

# PROGRAMME FOR INTERNATIONAL STUDENT ASSESSMENT (PISA) RESULTS FROM PISA 2015 COLLABORATIVE PROBLEM SOLVING

# France

Modern life requires people to collaborate with one another. Many human activities involve groups of people, where individuals rely on each other for things that they cannot do themselves. More and more jobs require a high level of social skills, while the proportion of jobs that require minimal social skills is shrinking. PISA's first assessment of collaborative problem-solving skills shows how well-prepared 15-year-old students are to work together productively. The items in this assessment require students to establish a shared understanding with other group members, take appropriate action to solve the problem, and maintain team organisation – as students would do in real-world situations.

- With a mean score of 494 points, France ranks between 19th and 23rd among the 32 OECD countries that participated in the collaborative problem-solving assessment, and between 24th and 28th among all 52 participating education systems. Students in France perform similarly to their counterparts in Beijing-Shanghai-Jiangsu-Guangdong (China), the Czech Republic, Iceland, Luxembourg, Portugal and Spain.
- France's students perform worse in collaborative problem solving than their performance in science, reading and mathematics would suggest.
- Roughly one in 15 students (6.6%) in France achieves Level 4, the top level of proficiency in collaborative problem solving. These students can carry out advanced problem-solving tasks with high collaboration complexity, maintain an awareness of group dynamics, and take the initiative to perform actions or make requests to overcome obstacles and resolve disagreements. On average across OECD countries, 7.9% of students can perform at this level.
- Roughly three in ten students (30%) in France perform below Level 2. On average across OECD countries, 28% of students perform below Level 2. These students are at best able to complete tasks with low problem complexity and limited collaboration complexity. They tend to focus on their individual role within the group, and might be able to enact plans when prompted to do so.
- There is a gap of 29 score points between girls' performance (508 points) and boys' performance (480 points) in France the same as the average gender gap observed across OECD countries.
- Students in France have positive attitudes towards collaboration. Over 85% of students reported that they are good listeners, that they enjoy seeing their classmates be successful, that they enjoy considering different perspectives and that they enjoy co-operating with peers.
- Some 89% of 15-year-old girls in France reported that they enjoy seeing their classmates be successful, five percentage points higher than the 84% of 15-year-old boys in France who reported likewise. However, gender differences in the extent to which boys and girls value relationships with others are generally smaller than the average across OECD countries.
- In France, students living in rural areas or villages (places with fewer than 3 000 people) value teamwork significantly more than students who live in cities (places with over 100 000 people).

PISA 2015 defines collaborative problem-solving competence as "the capacity of an individual to effectively engage in a process whereby two or more agents attempt to solve a problem by sharing the understanding and effort required to come to a solution and pooling their knowledge, skills and efforts to reach that solution".

This is the largest gap observed across all countries and economies that participated in the PISA 2015 assessment.

- The more that parents in France know their children's friends at school, the better their children perform in the collaborative problem-solving assessment, even after accounting for performance in science, reading and mathematics, gender, and students' and schools' socio-economic profile.
- Students in France who reported that their teachers never or almost never discipline them more harshly than they do other students, or that their teachers never or hardly ever have to wait a long time for students to quiet down, perform better in the uniquely collaborative aspects of the assessment, after accounting for science, reading and mathematics performance, gender, and students' and schools' socio-economic profile.

#### What is PISA?

The Programme for International Student Assessment (PISA) is a triennial survey that assesses the extent to which 15-year-old students near the end of compulsory education have acquired the knowledge and skills that are essential for full participation in modern societies. The assessment does not just ascertain whether students can reproduce knowledge; it also examines how well students can extrapolate from what they have learned and apply that knowledge in unfamiliar settings, both in and outside of school.

PISA offers insights for education policy and practice, and helps monitor trends in students' acquisition of knowledge and skills across countries and in different demographic subgroups within each country. The findings allow policy makers to gauge the knowledge and skills of students in their own countries in comparison with those in other countries, set policy targets against measurable goals achieved by other education systems, and learn from policies and practices applied elsewhere.

# Key features of the PISA 2015 assessment of collaborative problem solving

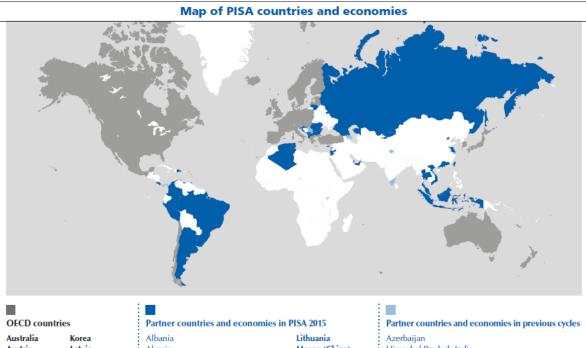
### The assessment

- Collaborative problem solving was assessed on computers. The assessment lasted 30 minutes, with different students taking different combinations of test items. A total of 90 minutes of collaborative problem-solving items were created.
- The assessment was interactive. Students interacted with computer agents in order to advance towards a solution to a given problem. Test items were a mixture of multiple-choice items requiring students to select the best response to their computer partners, and items requiring students to solve the problem, generally by clicking on a region in the central display area. Sample items can be explored online at: www.oecd.org/pisa/test.
- Students assessed in collaborative problem solving also completed assessments in science and, depending on the test form, may have completed an assessment in reading or mathematics. They also answered a background questionnaire, which took 30 minutes to complete, that sought information about themselves, their homes and their school and learning experiences.

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## The students

- Only a subsample of all students assessed in science in 2015 also participated in the collaborative problem-solving assessment. Around 125 000 students were assessed in collaborative problem solving, representing about 6 million 15-year-olds in the schools of the 52 participating countries and economies.
- In France, 1825 students in 251 schools completed the assessment of collaborative problem solving.



Austria Latvia Algeria Macao (China) Malaysia Belgium Luxembourg Argentina Canada Mexico Brazil Malta Chile The Netherlands B-S-J-G (China)\* Moldova Czech Republic New Zealand Bulgaria Montenegro Denmark Colombia Norway Peru Estonia Poland Costa Rica Qatar Finland **Portugal** Croatia Romania France Slovak Republic Cyprus<sup>1</sup> Russian Federation Dominican Republic Germany Slovenia Singapore Former Yugoslav Republic of Macedonia Chinese Taipei Greece Spain Thailand Hungary Sweden Georgia Hong Kong (China) Trinidad and Tobago Iceland Switzerland Ireland Indonesia Tunisia Turkey Israel United Kingdom Jordan **United Arab Emirates** United States Kazakhstan Italy Uruguay Japan Kosovo Viet Nam Lebanon

Himachal Pradesh-India Kyrgyzstan

Liechtenstein Mauritius Miranda-Venezuela Panama Serbia Tamil Nadu-India

Note: Countries and economies marked in bold participated in the PISA 2015 collaborative problem-solving assessment.

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<sup>\*</sup> B-S-J-G (China) refers to the four PISA participating Chinese provinces: Beijing, Shanghai, Jiangsu, Guangdong.

<sup>1.</sup> 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 recognises 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"

#### **France** Country Note – Results from PISA 2015 (Volume V): Collaborative Problem Solving

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#### **Contacts:**

#### **Andreas Schleicher**

Director

Directorate for Education and Skills

Email: Andreas.SCHLEICHER@oecd.org

Telephone: +33 1 45 24 93 66

# Jeffrey Mo

Analyst

Directorate for Education and Skills Email: <u>Jeffrey.MO@OECD.org</u> Telephone: +33 1 45 24 81 51

For more information on the Programme for International Student Assessment and to access the full set of PISA 2015 results, visit:

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