



# Australia's performance in PIAAC – key messages for education and training

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# PIAAC: Programme for the International Assessment of Adult Competencies

Like its predecessor, the Adult Literacy and Life Skills Survey (ALLS), PIAAC is an international survey of adults 16-64 years of age (15-74 in Australia). PIAAC

- measures the cognitive domains of
  - literacy (reading) [literacy also includes the components of reading - word meaning, sentence processing and passage comprehension]
  - numeracy
  - problem solving in technology-rich environments (PSTRE)
- through two modes of administration
  - paper and pen
  - computer
- allows comparison with the results of the ALLS
- was administered in OECD and partner countries (including by ABS in Australia) in 2011-12
- proficiency is described in terms of a scale of 500 points divided into levels
- 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 labour market and other aspects of their well-being (based on almost 300 background questions)
- questions and tasks based on common texts and stimuli

# PIAAC: Programme for the International Assessment of Adult Competencies

Is breast milk safe?

## MEDCO ASPIRIN

500

**INDICATIONS:** Headaches, muscle pains, rheumatic pains, toothaches, earaches. **RELIEVES COMMON COLD SYMPTOMS.**

**DOSAGE:** ORAL. 1 or 2 tablets every 6 hours, preferably accompanied by food, for not longer than 7 days. Store in a cool, dry place.

**CAUTION:** Do not use for gastritis or peptic ulcer. Do not use if taking anticoagulant drugs. Do not use for serious liver illness or bronchial asthma. If taken in large doses and for an extended period, may cause harm to kidneys. Before using this medication for chicken pox or influenza in children, consult with a doctor about Reyes Syndrome, a rare but serious illness. During lactation and pregnancy, consult with a doctor before using this product, especially in the last trimester of pregnancy. If symptoms persist, or in case of an accidental overdose, consult a doctor. Keep out of reach of children.

**INGREDIENTS:** Each tablet contains 500 mg acetylsalicylic acid.  
Excipient c.b.p. 1 tablet.  
Reg. No. 88246

Made in Canada by STERLING PRODUCTS, INC.  
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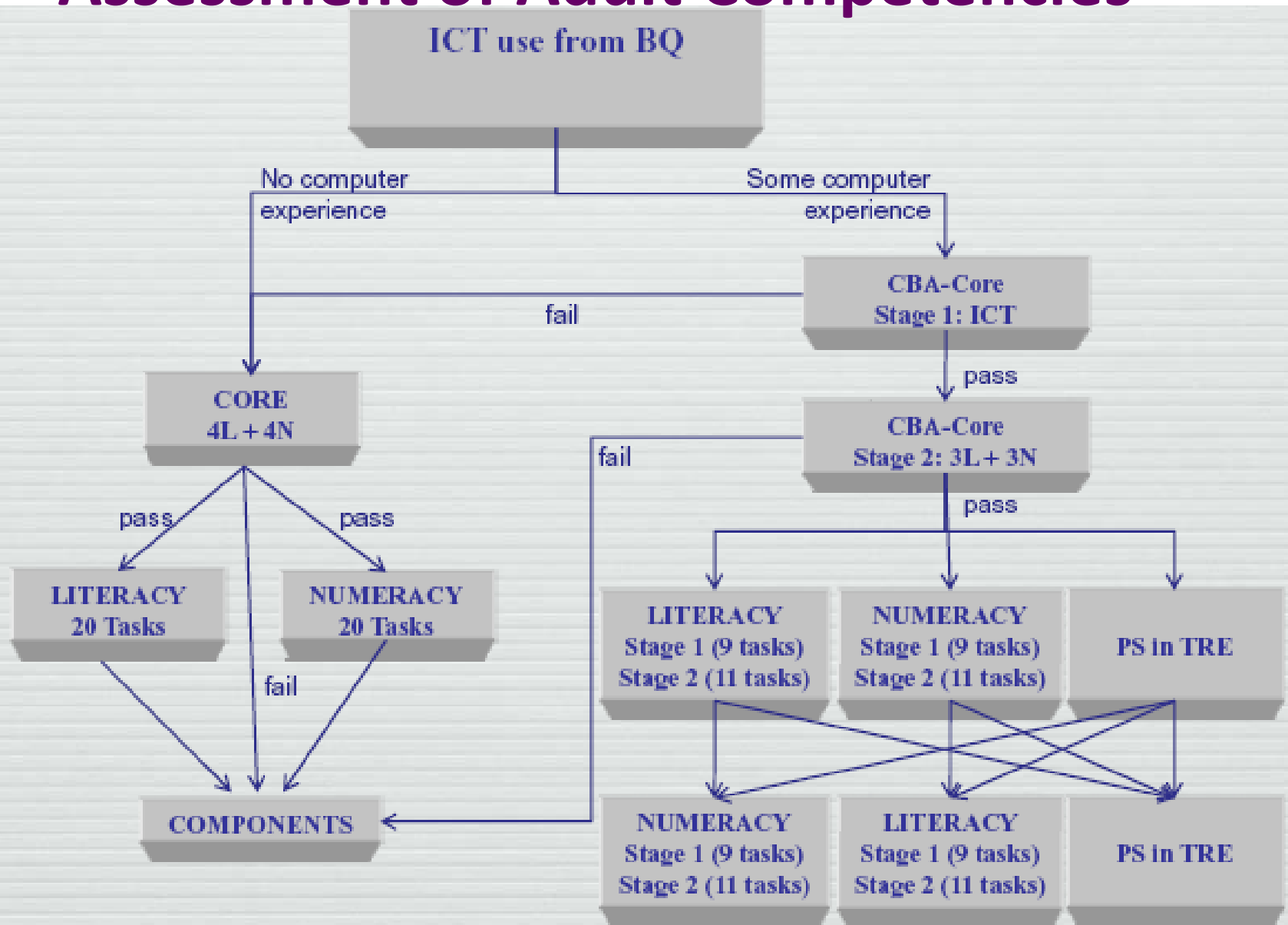


Breast Milk



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1995  
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# PIAAC: Programme for the International Assessment of Adult Competencies



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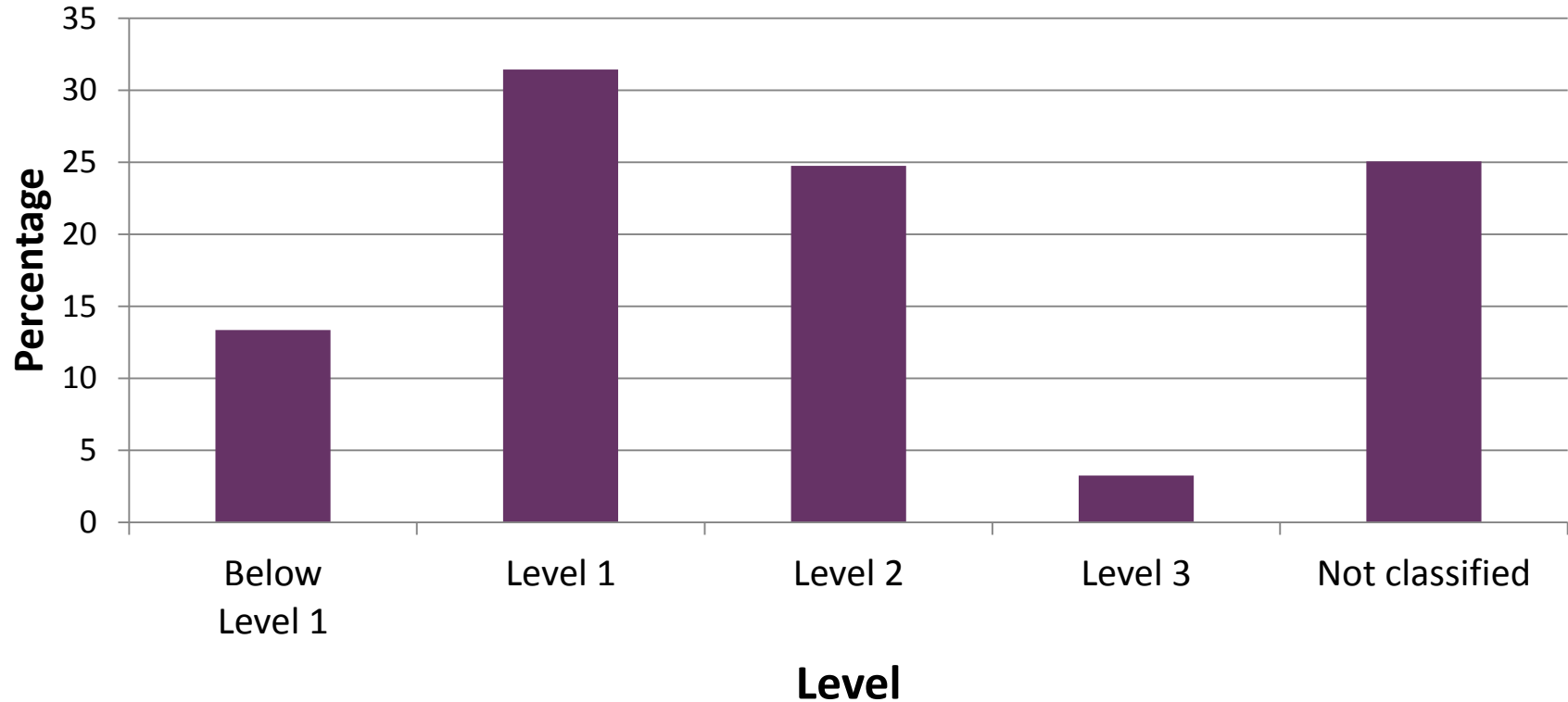


After the “filtering” process, what percentage of the adults aged 15-74 across Australia undertook PIAAC on the computer?

# Problem solving in technology-rich environments



**PSTRE** (Problem solving in technology-rich environments)

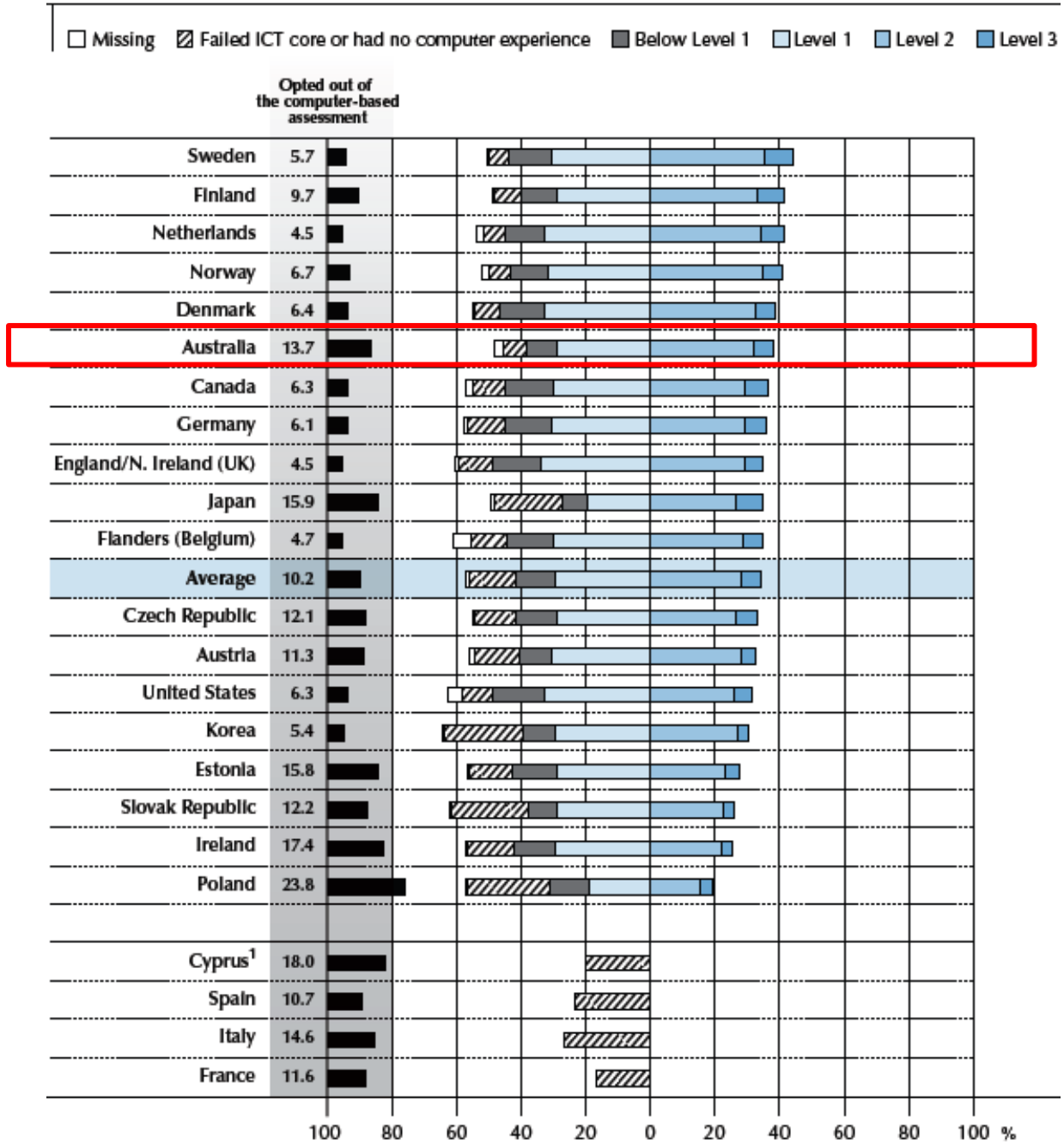


Proportions of persons in PSTRE. Total Australian population aged 15-74 years.

Note: 'Not classified' refers to those adults who either opted out of the computer based assessment or who failed a basic ICT test or who had no computer experience.

# PIAAC: PSTRE

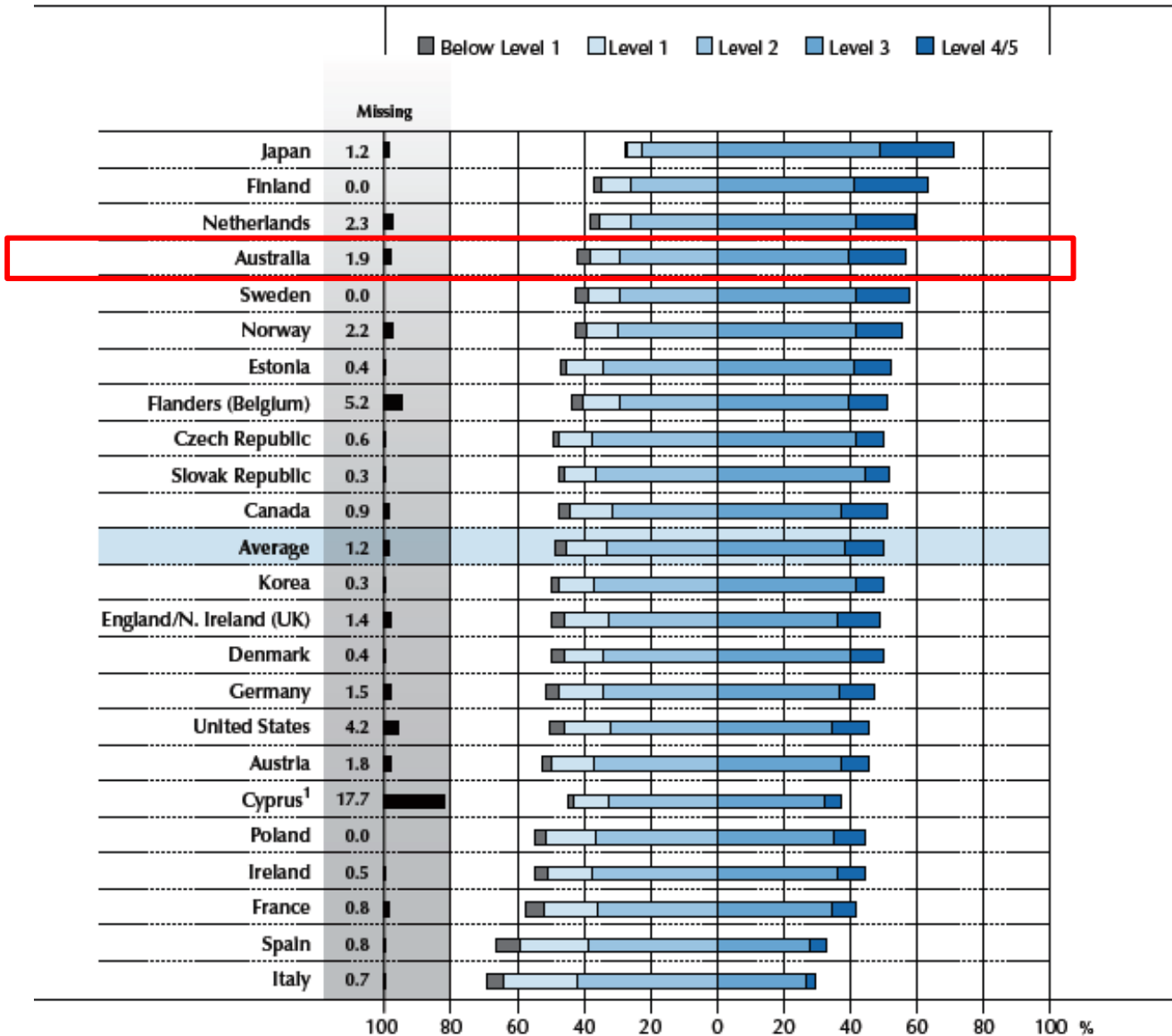
**Proficiency in problem solving in technology-rich environments among adult**  
*Percentage of 16-65 year-olds scoring at each proficiency level*



# Some messages from PIAAC

## Literacy proficiency among 16-65 year-olds

Percentage of adults scoring at each proficiency level in literacy

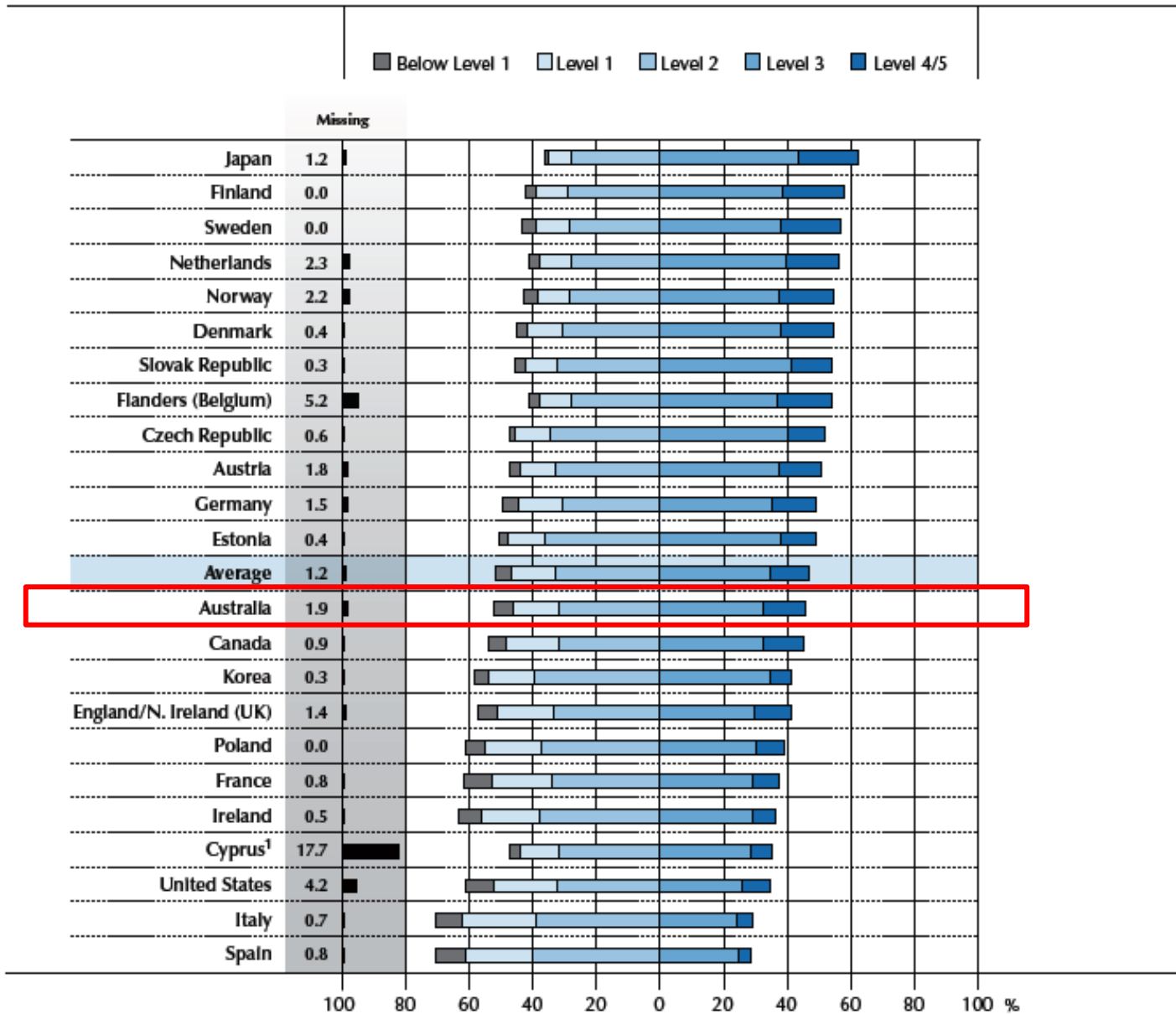




# Some messages from PIAAC

## Numeracy proficiency among adults

Percentage of 16-65 year-olds scoring at each proficiency level in numeracy



# Some brief comparisons with ALLS

No. and proportion with skill levels: below level 1, L1 or L2 (Ages 15-74)

## ALLS (2006) updated

Literacy scale		Numeracy scale	
No.	%	No.	%
6,932,300	45.9%	7,720,500	51.1%

## PIAAC (2011/12)

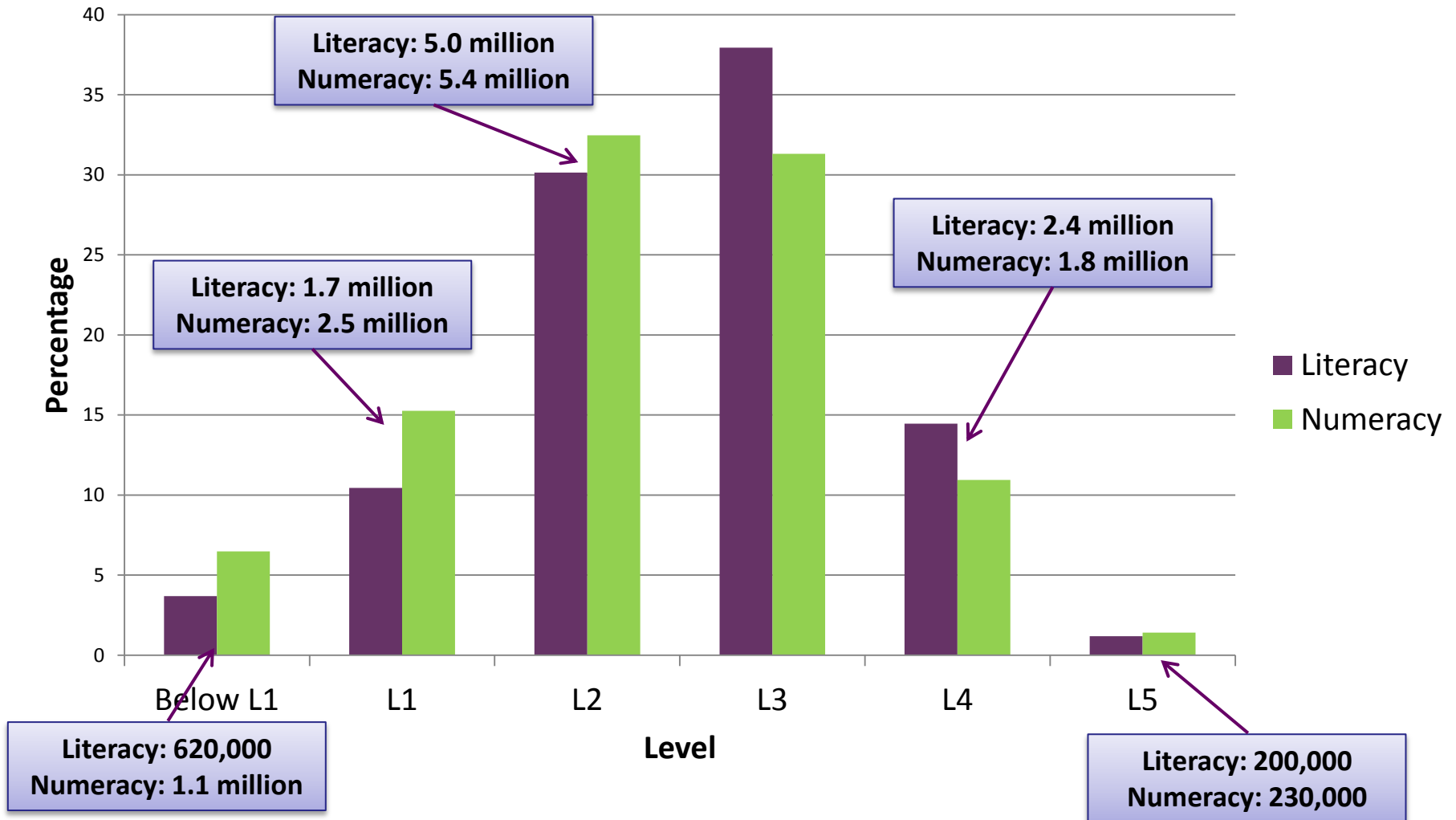
	Literacy		Numeracy	
	No.	%	No.	%
Total	7,397,100	44.3%	9,054,700	54.2%
Employed	4,302,900	38.8%	5,416,700	48.9%

## Mean ALLS and PIAAC score for ages 16-64 year olds

Literacy Mean score		Numeracy Mean score	
ALLS	PIAAC	ALLS	PIAAC
277	280	272	268

# Some PIAAC results

## Performance by Level (15-74 yrs)

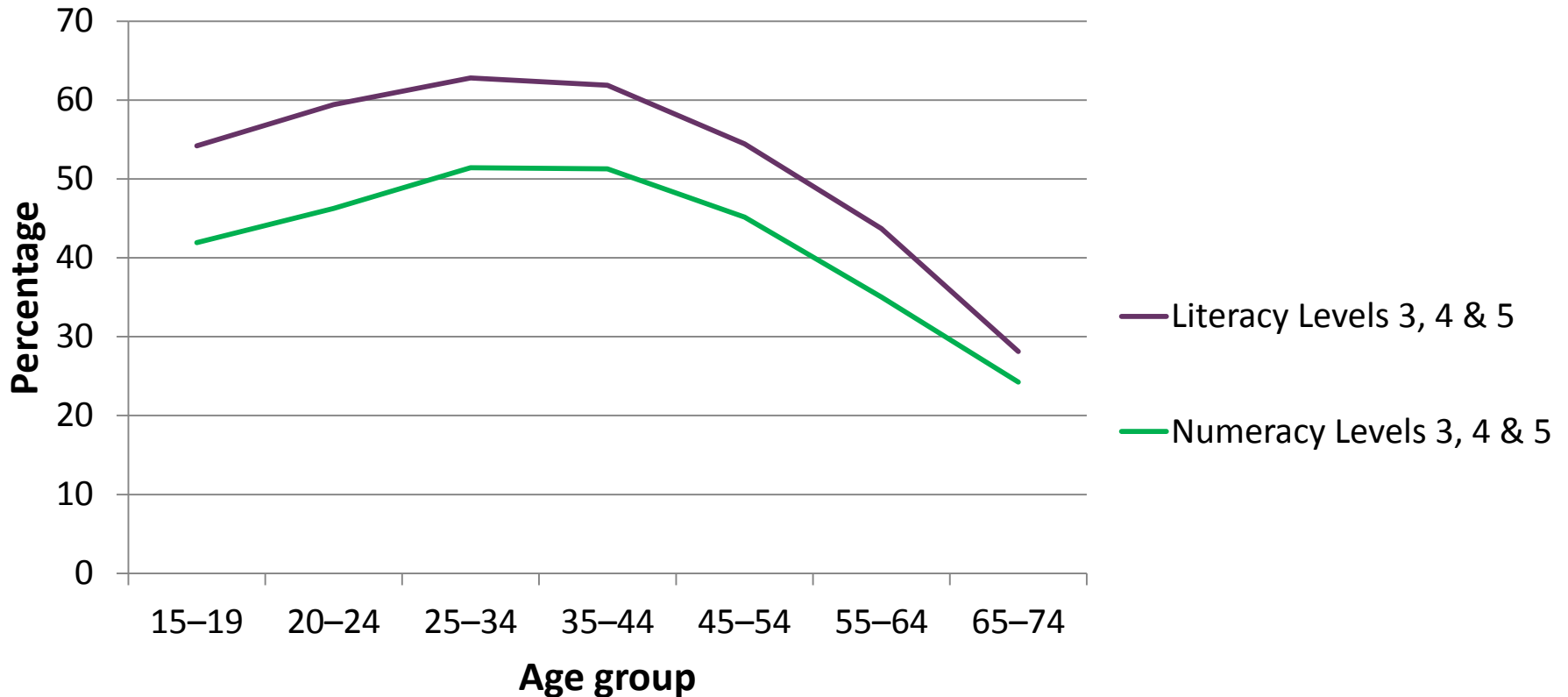


Proportions of persons in Literacy and Numeracy in PIAAC. Total Australian population aged 15-74 years.

# Some PIAAC results



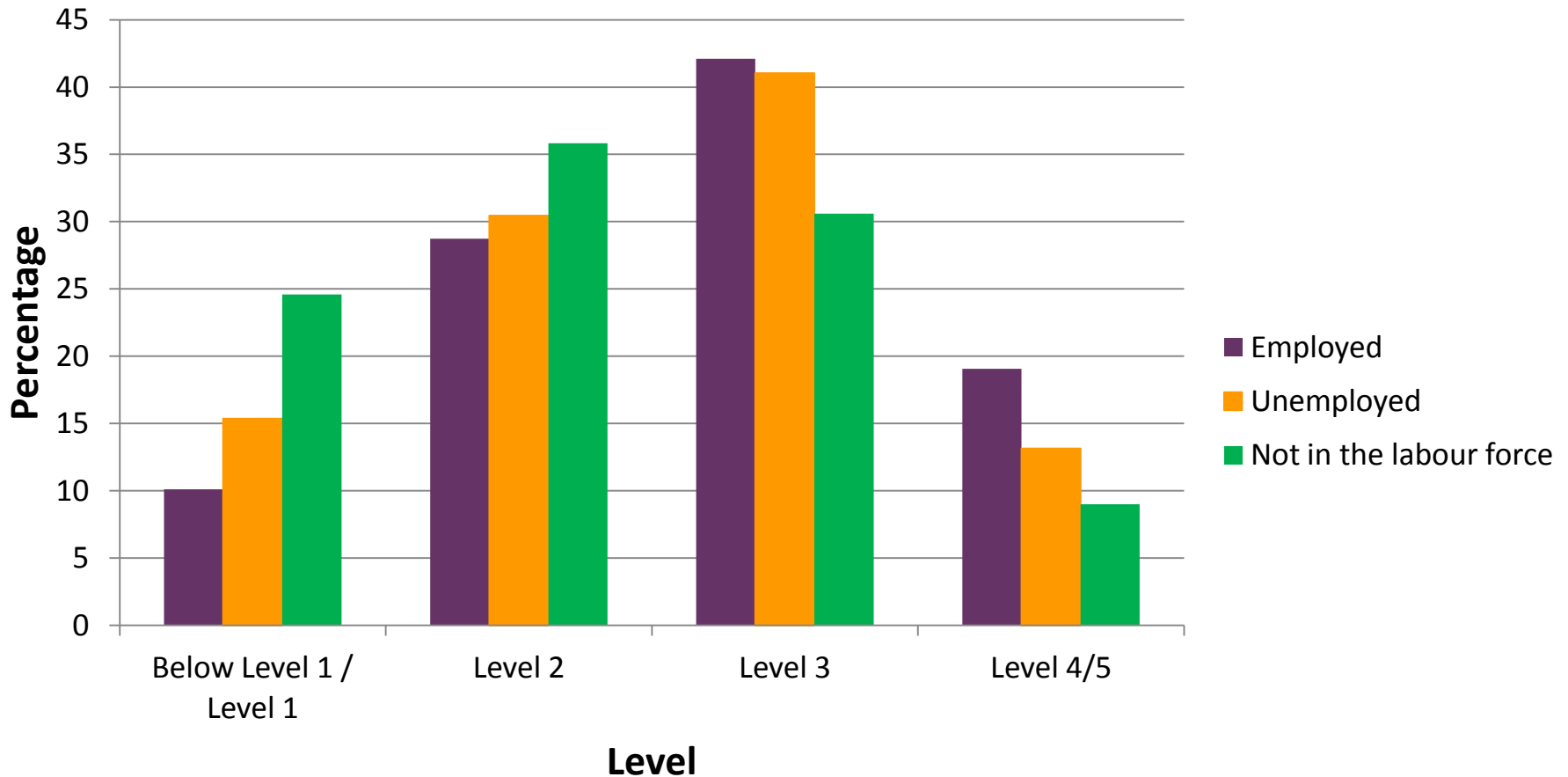
Percentage at Levels 3, 4 & 5 by age



Proportions of persons in Literacy and Numeracy levels 3, 4 and 5 in PIAAC by age. Total Australian population aged 15-74 years.

# Some PIAAC results

## Literacy Performance by Labour Force status

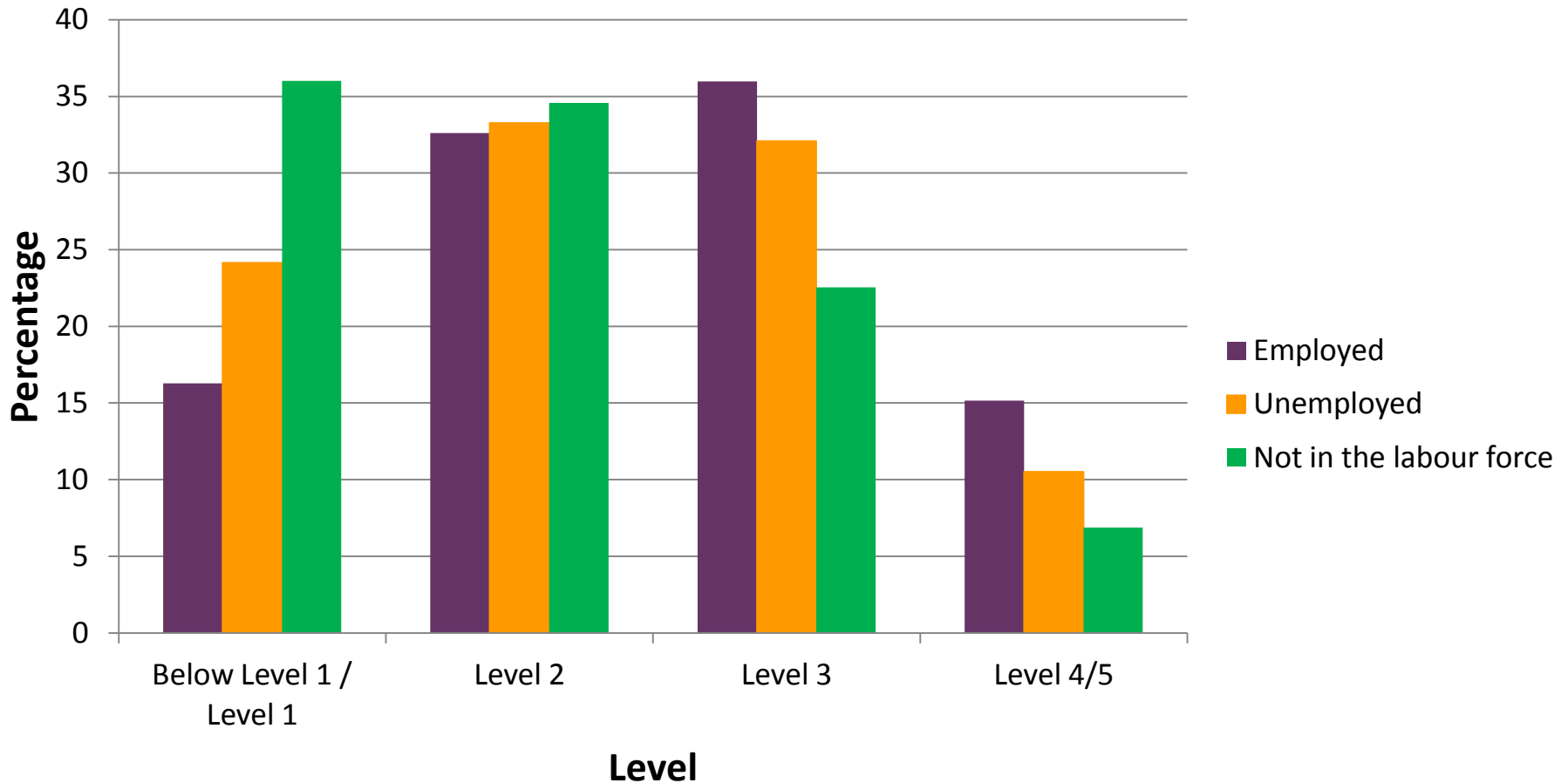


Proportions of persons in Literacy versus Labour Force Status in PIAAC by age.  
Total Australian population aged 15-74 years.

# Some PIAAC results



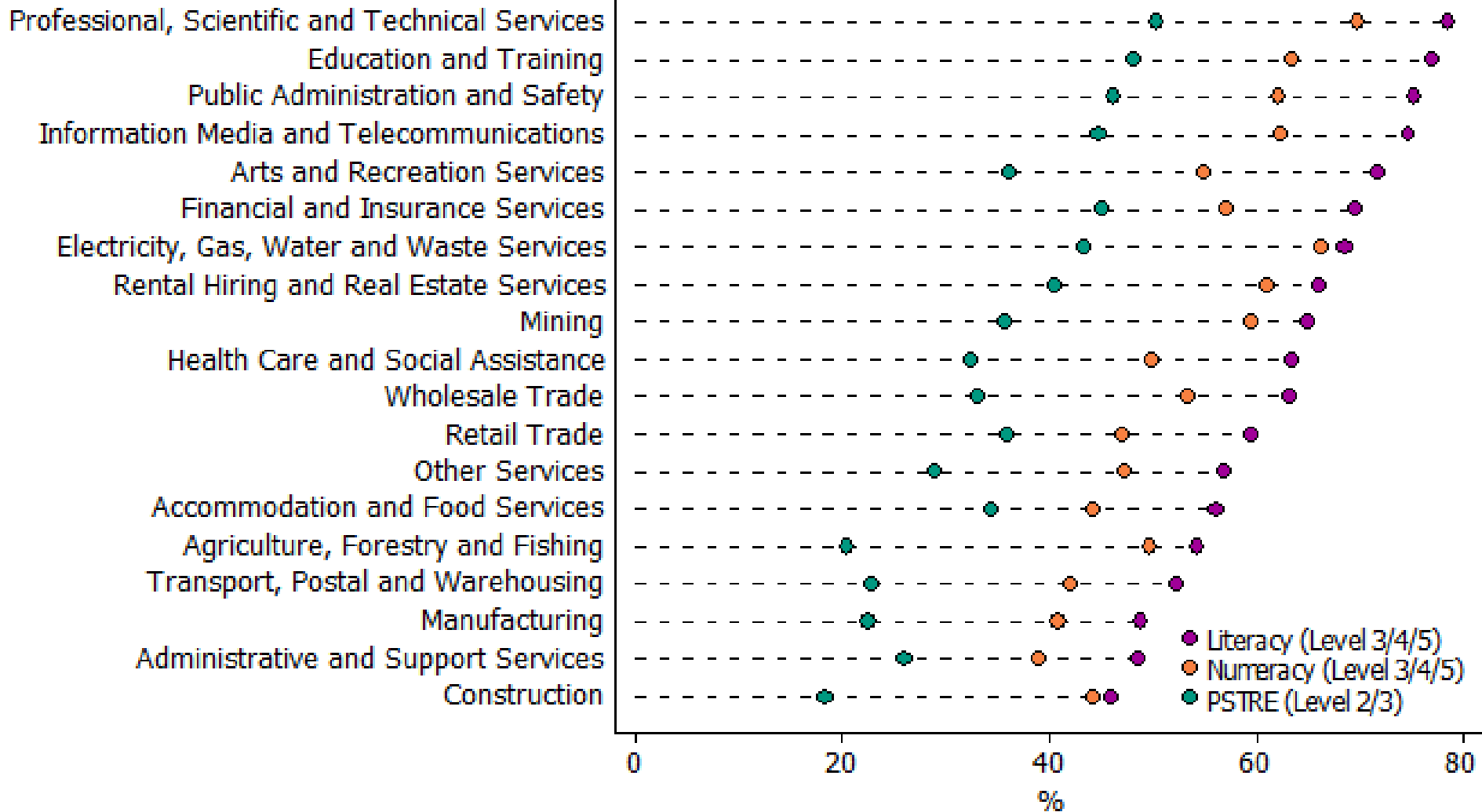
## Numeracy Performance by Labour Force status



Proportions of persons in Numeracy versus Labour Force Status in PIAAC by age. Total Australian population aged 15-74 years.

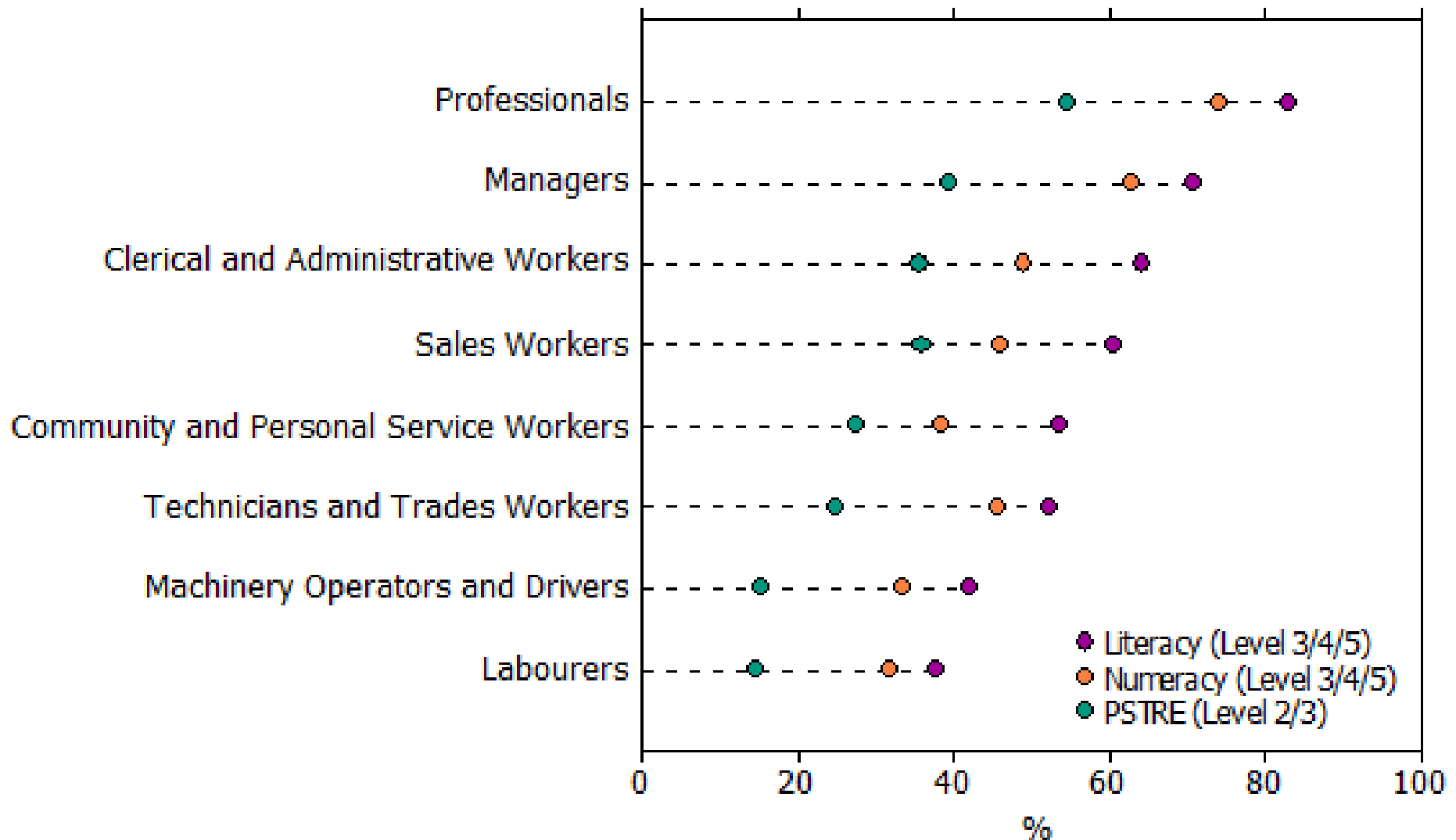
# Some PIAAC results

Proportion at literacy Level 3 or above, By industry—2011–12



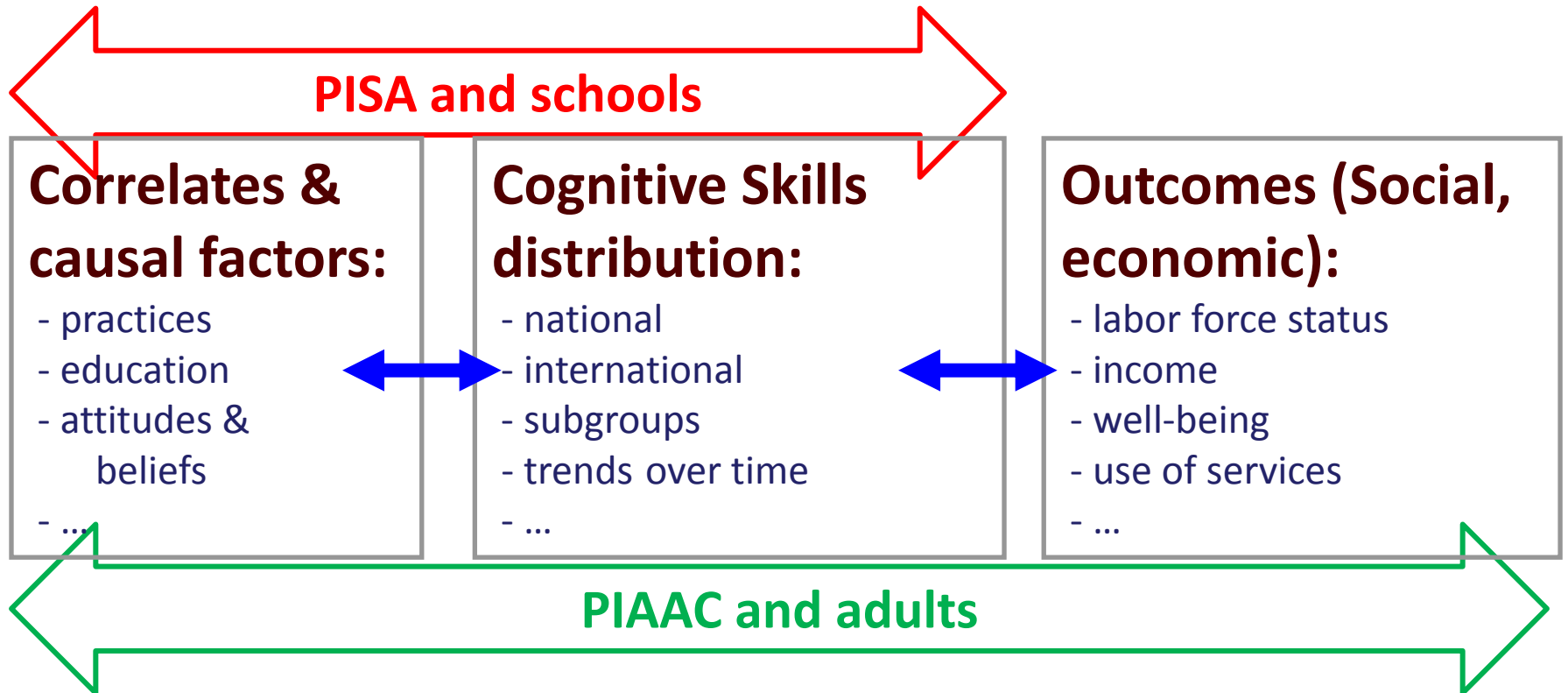
# Some PIAAC results

Proportion at literacy Level 3 or above, By occupation—2011–12





# What PIAAC can add



# What PIAAC can add



Based on previous cycles (IALS and ALLS) and reinforced by the initial research from PIAAC, the results indicate (again) that:

- people with higher LLN skills are more likely to be employed, participate in their community, experience better health and engage in further training
- people with higher LLN skills earn more on average
- extra years of education improve L&N skills.

An example of recent Australian research:

Moreover, for all the broad education levels studied here, income increases with literacy skills. ... Qualifications or credentials are not all-important in determining labour market outcomes. ... The evidence here is that individual skills are remunerated in the labour market. Since the labour market seems capable of distinguishing the most skilled or productive within each education group and rewarding them accordingly, education and training qualifications need to continue to provide individuals with improved skills such that they provide an income payoff and are worth undertaking. The education and training system itself needs to ensure that quality standards are maintained, since individuals will only be prepared in the long run to undertake those courses of study and training that provide real improvements in their skills.

Jenny Chesters, Chris Ryan, Mathias Sinning: NCVET report on *The returns to literacy skills in Australia*

# Just touching the tip of the PIAAC results



- Have seen some of what the OECD has started to work on – and other countries such as Poland and Canada are planning, but much more Australia can do
- Lots of information for detailed research ... but what research?
- What are the implications for practice?
- What are the implications for policy?
- Especially as PIAAC oversamples and includes 15 year olds, so how can we link with PISA?
- And in the current climate, Australian PIAAC data includes 65-74 year olds too. What story does that tell?
- What research are other countries doing – follow up surveys/interviews like Poland, Germany, Denmark and Italy?
- And Canada who has a very strong history of using their survey data? See the Canadian report here: <http://www.statcan.gc.ca/pub/89-555-x/89-555-x2013001-eng.pdf>
- How should we mine the data? What are the research questions we want answered?

# Further PIAAC information



For the details of the Australian results go to the ABS website at:

<http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4228.0Main+Features12011-12?OpenDocument>

PIAAC conference videos:

<http://vimeo.com/user21847172/videos/page:1/sort:date>

<http://vimeo.com/79372616>

The OECD website for PIAAC is: <http://www.oecd.org/site/piaac/>

The various reports are available from here:

<http://www.oecd.org/site/piaac/publications.htm>

The International Data Explorer where you can play with some of the international data is available here:

<http://piaacdataexplorer.oecd.org/ide/idepiaac/>

The pdf of the Canadian report is available from here:

<http://www.statcan.gc.ca/pub/89-555-x/89-555-x2013001-eng.pdf>

# Questions?

