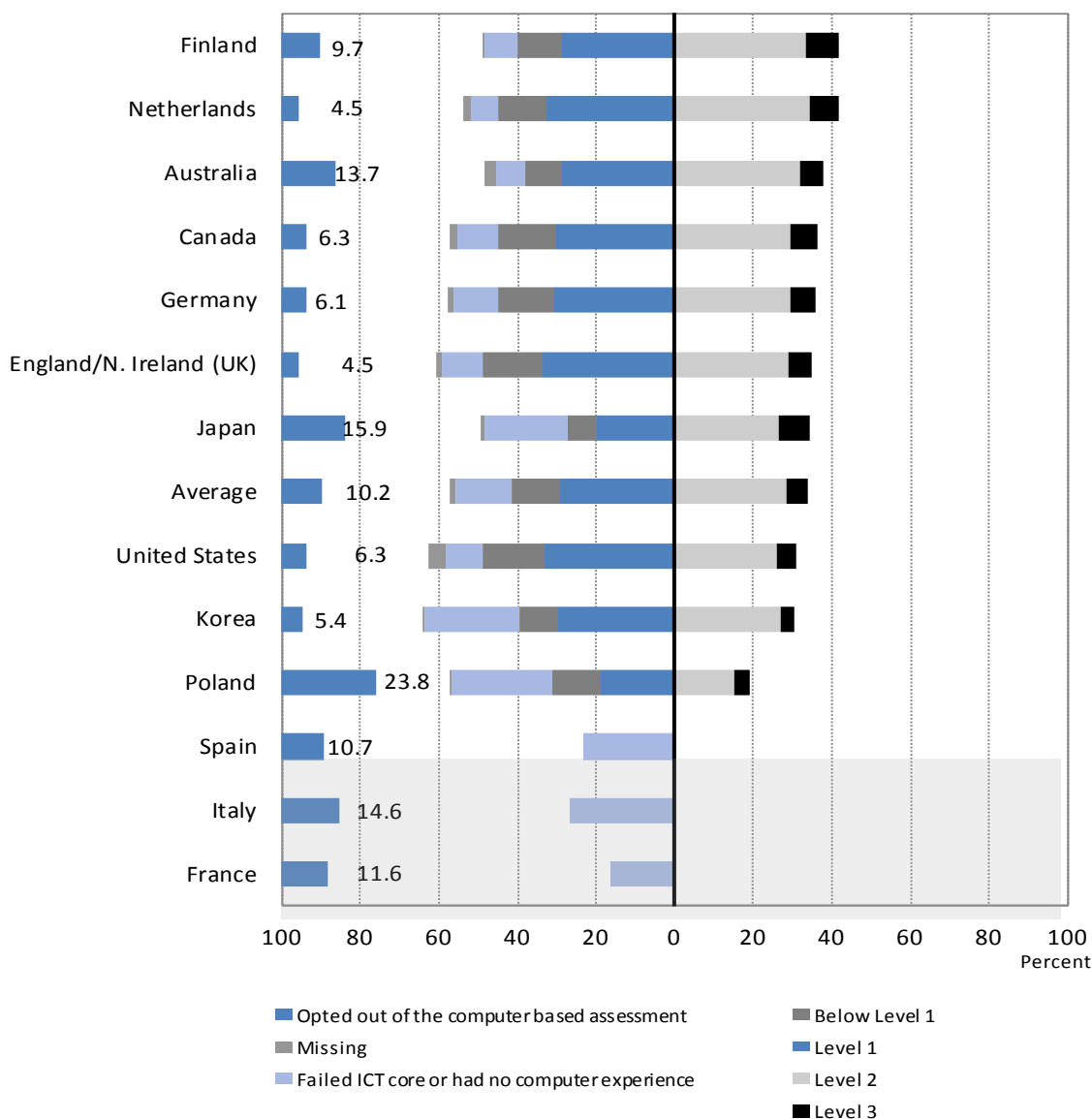
Notes: Countries are ranked in descending order of the combined percentage of adults scoring at Level 3 and Level 4 or 5. Adults in the missing category were not able to provide enough background information to impute proficiency scores because of language difficulties, or learning or mental disabilities (referred to as literacy-related non-response).

Source: Survey of Adult Skills (PIAAC) (2012).

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Proficiency in problem solving in technology-rich environments among adults

Percentage of adults scoring at each proficiency level in problem solving in technology-rich environments



How to read this chart: This chart shows the share of adults at different levels of proficiency in problem solving in technology-rich environments. For example, in the United States 26% of adults scored at Level 2 and 5.1% of adults scored at Level 3. Countries closer to the top of the chart have proportionately more adults who score at higher levels of skills. The black bar on the left edge of the chart shows the share of adults for whom no proficiency score was computed.

Notes: Adults included in the missing category were not able to provide enough background information to impute proficiency scores because of language difficulties, or learning or mental disabilities (referred to as literacy-related non-response). The missing category also includes adults who could not complete the assessment of problem solving in technology-rich environments because of technical problems with the computer used for the survey. France, Italy and Spain did not participate in the problem solving in technology-rich environments assessment. Countries are ranked in descending order of the percentage of adults who scored at Level 2 or 3.

Source: Survey of Adult Skills (PIAAC) (2012).

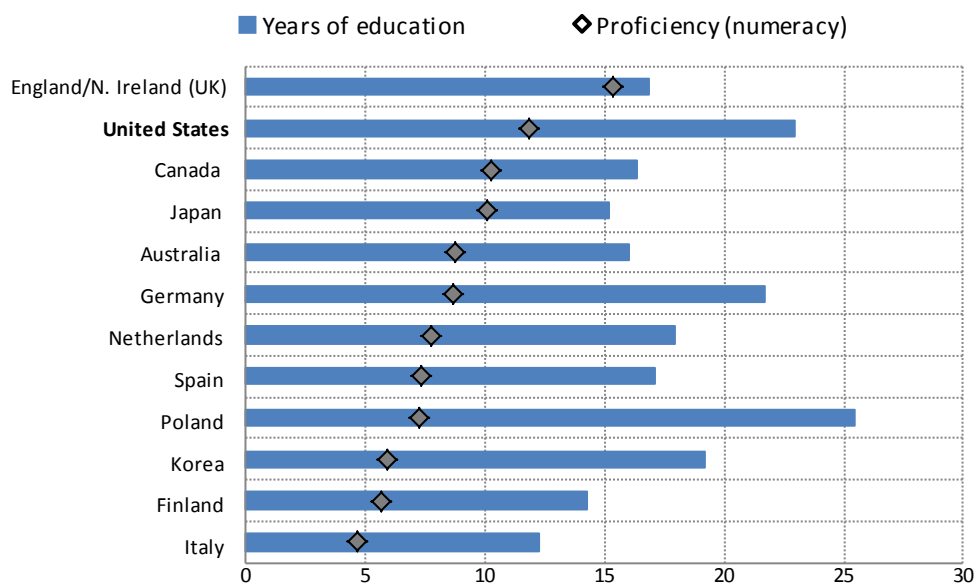
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The rewards, in wages, for being proficient in information-processing skills are particularly high in the United States.

In most countries, those with better information-processing skills, regardless of their level of education, are more likely to participate in the labor market and earn higher wages. The relationship between numeracy skills and wages is particularly strong in the United States, as it is in other countries where there are less stringent regulations on employment protection and larger differences in wages.

Do education and numeracy proficiency affect wages?

Percentage change in wages associated with a one standard deviation change in years of education and proficiency in numeracy



How to read this chart: This chart shows that adults with better numeracy skills tend to have higher wages. The association between numeracy skills and wages exists even when taking other factors like education, age, gender, immigrant status and tenure into account. The association between numeracy skills and wages is stronger in countries towards the top of the chart.

Notes: Coefficients from the OLS regression of log hourly wages on years of education and proficiency. Coefficients adjusted for age, gender, foreign-born status and tenure. The wage distribution was trimmed to eliminate the 1st and 99th percentiles. All values are statistically significant. The regression sample includes only employees. Years of education have a standard deviation of 3.05, numeracy has a standard deviation of 52.6. Countries are ranked in descending order of the effect of proficiency.

Source: Survey of Adults Skills (PIAAC) (2012).

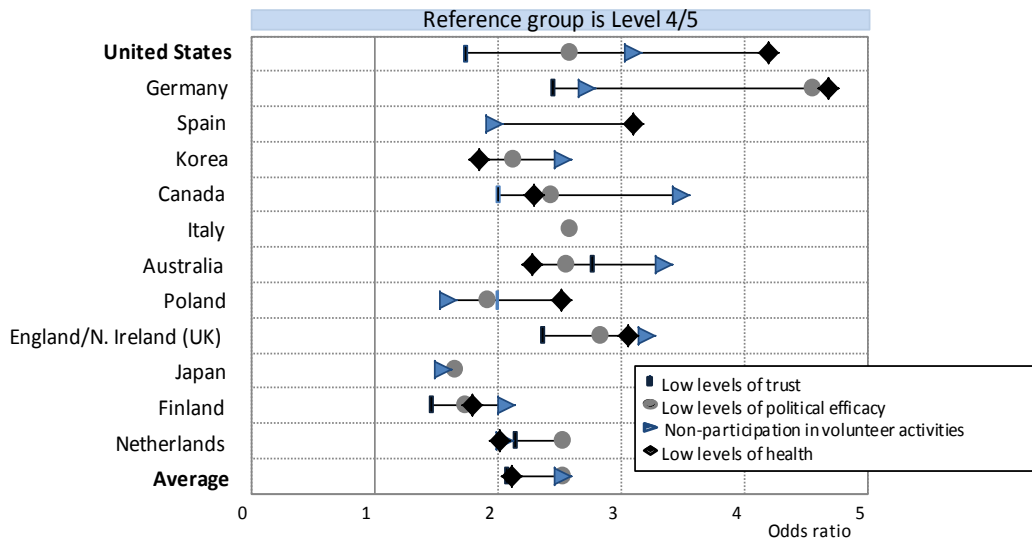
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The association between literacy skills and health is stronger in the United States than in almost any other country.

In the United States, the odds of reporting “fair” or “poor” health are four times greater for those with low literacy skills (below Level 2) than for highly skilled adults (Level 4/5). This is double the average ratio observed across participating countries. In the United States more than in most other countries, those with lower skills are more likely to feel that they have no influence in the political process, yet participation in volunteer activities is more common in the United States than in most OECD countries and is associated with higher literacy to a greater extent than in most other countries. The association between literacy and trust in others, although observed, is much weaker in the United States than in most other countries.

Low literacy proficiency and negative social outcomes

Odds ratio showing the likelihood of adults scoring at or below Level 1 in literacy reporting low levels of trust and political efficacy, fair or poor health, or of not participating in volunteer activities (adjusted)



How to read this chart: This chart shows that adults with weaker literacy skills are more likely to report negative social outcomes, even when other factors (e.g. age, gender, education, immigrant and language background) are taken into account. For example, in the United States the odds of reporting poor health (black rhombus) are over four times higher for low-skilled adults than for high-skilled adults. But in Korea and Finland, the odds are less than two times higher.

Notes: Countries are ranked in descending order of the difference between the maximum and the minimum odds ratios for the four social outcomes. Estimates that are not statistically different from the reference group are not shown. Odds ratios are adjusted for age, gender, educational attainment and immigrant and language background.

Source: Survey of Adult Skills (PIAAC) (2012).

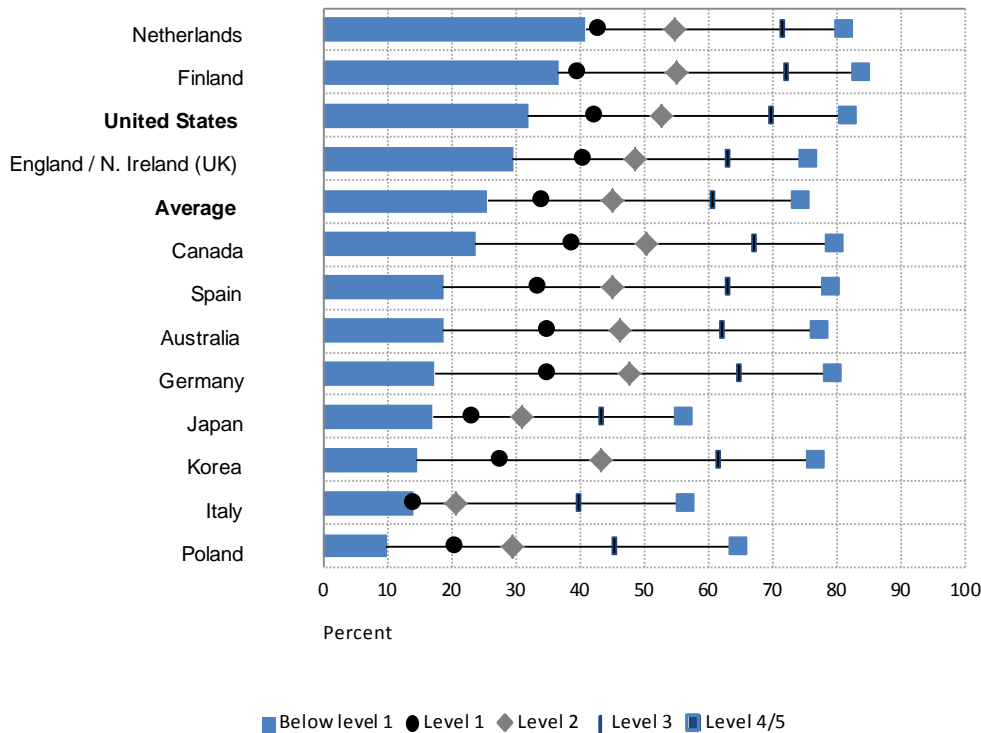
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Participation rates in adult education and training are higher in the United States than in most countries among adults at all skills levels although, as elsewhere, low-skilled adults are less likely to participate.

Participation in adult education and training, which ranges from basic literacy programs to university education and high-level professional training, is more common in the United States than on average across countries, among adults with all levels of skills proficiency. As in other countries, those with higher proficiency tend to participate more. Over the 12 months prior to the survey, 81.5% of adults scoring at Level 4/5 in literacy, 69.7% of adults scoring at Level 3, 52.6% of adults scoring at Level 2, 41.9% of adults scoring at Level 1, and 31.9% of those scoring below Level 1 participated in adult education.

Participation rate in adult education, by literacy proficiency levels

Percentage of adults who participated in adult education and training during year prior to the Survey, by level of proficiency in literacy



How to read this chart: This chart shows that adults with higher literacy skills tend to participate more in adult education than those with lower literacy skills. For example, on average across participating countries 72.2% of adults scoring at Level 4/5, 60.67% of those scoring at Level 3, 45% of those scoring at Level 2, 33.5% of those scoring at Level 1 and 25.6% of those scoring below Level 1 participated in adult education during the 12 months prior to the survey.

Note: Countries are ranked in descending order of the percentage of adults scoring below Level 1 in literacy who participated in adult education and training during year prior to the survey.

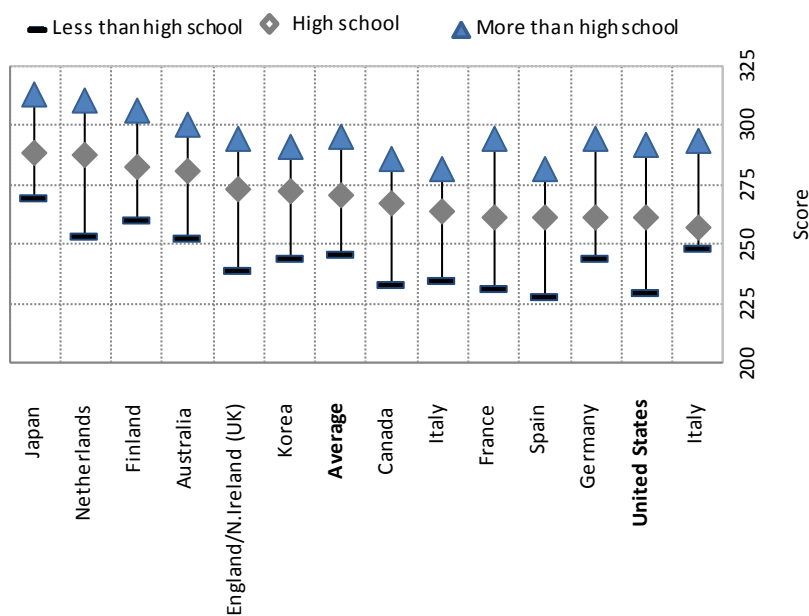
Source: Survey of Adult Skills (PIAAC) (2012).

StatLink <http://dx.doi.org/10.1787/888932905913>

As in other countries, US adults with higher levels of education tend to have better skills, while those whose highest level of attainment is high school perform worse, on average, than their counterparts in other countries.

Information-processing skills and educational attainment are mutually reinforcing, so those with higher levels of education tend to have better information-processing skills. Adults in the United States who didn't graduate from high school scored 230.3 points, on average, in literacy; those who graduated from high school scored 260.9 points, on average; and those with more than high school education scored, on average, 291.4 points. U.S. adults with "more than high school" education have literacy skills that are, on average, about the same as those of their similarly educated counterparts in other OECD countries. But U.S. adults whose highest level of educational attainment is high school perform worse, on average, than their counterparts in other countries. Although a larger proportion of adults in the United States than in comparison countries attained higher levels of education, the poorer literacy proficiency observed among U.S. adults who have a high school education or less drags down the average proficiency among U.S. adults.


Skills proficiency scores, by educational attainment



How to read this chart: This chart shows the average score of adults with more than high school education (triangles), high school education (rhombuses) and less than high school education (lines). For example, on average across participating countries adults with less than high school education achieved an average score of 245.8, those with high school education scored on average at 270.8 points, while those with more than high school education scored on average at 294.8 points.

Note: Countries are ranked in descending order of the average score of adults with high school education.

Source: OECD, Survey of Adult Skills (2012).

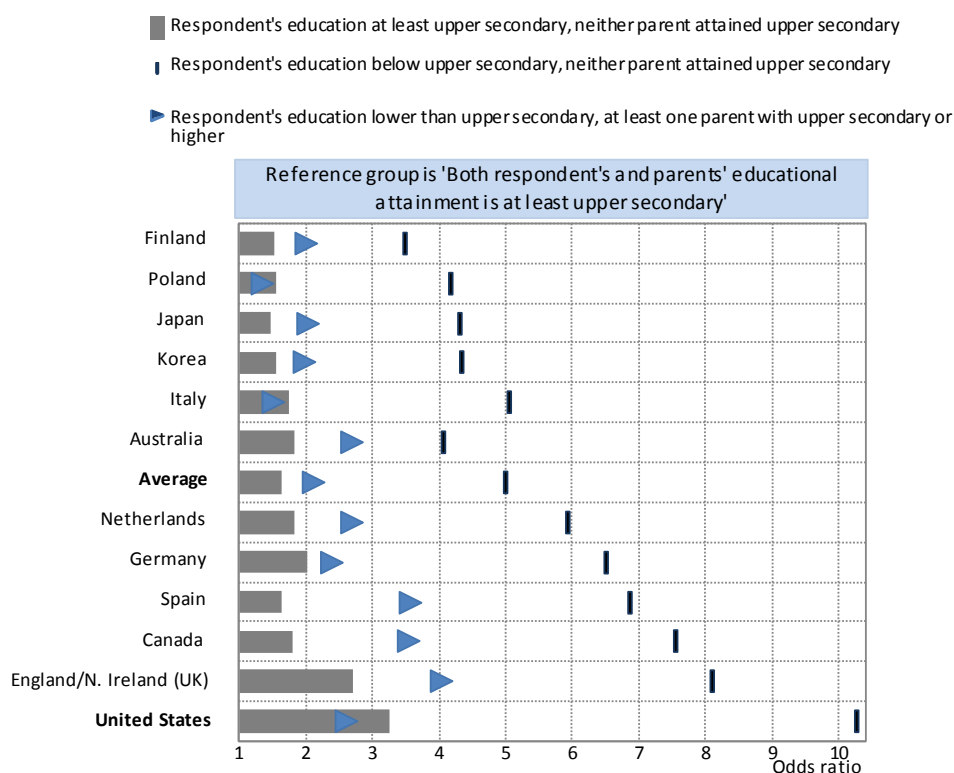
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Socio-economic background has a stronger impact on skills proficiency in the United States than in other countries.

In all countries, but particularly in the United States, adults born to better-educated parents tend to have stronger literacy skills. Among 16-24 year-olds, the association is much weaker and is close to the average across all participating countries. This latter finding might reflect growing equity in the education and training system over time. Alternatively, it might reflect the fact that the impact of parents' education is not fully apparent until later in life. In all countries, but again more so in the United States, low-educated adults from disadvantaged backgrounds are particularly likely to have low skills. The odds of being low skilled are ten times greater among low-educated adults born to low-educated parents than among high-educated adults born to high-educated parents – much greater than in other countries.

Likelihood of lower literacy proficiency among low-educated adults

Adjusted odds ratio of scoring at or below Level 2 in literacy, by respondent's and parents' level of education



How to read this chart: This chart shows that low-educated adults coming from low-educated families (black line) are more likely to have lower literacy skills than adults who attained higher levels of education or come from better-educated families. In the United States, unlike most other comparison countries, better-educated adults coming from low-educated families (grey bar) are more likely to have lower literacy skills than low-educated adults coming from more educated families (blue triangle).

Notes: Estimates based on a sample size of fewer than 30 respondents or are not statistically different from the reference group are not shown. For more detailed results, see corresponding table in Annex. Odds ratios are adjusted for age, gender, type of occupation, and immigrant and language background. Countries are ranked in ascending order of the odds ratios of respondents scoring at or below proficiency Level 2 when their and their parents' educational attainment is below upper secondary.

Source: Survey of Adult Skills (PIAAC) (2012).

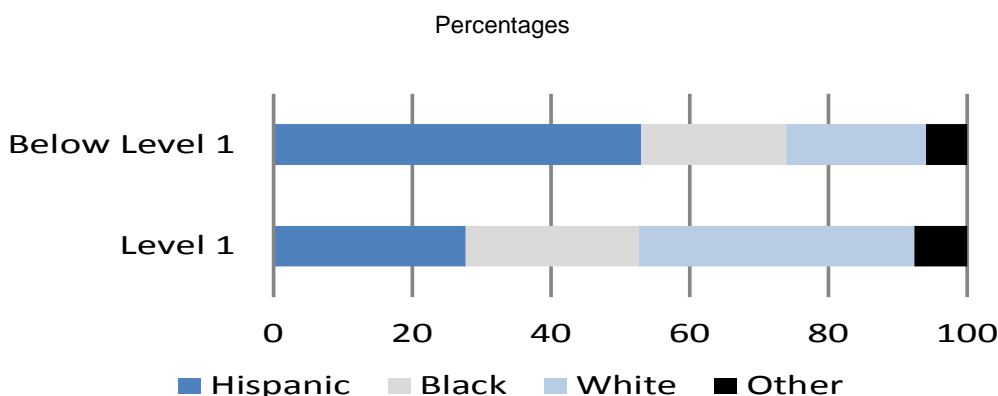
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Black and Hispanic adults are substantially over-represented in the low-skilled adult population.

Data on race/ethnicity were collected as part of the US national data collection in the survey (comparable data from other countries are not available). While one in ten (10%) white adults scores below Level 2 in literacy, more than one in three (35%) black adults do so, and nearly one in two (43%) Hispanics do. Similar patterns are observed in numeracy: 59% of black and 56% of Hispanic adults score below Level 2, compared to 19% of white adults.

Given that blacks and Hispanics are three to four times more likely to have poor skills than whites, these groups are substantially over-represented in the low-skilled population. Half of those with the lowest level of literacy (below Level 1) are Hispanic, and a further one in five are black. Among those with Level 1 literacy skills, about one in four are black and a little over one in four are Hispanic. Among those scoring at the lowest level of numeracy (below Level 1), 31% are black and 37% are Hispanic, while 22% of adults scoring at Level 1 are black and Hispanic.

Race/ethnicity of adults with low literacy skills in the United States



How to read this chart: This chart shows the race/ethnicity of adults at the two lowest levels of literacy in the United States. Among those scoring at the lowest level (below Level 1), 53% are Hispanic, 20.9% are black, and 20.1% are white. Among adults scoring at Level 1 in literacy, 27.7% are Hispanic, 24.9% are black and 39.7% are white.

Source: Survey of Adult Skills (PIAAC) (2012) US national dataset.

StatLink  <http://dx.doi.org/10.1787/888932906008>

Key facts about the Survey of Adult Skills (PIAAC)

What is assessed

- The Survey of Adult Skills (PIAAC) assesses the proficiency of adults from age 16 onwards in literacy, numeracy and problem solving in technology-rich environments. These skills are “key information-processing competencies” that are relevant to adults in many social contexts and work situations, and necessary for fully integrating and participating in the labor market, education and training, and social and civic life.
- In addition, the survey collects a range of information on the reading- and numeracy-related activities of respondents, the use of information and communication technologies at work and in everyday life, and on a range of generic skills, such as collaborating with others and organising one’s time, required of individuals in their work. Respondents are also asked whether their skills and qualifications match their work requirements and whether they have autonomy over key aspects of their work.

Methods

- Around 166 000 adults aged 16-65 were surveyed in 24 countries and sub-national regions: 22 OECD member countries – Australia, Austria, Belgium (Flanders), Canada, the Czech Republic, Denmark, Estonia, Finland, France, Norway, Ireland, Italy, Japan, Korea, the Netherlands, Norway, Poland, the Slovak Republic, Spain, Sweden, the United Kingdom (England and Northern Ireland), and the United States; and two partner countries – Cyprus** and the Russian Federation
- Data collection for the Survey of Adult Skills took place from 1 August 2011 to 31 March 2012 in most participating countries. In Canada, data collection took place from November 2011 to June 2012; and France collected data from September to November 2012.
- The language of assessment was the official language or languages of each participating country. In some countries, the assessment was also conducted in widely spoken minority or regional languages.
- Two components of the assessment were optional: the assessment of problem solving in technology-rich environments and the assessment of reading components. Twenty of the 24 participating countries administered the problem-solving assessment and 21 administered the reading components assessment.
- The target population for the survey was the non-institutionalized population, aged 16 to 65 years, residing in the country at the time of data collection, irrespective of nationality, citizenship or language status.
- Sample sizes depended primarily on the number of cognitive domains assessed and the number of languages in which the assessment was administered. Some countries boosted sample sizes in order to have reliable estimates of proficiency for the residents of particular geographical regions and/or for certain sub-groups of the population such as indigenous inhabitants or immigrants. The achieved samples ranged from a minimum of approximately 4 500 to a maximum of nearly 27 300.
- The survey was administered under the supervision of trained interviewers either in the respondent’s home or in a location agreed between the respondent and the interviewer. The background questionnaire was administered in Computer-Aided Personal Interview format by the interviewer. Depending on the situation of the respondent, the time taken to complete the questionnaire ranged between 30 and 45 minutes.
- After having answered the background questionnaire, the respondent completed the assessment either on a laptop computer or by completing a paper version using printed test booklets, depending on their computer skills. Respondents could take as much or as little time as needed to complete the assessment. On average, the respondents took 50 minutes to complete the cognitive assessment.

**A. Note by Turkey

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

B. Note by all the European Union Member States of the OECD and the European Union

The Republic of Cyprus is recognized by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

Proficiency levels: Literacy and numeracy

Level	Score range	Literacy	Numeracy
Below Level 1	Below 176 points	Tasks at this level require the respondent to read brief texts on familiar topics and locate a single piece of specific information. There is seldom any competing information in the text. Only basic vocabulary knowledge is required, and the reader is not required to understand the structure of sentences or paragraphs or make use of other text features.	Tasks at this level require the respondent to carry out simple processes such as counting, sorting, performing basic arithmetic operations with whole numbers or money, or recognising common spatial representations.
1	176 to less than 226 points	Tasks at this level require the respondent to read relatively short digital or print texts to locate a single piece of information that is identical to or synonymous with the information given in the question or directive. Knowledge and skill in recognising basic vocabulary, determining the meaning of sentences, and reading paragraphs of text is expected.	Tasks at this level require the respondent to carry out basic mathematical processes in common, concrete contexts where the mathematical content is explicit. Tasks usually require one-step or simple processes involving counting; sorting; performing basic arithmetic operations; and identifying elements of simple or common graphical or spatial representations.
2	226 to less than 276 points	Tasks at this level require the respondent to make matches between the text, either digital or printed, and information, and may require paraphrasing or low-level inferences.	Tasks at this level require the application of two or more steps or processes involving calculation with whole numbers and common decimals, percents and fractions; simple measurement and spatial representation; estimation; and interpretation of relatively simple data and statistics in texts, tables and graphs.
3	276 to less than 326 points	Texts at this level are often dense or lengthy. Understanding text and rhetorical structures is often required, as is navigating complex digital texts.	Tasks at this level require the application of number sense and spatial sense; recognising and working with mathematical relationships, patterns, and proportions expressed in verbal or numerical form; and interpreting data and statistics in texts, tables and graphs.
4	326 to less than 376 points	Tasks at this level often require the respondent to perform multiple-step operations to integrate, interpret, or synthesize information from complex or lengthy texts. Many tasks require identifying and understanding one or more specific, non-central idea(s) in the text in order to interpret or evaluate subtle evidence-claim or persuasive discourse relationships.	Tasks at this level require analysis and more complex reasoning about quantities and data; statistics and chance; spatial relationships; and change, proportions and formulas. They may also require understanding arguments or communicating well-reasoned explanations for answers or choices.
5	Equal to or higher than 376 points	Tasks at this level may require the respondent to search for and integrate information across multiple, dense texts; construct syntheses of similar and contrasting ideas or points of view; or evaluate evidence based arguments. They often require respondents to be aware of subtle, rhetorical cues and to make high-level inferences or use specialized background knowledge.	Tasks at this level may require the respondent to integrate multiple types of mathematical information where considerable translation or interpretation is required; draw inferences; develop or work with mathematical arguments or models; and critically reflect on solutions or choices.

Description of proficiency levels in problem solving in technology-rich environments

Level	Score range	The types of tasks completed successfully at each level of proficiency
No computer experience	Not applicable	Adults in this category reported having no prior computer experience; therefore, they did not take part in the computer-based assessment but took the paper-based version of the assessment, which does not include the problem solving in technology-rich environment domain.
Failed ICT core	Not applicable	Adults in this category had prior computer experience but failed the ICT core test, which assesses basic ICT skills, such as the capacity to use a mouse or scroll through a web page, needed to take the computer-based assessment. Therefore, they did not take part in the computer-based assessment, but took the paper-based version of the assessment, which does not include the problem solving in technology-rich environment domain.
“Opted out” of taking computer-based assessment	Not applicable	Adults in this category opted to take the paper-based assessment without first taking the ICT core assessment, even if they reported some prior experience with computers. They also did not take part in the computer-based assessment, but took the paper-based version of the assessment, which does not include the problem solving in technology-rich environment domain.
Below Level 1	Below 241 points	Tasks are based on well-defined problems involving the use of only one function within a generic interface to meet one explicit criterion without any categorical or inferential reasoning, or transforming of information. Few steps are required and no sub-goal has to be generated.
1	241 to less than 291 points	At this level, tasks typically require the use of widely available and familiar technology applications, such as e-mail software or a web browser. There is little or no navigation required to access the information or commands required to solve the problem. The tasks involve few steps and a minimal number of operators. Only simple forms of reasoning, such as assigning items to categories, are required; there is no need to contrast or integrate information.
2	291 to less than 341 points	At this level, tasks typically require the use of both generic and more specific technology applications. For instance, the respondent may have to make use of a novel online form. Some navigation across pages and applications is required to solve the problem. The task may involve multiple steps and operators. The goal of the problem may have to be defined by the respondent, though the criteria to be met are explicit.
3	Equal to or higher than 341 points	At this level, tasks typically require the use of both generic and more specific technology applications. Some navigation across pages and applications is required to solve the problem. The task may involve multiple steps and operators. The goal of the problem may have to be defined by the respondent, and the criteria to be met may or may not be explicit. Integration and inferential reasoning may be needed to a large extent.

<p>Contacts: Andreas Schleicher Advisor to the Secretary-General on Education Policy, Deputy Director for Education and Skills Email: Andreas.SCHLEICHER@oecd.org Telephone: +33 6 07 38 54 64</p> <p>Questions can be directed to: Viktoria.KIS@oecd.org</p>	<p>For more information on the Survey of Adult Skills (PIAAC) and to access the full <i>OECD Skills Outlook 2013</i> report, visit:</p> <p>http://skills.oecd.org/skillsoutlook.html www.oecd.org/site/piaac/</p>
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