



PIAAC at the regional level

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Objectives of PIAAC

Provide high quality comparable information on the level and distribution of key information processing skills in the adult population

Show the relationship of these skills to individual and social 'outcomes'

Better understand the processes through which skills are gained, maintained and lost over the lifecycle

Design features: content

Direct assessment of key information processing skills

- Literacy (including reading components), numeracy, problem solving in technology-rich environments (PS-TRE)
- Linked to IALS and ALL in domains of literacy and numeracy

Information on the use of literacy, numeracy and problem solving at work and elsewhere

Information on use of a range of other generic skills at work

- Interaction, organisation (self and others), learning and physical skills

Information on antecedents and outcomes

Design features

Target population – 16-65 year olds resident in national territory

- Frame must cover at least 95% of target population

Sample: probability sample representative of target population

- Minimum sample size = 5000
- Response rate target = 70%

Household survey

Strict technical standards to ensure the comparability and quality of data

Survey of Adult Skills

Skills assessed

“Key information-processing skills”

Literacy

The ability to...

Understand, evaluate, use and engage with written texts.

Literacy encompasses a range of skills from the decoding of written words and sentences to the comprehension, interpretation and evaluation of complex texts.

Numeracy

The ability to...

Access, use, interpret and communicate mathematical information and ideas

Numeracy involves managing a situation or solving a problem in a real context, by responding to mathematical content/information/ideas represented in multiple ways.

Problem Solving In Technology-rich Environments

The ability to...

Use digital technology communication tools and networks to acquire and evaluate information, communicate with others and perform practical tasks.

The assessment focuses on the abilities to solve problems for personal, work and civic purposes by setting up appropriate goals and plans, and accessing and making use of information through computers and computer networks.

The background questionnaire

Content of the PIAAC BQ

| Section | Content |
|---------|---|
| A | Basic demographics (age, sex) |
| B | Educational attainment and participation |
| C | Labour Force status and work history |
| D | Characteristics of current job |
| E | Characteristics of last job (if unemployed and worked in last 5 years) |
| F | Skill use at work (generic skills) |
| G | Skill use at work (literacy, numeracy and ICTs) |
| H | Skill use in everyday life (literacy, numeracy and ICTs) |
| I | 'Social outcomes' and learning strategies |
| J | Background characteristics (social, linguistic and migration background and family composition) |

PIAAC data at regional/sub-regional level

Most countries did not design samples to provide regional estimates. Some exceptions

- Australia (States and Territories)
- Canada (Provinces and Territories)
- Germany (lander of former East Germany)

Three countries only surveyed one or more regions or sub-regions

- Belgium (Flanders region only)
- Indonesia (Jakarta municipal area only)
- UK (England and Northern Ireland)

Only sample of a city is Jakarta.

Samples not designed to provide representative samples of particular cities

PIAAC data at regional/sub-regional level

Regional level data available in international data sets:

- Flanders region
- Jakarta
- England, and
- Northern Ireland

Regional data has been published in:

- Australia (<http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/4228.0Main%20Features12011-12?opendocument&tabname=Summary&prodno=4228.0&issue=2011-12&num=&view=>)
- Canada (<http://www.cmec.ca/Publications/Lists/Publications/Attachments/315/Canadian-PIAAC-Report.EN.pdf>)

Analysis at regional level

Comparisons between regions

- Australia and Canada

Within region analysis

- Ontario (Canada):
 - *PIAAC IN ONTARIO: An Analysis of Cognitive Skills in the Province* (units of analysis census districts and agglomerated areas)
http://www.essentialskillsontario.ca/sites/www.essentialskillsontario.ca/files/PIAAC%20in%20Ontario%20-%20An%20Analysis%20of%20Cognitive%20Skills%20in%20the%20Province_0.pdf
 - *PIAAC: A Map of Cognitive Skills in Ontario* (online mapping application)
<http://www.essentialskillsontario.ca/node/771>
- Québec (Canada)
 - *Les compétences en littératie, en numératie et en résolution de problèmes dans des environnements technologiques : des clefs pour relever les défis du XXI^e siècle. Rapport québécois du Programme pour l'évaluation internationale des compétences des adultes (PEICA)* <http://stat.gouv.qc.ca/statistiques/education/alphabetisation-litteratie/peica.pdf>

Small area estimation

Small area estimation involves the information on the covariance of proficiency and certain background characteristics from PIAAC combined with data on the characteristics of the population in small geographic areas (e.g. census data) to provide estimates of the average proficiency of the population in the areas.

- Interest is in mapping likely geographic distribution of adults with different levels of proficiency for targeting services and planning purposes.

Projects being undertaken in

- The Netherlands (Statistics Netherlands and University of Maastricht)
 - Average score, % with low proficiency
- USA (NCES, ETS, Westat).
 - State level estimates
 - County level (conclusion – not enough sample for this)
- Paper at 2013 PIAAC International Conference by Kentaro Yamamoto.

Work has been undertaken in England using data from the Skills for Life survey

- *2011 Skills for Life Survey: Small Area Estimation Technical Report*
(https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/36077/12-1318-2011-skills-for-life-small-area-estimation-technical.pdf)

Small area estimation

OECD plans to undertake a project on small area estimation in 2017

- Literacy, numeracy, PSTRE, computer use
- Levels of literacy, numeracy and ICT practice?

Find Out More About PIAAC at:



www.oecd.org/site/piaac

All national and international
publications

The complete micro-level database



Email

william.thorn@oecd.org

Thank you