Appendix B

Scores in Reading Literacy

Table 3.6. Mean scores, standard deviations and standard errors for all participating countries/economies on the PISA 2018 reading literacy scale and positions relative to the OECD and Irish means, for all participating countries/economies

	Mean	SE	SD	SE	IRL		Mean	SE	SD	SE	IRL
B-S-J-Z (China)	555.2	(2.7)	87.2	(1.7)	▲	Greece	457.4	(3.6)	97.4	(1.6)	▼
Singapore	549.5	(1.6)	108.9	(1.0)	▲	Chile	452.3	(2.6)	92.0	(1.2)	▼
Macao (China)	525.1	(1.2)	92.1	(1.1)	▲	*Malta*	448.2	(1.7)	112.8	(1.2)	▼
Hong Kong (China)	524.3	(2.7)	99.5	(1.5)	O	*Serbia*	439.5	(3.3)	96.4	(1.4)	▼
Estonia	523.0	(1.8)	93.2	(1.2)	O	*United Arab Emirates*	431.8	(2.3)	113.3	(0.9)	▼
Canada	520.1	(1.8)	100.3	(0.8)	O	Romania	427.7	(5.1)	98.4	(2.2)	▼
Finland	520.1	(2.3)	99.6	(1.3)	O	Uruguay	427.1	(2.8)	95.9	(1.6)	▼
Ireland	518.1	(2.2)	90.7	(1.0)		Costa Rica	426.5	(3.4)	81.3	(1.7)	▼
Korea	514.1	(2.9)	102.0	(1.7)	O	Cyprus	424.4	(1.4)	98.0	(0.9)	▼
Poland	511.9	(2.7)	97.3	(1.4)	O	Moldova	424.0	(2.4)	93.3	(1.6)	▼
Sweden	505.8	(3.0)	107.5	(1.5)	▼	Montenegro	421.1	(1.1)	86.0	(0.8)	▼
New Zealand	505.7	(2.0)	106.3	(1.3)	▼	Mexico	420.5	(2.7)	83.5	(1.6)	▼
United States	505.4	(3.6)	107.9	(1.6)	▼	Bulgaria	419.8	(3.9)	101.4	(1.8)	▼
United Kingdom	503.9	(2.6)	100.2	(1.3)	▼	Jordan	419.1	(2.9)	87.3	(1.7)	▼
Japan	503.9	(2.7)	97.1	(1.7)	▼	Malaysia	415.0	(2.9)	84.8	(1.6)	▼
Australia	502.6	(1.6)	108.7	(0.9)	▼	Brazil	412.9	(2.1)	99.6	(1.3)	▼
Chinese Taipei	502.6	(2.8)	101.7	(1.5)	▼	Columbia	412.3	(3.3)	88.7	(1.5)	▼
Denmark	501.1	(1.8)	92.1	(1.2)	▼	*Brunei Darussalam*	408.1	(0.9)	97.4	(0.8)	▼

	Mean	SE	SD	SE	IRL		Mean	SE	SD	SE	IRL
Norway	499.5	(2.2)	105.7	(1.3)	▼	Qatar	407.1	(0.8)	109.6	(0.6)	▼
Germany	498.3	(3.0)	105.7	(1.5)	▼	Albania	405.4	(1.9)	80.3	(1.2)	▼
Slovenia	495.3	(1.2)	93.6	(1.2)	▼	Bosnia and Herzegovina	403.0	(2.9)	79.3	(1.2)	▼
Belgium	492.9	(2.3)	102.6	(1.3)	▼	Argentina	401.5	(3.0)	97.8	(1.5)	▼
France	492.6	(2.3)	101.2	(1.5)	▼	Peru	400.5	(3.0)	91.8	(1.5)	▼
Portugal	491.8	(2.4)	96.1	(1.2)	▼	Saudi Arabia	399.2	(3.0)	84.4	(1.6)	▼
Czech Republic	490.2	(2.5)	97.3	(1.6)	▼	Thailand	392.9	(3.2)	78.9	(1.6)	▼
Netherlands	484.8	(2.7)	104.8	(1.7)	▼	Republic of North Macedonia	392.7	(1.1)	94.3	(1.0)	▼
Austria	484.4	(2.7)	99.4	(1.2)	▼	Baku (Azerbaijan)	389.4	(2.5)	74.1	(1.7)	▼
Switzerland	483.9	(3.1)	102.7	(1.5)	▼	Kazakhstan	386.9	(1.5)	77.3	(1.2)	▼
Croatia	479.0	(2.7)	89.2	(1.7)	▼	Georgia	379.8	(2.2)	84.3	(1.2)	▼
Latvia	478.7	(1.6)	90.0	(1.1)	▼	Panama	377.0	(3.0)	87.8	(1.9)	▼
Russian Federation	478.5	(3.1)	92.9	(1.8)	▼	Indonesia	371.0	(2.6)	75.1	(1.7)	▼
Italy	476.3	(2.4)	96.9	(1.7)	▼	Morocco	359.4	(3.1)	74.6	(1.1)	▼
Hungary	476.0	(2.3)	97.6	(1.3)	▼	Lebanon	353.4	(4.3)	113.3	(1.6)	▼
Lithuania	475.9	(1.5)	94.3	(1.0)	▼	Kosovo	353.1	(1.1)	68.3	(0.7)	▼
Iceland	474.0	(1.7)	104.7	(1.3)	▼	Dominican Republic	341.6	(2.9)	81.8	(1.8)	▼
Belarus	473.8	(2.4)	89.4	(1.3)	▼	Philippines	339.7	(3.3)	79.9	(2.3)	▼
Israel	470.4	(3.7)	124.5	(1.9)	▼						
Luxembourg	470.0	(1.1)	108.4	(1.0)	▼						
Ukraine	466.0	(3.5)	93.3	(1.7)	▼						
Turkey	465.6	(2.2)	87.7	(1.6)	▼	OECD Average (36a)	487.1	(0.4)	99.4	(0.2)	▼

	Mean	SE	SD	SE	IRL		Mean	SE	SD	SE	IRL
Slovak Republic	458.0	(2.2)	100.3	(1.4)	▼	EU Average	481.7	(0.5)	98.7	(0.3)	▼

■ Significantly above OECD average	▲	Significantly higher than Ireland
□ At OECD average	O	Not significantly different from Ireland
▨ Significantly below OECD average	▼	Significantly lower than Ireland

OECD countries are in regular font, partner countries/economies are in italics.

OECD Average 36a is used for Reading data: arithmetic mean for 36 of 37 OECD countries (excluding Spain).

Reporting on the reading literacy data for Spain is deferred until sub-optimal response patterns are investigated.

Data for Vietnam are excluded; they have not been fully validated for international comparability due to a lack of consistency in response patterns.

Scores in Science

- Mean country/economy scores, standard deviations and standard errors for the overall science scale, and positions relative to the OECD average and mean score for Ireland

	Mean	SE	SD	SE	IRL		Mean	SE	SD	SE	IRL
BSJZ China	590.5	(2.7)	83.2	(1.7)	▲	Slovak Republic	464.0	(2.3)	95.8	(1.5)	▼
Singapore	550.9	(1.5)	97.5	(1.0)	▲	Israel	462.2	(3.6)	110.8	(1.9)	▼
Macao China	543.6	(1.5)	83.0	(1.0)	▲	Malta	456.6	(1.9)	106.9	(1.2)	▼
Estonia	530.1	(1.9)	87.8	(1.2)	▲	Greece	451.6	(3.1)	85.9	(1.6)	▼
Japan	529.1	(2.6)	92.1	(1.6)	▲	Chile	443.6	(2.4)	83.5	(1.4)	▼
Finland	521.9	(2.5)	96.4	(1.3)	▲	Serbia	439.9	(3.0)	91.6	(1.3)	▼
Korea	519.0	(2.8)	97.9	(1.7)	▲	Cyprus	439.0	(1.4)	93.0	(1.1)	▼
Canada	518.0	(2.2)	95.7	(1.0)	▲	Malaysia	437.6	(2.7)	76.8	(1.5)	▼
HK China	516.7	(2.5)	86.2	(1.2)	▲	United Arab Emirates	433.6	(2.0)	103.2	(0.8)	▼
Chinese Taipei	515.7	(2.9)	99.3	(1.5)	▲	Brunei Darussalam	431.0	(1.2)	95.9	(1.1)	▼
Poland	511.0	(2.6)	91.5	(1.4)	▲	Jordan	429.3	(2.9)	88.2	(1.5)	▼
New Zealand	508.5	(2.1)	102.3	(1.4)	▲	Moldova	428.5	(2.3)	89.0	(1.4)	▼
Slovenia	507.0	(1.3)	88.1	(1.1)	▲	Thailand	425.8	(3.2)	81.8	(1.6)	▼
United Kingdom	504.7	(2.6)	99.0	(1.4)	▲	Uruguay	425.8	(2.5)	86.5	(1.4)	▼
Netherlands	503.4	(2.8)	104.4	(1.9)	▲	Romania	425.8	(4.6)	90.1	(1.8)	▼
Germany	503.0	(2.9)	102.9	(1.6)	O	Bulgaria	424.1	(3.6)	94.6	(2.0)	▼
Australia	503.0	(1.8)	100.7	(1.1)	▲	Mexico	419.2	(2.6)	74.4	(1.6)	▼
United States	502.4	(3.3)	99.1	(1.6)	O	Qatar	419.1	(0.9)	103.0	(0.9)	▼
Sweden	499.4	(3.1)	98.0	(1.5)	O	Albania	416.7	(2.0)	74.1	(1.1)	▼
Belgium	498.8	(2.2)	98.8	(1.3)	O	Costa Rica	415.6	(3.3)	73.3	(1.9)	▼
Czech Republic	496.8	(2.5)	94.5	(1.6)	O	Montenegro	415.2	(1.3)	81.4	(1.0)	▼
Ireland	496.1	(2.2)	88.3	(1.2)		Colombia	413.3	(3.1)	82.0	(1.4)	▼
Switzerland	495.3	(3.0)	96.8	(1.4)	O	Republic of North Macedonia	413.0	(1.4)	91.8	(1.2)	▼
France	493.0	(2.2)	96.0	(1.4)	O	Peru	404.2	(2.7)	80.1	(1.5)	▼
Denmark	492.6	(1.9)	91.5	(1.3)	O	Argentina	404.1	(2.9)	89.6	(1.6)	▼

	Mean	SE	SD	SE	IRL		Mean	SE	SD	SE	IRL
Portugal	491.7	(2.8)	92.0	(1.3)	O	Brazil	403.6	(2.1)	90.3	(1.5)	▼
Norway	490.4	(2.3)	98.4	(1.2)	O	Bosnia and Herzegovina	398.5	(2.7)	76.6	(1.3)	▼
Austria	489.8	(2.8)	95.6	(1.2)	O	Baku (Azerbaijan)	397.6	(2.4)	73.7	(1.6)	▼
Latvia	487.3	(1.8)	84.3	(1.2)	▼	Kazakhstan	397.1	(1.7)	75.7	(1.4)	▼
Spain	483.3	(1.6)	89.5	(0.8)	▼	Indonesia	396.1	(2.4)	69.3	(1.7)	▼
Lithuania	482.1	(1.6)	90.3	(1.0)	▼	Saudi Arabia	386.2	(2.8)	78.7	(1.4)	▼
Hungary	480.9	(2.3)	93.9	(1.4)	▼	Lebanon	383.7	(3.5)	95.4	(1.6)	▼
Russian Fed.	477.7	(2.9)	83.9	(1.7)	▼	Georgia	382.7	(2.3)	80.9	(1.3)	▼
Luxembourg	476.8	(1.2)	98.5	(1.2)	▼	Morocco	376.6	(3.0)	66.9	(1.2)	▼
Iceland	475.0	(1.8)	91.1	(1.0)	▼	Kosovo	364.9	(1.2)	64.7	(0.8)	▼
Croatia	472.4	(2.8)	89.9	(1.6)	▼	Panama	364.6	(2.9)	85.4	(1.9)	▼
Belarus	471.3	(2.4)	85.0	(1.3)	▼	Philippines	356.9	(3.2)	75.2	(2.3)	▼
Ukraine	469.0	(3.3)	91.4	(1.8)	▼	Dominican Rep.	335.6	(2.5)	70.6	(1.6)	▼
Turkey	468.3	(2.0)	83.5	(1.6)	▼	OECD Average	488.7	(0.4)	93.5	(0.2)	▼
Italy	468.0	(2.4)	90.1	(1.7)	▼	EU Average	484.0	(0.5)	93.8	(0.3)	▼

� (dark grey)	Significantly above the OECD average	▲	Significantly higher than Ireland
	At OECD average	O	Not significantly different to Ireland
(light grey)	Significantly below the OECD average	▼	Significantly lower than Ireland

Scores in Mathematics

Table 5.2. Mean scores, standard deviations and standard errors for all countries/economies, the OECD average and the EU average on the overall mathematics scale, and positons relative to OECD average and mean score for Ireland.

	Mean	SE	SD	SE	IRL		Mean	SE	SD	SE	IRL
BSJZ China	591.4	(2.5)	80.3	(1.8)	▲	Israel	463.0	(3.5)	108.5	(1.9)	▼
Singapore	569.0	(1.6)	94.0	(1.2)	▲	Turkey	453.5	(2.3)	88.2	(1.8)	▼
Macao China	557.7	(1.5)	80.7	(1.5)	▲	Ukraine	453.1	(3.6)	94.0	(1.9)	▼
HK China	551.2	(3.0)	93.9	(1.9)	▲	Greece	451.4	(3.1)	89.2	(1.8)	▼
Chinese Taipei	531.1	(2.9)	99.7	(1.7)	▲	Cyprus	450.7	(1.4)	94.7	(1.1)	▼
Japan	527.0	(2.5)	86.5	(1.6)	▲	Serbia	448.3	(3.2)	96.7	(1.7)	▼
Korea	525.9	(3.1)	100.4	(2.0)	▲	Malaysia	440.2	(2.9)	83.1	(1.7)	▼
Estonia	523.4	(1.7)	81.6	(1.1)	▲	Albania	437.2	(2.4)	83.1	(1.3)	▼
Netherlands	519.2	(2.6)	93.3	(1.8)	▲	Bulgaria	436.0	(3.8)	97.4	(2.1)	▼
Poland	515.6	(2.6)	90.1	(1.7)	▲	United Arab Emirates	434.9	(2.1)	105.7	(1.2)	▼
Switzerland	515.3	(2.9)	94.3	(1.4)	▲	Brunei Darussalam	430.1	(1.2)	91.4	(1.0)	▼
Canada	512.0	(2.4)	92.3	(1.1)	▲	Romania	429.9	(4.9)	94.0	(2.1)	▼
Denmark	509.4	(1.7)	82.4	(1.0)	▲	Montenegro	429.6	(1.2)	83.3	(1.0)	▼
Slovenia	508.9	(1.4)	89.0	(1.4)	▲	Kazakhstan	423.1	(1.9)	87.0	(1.1)	▼
Belgium	508.1	(2.3)	95.4	(1.7)	▲	Moldova	420.6	(2.4)	94.4	(1.7)	▼
Finland	507.3	(2.0)	82.4	(1.2)	▲	Baku (Azerbaijan)	419.6	(2.8)	89.3	(1.7)	▼
Sweden	502.4	(2.7)	90.7	(1.4)	O	Thailand	418.6	(3.4)	87.8	(1.8)	▼
United Kingdom	501.8	(2.6)	93.0	(1.4)	O	Uruguay	417.7	(2.6)	85.3	(1.7)	▼
Norway	501.0	(2.2)	90.5	(1.3)	O	Chile	417.4	(2.4)	84.6	(1.4)	▼
Germany	500.0	(2.6)	95.4	(1.5)	O	Qatar	414.2	(1.2)	98.1	(0.9)	▼
Ireland	499.6	(2.2)	77.8	(1.0)		Mexico	408.8	(2.5)	77.6	(1.6)	▼
Czech Republic	499.5	(2.5)	93.2	(1.7)	O	Bosnia and Herzegovina	406.4	(3.1)	82.0	(1.3)	▼

	Mean	SE	SD	SE	IRL		Mean	SE	SD	SE	IRL
Austria	498.9	(3.0)	93.5	(1.5)	O	Costa Rica	402.3	(3.3)	74.7	(2.0)	▼
Latvia	496.1	(2.0)	80.3	(1.1)	O	Peru	399.8	(2.6)	84.4	(1.5)	▼
France	495.4	(2.3)	92.6	(1.5)	O	Jordan	399.8	(3.3)	85.2	(1.7)	▼
Iceland	495.2	(2.0)	90.2	(1.2)	O	Georgia	397.6	(2.6)	88.5	(1.6)	▼
New Zealand	494.5	(1.7)	93.2	(1.1)	O	Republic of North Macedonia	394.4	(1.6)	93.5	(1.2)	▼
Portugal	492.5	(2.7)	96.4	(1.3)	▼	Lebanon	393.5	(4.0)	105.6	(1.6)	▼
Australia	491.4	(1.9)	92.2	(1.2)	▼	Colombia	390.9	(3.0)	81.2	(2.0)	▼
Russian Fed.	487.8	(3.0)	86.0	(1.9)	▼	Brazil	383.6	(2.0)	87.5	(1.6)	▼
Italy	486.6	(2.8)	93.8	(1.8)	▼	Argentina	379.5	(2.8)	84.0	(1.7)	▼
Slovak Republic	486.2	(2.6)	99.6	(1.7)	▼	Indonesia	378.7	(3.1)	79.3	(2.2)	▼
Luxembourg	483.4	(1.1)	98.3	(1.3)	▼	Saudi Arabia	373.2	(3.0)	78.7	(1.6)	▼
Spain	481.4	(1.5)	88.4	(1.0)	▼	Morocco	367.7	(3.3)	76.1	(1.5)	▼
Lithuania	481.2	(2.0)	91.4	(1.1)	▼	Kosovo	365.9	(1.5)	77.2	(1.3)	▼
Hungary	481.1	(2.3)	91.1	(1.6)	▼	Panama	352.8	(2.7)	77.5	(2.1)	▼
United States	478.2	(3.2)	92.1	(1.5)	▼	Philippines	352.6	(3.5)	78.5	(2.0)	▼
Belarus	471.9	(2.7)	93.0	(1.4)	▼	Dominican Republic	325.1	(2.6)	71.5	(2.0)	▼
Malta	471.7	(1.9)	101.9	(1.4)	▼	OECD Average	489.3	(0.4)	90.6	(0.2)	
Croatia	464.2	(2.5)	86.5	(1.7)	▼	EU Average	488.6	(0.5)	91.2	(0.3)	

⬛ Significantly above OECD average	▲ Significantly higher than Ireland
⬜ At OECD average	O Not significantly different from Ireland
⬛ Significantly below OECD average	▼ Significantly lower than Ireland