

Good - better - best? Identifying highest performing jurisdictions

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Introduction

Jurisdictions which appear at the upper positions of comparative rankings exercises such as PISA (Programme for International Student Assessment) and TIMSS (Trends in International Mathematics and Science Study) are known as high-performing jurisdictions (HPJs). The number of HPJs grows with the number of comparisons in existence, but it is probable that more than 20 jurisdictions might reasonably be given the title, following performance in one or other of the comparisons.

It is becoming increasingly difficult to identify a smaller number of the highest performing jurisdictions, owing to the abundance of comparisons from which to choose. For the purposes of Cambridge Assessment's research into different education systems worldwide, the definition below was proposed to identify the **highest** performing jurisdictions. In the abbreviation 'HPJ' an asterisk is used to signify 'highest' rather than 'high'-performing jurisdictions; hence H*PJ.

Definition

An H*PJ is identified by its appearance in one of the top 20 positions of at least six of the following seven recent comparisons: TIMSS 2011 8th Grade Science (Martin, Mullis, Foy, & Stanco, 2012); TIMSS 2011 8th Grade Maths (Mullis, Martin, Foy, & Arora, 2012); PIRLS (Progress in International Reading Literacy Study) 2011 Reading (Martin, Mullis, Foy, & Drucker, 2012); PISA 2012 Reading (Organisation for Economic Co-operation and Development [OECD], 2013); PISA 2012 Maths (OECD, 2013); PISA 2012 Science (OECD, 2013); The Global Index of Cognitive Skills and Educational Attainment 2014 (Pearson, 2014).

There are two limitations to this definition; firstly, not all jurisdictions participate in every comparison, so absence from a top 20 position may be due to this fact alone, which might seem unfair. Secondly, if many of the comparisons are influenced by the same overriding factors (e.g., congruence of testing style to jurisdiction educational culture) then it would be expected that the same jurisdictions reappear. Nevertheless, these limitations aside, this seems a reasonable pragmatic approach to obtaining a manageable list of the highest performers.

H*PJs

Application of the definition above resulted in the following list of H*PJs:

Hong Kong, Singapore, Finland, Chinese Taipei, Australia, Japan, South Korea.

Full details are shown in Figure 1 on page 38.

- No attempt has been made to change jurisdiction names in Figure 1; they are retained in the form in which they appear in each comparison. Thus, 'Korea, Rep.' and 'South Korea' each appear, but are treated as the same jurisdiction.
- In some instances a country is listed in one comparison (e.g., United Kingdom [UK] in PISA (Science) 2012 whilst jurisdictions within that country are listed in another (e.g., England and Northern Ireland in PIRLS (Reading) 2011). In these instances, the count is made separately for each; that is, England receives a count of three, the UK receives a count of two, and Northern Ireland receives a count of one. They are not combined into a single count of five for the UK.
- In some cases the specific order of jurisdictions within a particular comparison will differ from other published sources. This occurs where multiple jurisdictions have equal ranking, so the specific order in which they appear in the figure is determined by other methods. As we are making no attempt to use the specific rankings in this exercise, and are merely counting the number of occurrences of that jurisdiction in the figure, this is immaterial.

References

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- Pearson (2014). *The Global Index of Cognitive Skills and Educational Attainment 2014. The Learning Curve*. Retrieved from <http://thelearningcurve.pearson.com/index/index-ranking>

Figure 1: Ranked positions of jurisdictions in seven recent comparisons

	TIMSS 2011 (8 th Grade) Science	TIMSS 2011 (8 th Grade) Maths	PIRLS 2011 Reading	PISA (Reading) 2012	PISA (Maths) 2012	PISA (Science) 2012	Pearson Index of Cognitive Skills and Educational Attainment 2014 ¹
1	Singapore	Korea, Rep.	Hong Kong	Shanghai – China	Shanghai – China	Shanghai – China	South Korea
2	Chinese Taipei	Singapore	Russian Fed.	Hong Kong – China	Singapore	Hong Kong	Japan
3	Korea, Rep.	Chinese Taipei	Finland	Singapore	Hong Kong – China	Singapore	Singapore
4	Japan	Hong Kong – China	Singapore	Japan	Chinese Taipei	Japan	Hong Kong
5	Finland	Japan	Northern Ireland	Korea	Korea	Finland	Finland
6	Slovenia	Russian Fed.	United States	Finland	Macao – China	Estonia	United Kingdom
7	Russian Fed.	Israel	Denmark	Ireland	Japan	Korea	Canada
8	Hong Kong	Finland	Croatia	Chinese Taipei	Liechtenstein	Vietnam	Netherlands
9	England	United States	Chinese Taipei	Canada	Switzerland	Poland	Ireland
10	United States	England	Ireland, Rep.	Poland	Netherlands	Canada	Poland
11	Hungary	Hungary	England	Estonia	Estonia	Liechtenstein	Denmark
12	Australia	Australia	Canada	Liechtenstein	Finland	Germany	Germany
13	Israel	Slovenia	Netherlands	New Zealand	Canada	Chinese Taipei	Russia
14	Lithuania	Lithuania	Czech Rep.	Australia	Poland	Ireland	United States
15	New Zealand	Italy	Sweden	Netherlands	Belgium	Netherlands	Australia
16	Sweden	New Zealand	Italy	Belgium	Germany	Australia	New Zealand
17	Italy	Kazakhstan	Germany	Switzerland	Vietnam	Macao – China	Israel
18	Ukraine	Sweden	Israel	Macao – China	Austria	New Zealand	Belgium
19	Norway	Ukraine	Portugal	Vietnam	Australia	Switzerland	Czech Rep.
20	Kazakhstan	Norway	Hungary	Germany	= Ireland	= United Kingdom	Switzerland
					= Slovenia	= Slovenia	

Appears in all seven top 20s:
Hong Kong, Singapore, Finland

Appears in six of the top 20s:
Chinese Taipei, Australia, Japan, South Korea

Appears in five of the top 20s

Appears in four of the top 20s

Appears in three of the top 20s

Appears in two of the top 20s

Appears in one of the top 20s

= Joint 20th position

1. The Pearson Index is not entirely independent from all of the other comparisons charted here as it is a 'basket' comparison which draws partly from the PISA, TIMSS and PIRLS scores and partly from literacy and graduation rates.