

## Exhibit 4.1 and 4.2: Home Resources for Learning

The *Home Resources for Learning* scale combines data reported by students and their parents. The parents' data were collected using the PIRLS 2016 Learning to Read Survey in which students' parents were asked to provide information about their child's experiences learning to read. As explained in Exhibit 4.1, students provided information about the number of books in the home and other study supports, while the parents provided information about the number of children's books, the parents' levels of education, and their occupations. As also explained, students were assigned a score on the scale according to the availability of these five home resources for learning.

The PIRLS 2016 results add to the already extensive amounts of research showing a powerful positive relationship between students' socioeconomic environment and their educational achievement.

In Exhibit 4.1, countries are ordered by the percentage of students in the **Many Resources** category. However, on average, almost three-fourths of the students (73%) were assigned to the **Some Resources** category. Twenty percent were in the **Many Resources** category and 7 percent were in the **Few Resources** category, with a 140-point difference in their average reading achievement (572 vs. 432). Average reading achievement for the students in the **Some Resources** category was in between, at 509 points. The scatterplot on the third page of the exhibit shows the relationship between average reading achievement and home resources for learning for each country.

Exhibit 4.2 presents information about students' access to digital devices in the home. The percentages of students with **High**, **Medium**, and **Low Access** mirror the percentages with **Many**, **Some**, and **Few Resources**. There was a 122-point difference in average reading across the categories of digital access (536 vs. 414), with very low average achievement for those having low access.

**Exhibit 4.1: Home Resources for Learning**

*Students Categorized by Parents' and Students' Reports*

Students were scored according to their own and their parents' responses concerning the availability of five resources on the *Home Resources for Learning* scale. Students with **Many Resources** had a score of at least 11.8, which is the point on the scale corresponding to students reporting they had more than 100 books in the home and both of the home study supports, and parents reporting that they had more than 25 children's books in the home, that at least one parent had finished university, and that at least one parent had a professional occupation, on average. Students with **Few Resources** had a score no higher than 7.5, which is the scale point corresponding to students reporting that they had 25 or fewer books in the home and neither of the home study supports, and parents reporting that they had 10 or fewer children's books in the home, that neither parent had gone beyond upper-secondary education, and that neither parent was a small business owner or had a clerical or professional occupation, on average. All other students were assigned to the **Some Resources** category.

Country	Many Resources		Some Resources		Few Resources		Average Scale Score	Difference in Average Scale Score from 2011
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement		
Norway (5)	45 (1.2)	581 (2.3)	54 (1.2)	544 (2.5)	1 (0.1)	~ ~	11.4 (0.04)	--
Sweden	r 43 (1.7)	586 (2.3)	56 (1.7)	542 (2.7)	1 (0.1)	~ ~	11.4 (0.05)	r 0.0 (0.08)
Denmark	41 (1.4)	575 (2.2)	58 (1.4)	535 (2.5)	1 (0.2)	~ ~	11.3 (0.05)	0.0 (0.07)
Finland	37 (1.2)	594 (2.0)	63 (1.1)	555 (2.0)	0 (0.1)	~ ~	11.2 (0.03)	0.0 (0.06)
Canada	r 35 (1.0)	579 (1.9)	65 (1.0)	536 (1.9)	1 (0.1)	~ ~	11.2 (0.03)	r -0.2 (0.05)
Ireland	33 (1.4)	607 (2.5)	66 (1.4)	555 (2.2)	1 (0.3)	~ ~	11.0 (0.05)	0.2 (0.08)
Netherlands	s 33 (1.5)	577 (2.5)	67 (1.5)	541 (2.5)	0 (0.1)	~ ~	11.0 (0.05)	s 0.2 (0.08)
Belgium (French)	30 (1.3)	540 (2.5)	67 (1.2)	486 (3.0)	4 (0.4)	439 (7.5)	10.7 (0.05)	0.0 (0.10)
Singapore	29 (0.9)	624 (3.3)	69 (0.8)	562 (3.3)	2 (0.2)	~ ~	10.9 (0.03)	0.2 (0.05)
Hungary	28 (1.7)	603 (2.8)	65 (1.7)	543 (2.5)	6 (0.8)	467 (6.6)	10.6 (0.09)	0.5 (0.13)
Belgium (Flemish)	27 (1.2)	560 (2.1)	71 (1.1)	519 (1.9)	2 (0.3)	~ ~	10.8 (0.05)	--
Germany	s 25 (1.5)	591 (3.4)	74 (1.5)	539 (2.8)	1 (0.2)	~ ~	10.8 (0.06)	s 0.1 (0.09)
France	24 (1.3)	552 (3.5)	73 (1.3)	505 (2.1)	2 (0.3)	~ ~	10.6 (0.05)	0.0 (0.08)
Malta	23 (0.7)	486 (2.9)	76 (0.7)	455 (2.0)	1 (0.2)	~ ~	10.7 (0.02)	r 0.6 (0.03)
Israel	22 (1.3)	588 (3.0)	76 (1.3)	523 (2.9)	1 (0.2)	~ ~	10.9 (0.06)	r 0.1 (0.08)
Austria	22 (1.2)	584 (2.8)	77 (1.1)	533 (2.2)	2 (0.2)	~ ~	10.6 (0.05)	0.2 (0.08)
Slovenia	22 (1.1)	587 (2.6)	77 (1.1)	534 (2.1)	1 (0.2)	~ ~	10.6 (0.04)	0.2 (0.06)
Czech Republic	21 (1.2)	587 (2.0)	77 (1.2)	536 (1.8)	2 (0.3)	~ ~	10.5 (0.05)	0.0 (0.07)
Poland	21 (0.9)	605 (3.1)	76 (1.0)	556 (2.1)	3 (0.4)	509 (10.1)	10.4 (0.05)	--
Chinese Taipei	21 (1.3)	593 (2.8)	74 (1.2)	553 (1.9)	5 (0.4)	513 (6.7)	10.3 (0.06)	0.1 (0.08)
Hong Kong SAR	21 (1.8)	579 (4.9)	74 (1.8)	568 (3.0)	5 (0.5)	553 (7.3)	10.3 (0.08)	0.5 (0.11)
Latvia	21 (1.0)	589 (2.4)	77 (1.0)	552 (1.8)	2 (0.3)	~ ~	10.6 (0.04)	--
Spain	19 (0.7)	565 (1.8)	77 (0.8)	526 (1.7)	4 (0.5)	476 (5.1)	10.3 (0.04)	0.0 (0.07)
Portugal	18 (1.0)	568 (4.2)	76 (0.9)	523 (2.2)	6 (0.5)	487 (4.3)	10.1 (0.05)	0.2 (0.08)
Lithuania	16 (1.0)	594 (3.5)	81 (1.1)	543 (2.6)	3 (0.6)	466 (8.1)	10.2 (0.05)	0.4 (0.07)
Slovak Republic	16 (0.9)	592 (3.4)	77 (1.4)	539 (2.2)	8 (1.1)	397 (13.5)	10.1 (0.05)	0.1 (0.08)
Bulgaria	15 (1.1)	610 (3.9)	71 (1.8)	558 (3.4)	14 (1.8)	466 (10.3)	9.8 (0.09)	0.4 (0.15)
Russian Federation	14 (0.8)	618 (3.2)	84 (0.8)	576 (2.2)	2 (0.3)	~ ~	10.3 (0.04)	-0.1 (0.06)
United Arab Emirates	12 (0.5)	539 (4.7)	85 (0.5)	450 (3.0)	3 (0.2)	369 (8.3)	10.2 (0.03)	0.2 (0.05)
Georgia	12 (0.9)	529 (4.3)	82 (1.2)	488 (2.9)	6 (0.9)	439 (7.9)	10.0 (0.05)	0.1 (0.09)
Qatar	r 11 (0.5)	519 (3.9)	86 (0.6)	449 (2.0)	3 (0.3)	363 (8.6)	10.2 (0.02)	r 0.0 (0.05)
Macao SAR	11 (0.4)	581 (3.7)	81 (0.6)	542 (1.1)	7 (0.4)	530 (3.4)	9.8 (0.02)	--
Trinidad and Tobago	r 10 (0.8)	554 (5.1)	86 (0.9)	480 (3.6)	4 (0.4)	430 (10.2)	10.0 (0.04)	r 0.2 (0.07)
Italy	8 (0.8)	595 (3.3)	86 (0.9)	550 (2.2)	6 (0.6)	507 (6.2)	9.7 (0.05)	0.0 (0.07)
Bahrain	8 (0.6)	519 (6.2)	87 (0.6)	447 (2.7)	5 (0.4)	388 (7.2)	9.8 (0.03)	--
Kazakhstan	8 (0.9)	573 (7.1)	88 (1.0)	534 (2.3)	4 (0.6)	516 (7.4)	9.9 (0.05)	--
Chile	6 (0.4)	557 (4.4)	85 (0.8)	497 (2.6)	10 (0.7)	461 (6.8)	9.3 (0.05)	--
Oman	5 (0.4)	505 (7.8)	81 (0.7)	427 (3.3)	14 (0.6)	368 (4.7)	9.3 (0.03)	0.6 (0.05)
Iran, Islamic Rep. of	4 (0.5)	525 (5.8)	67 (1.4)	449 (3.5)	29 (1.4)	373 (5.4)	8.5 (0.06)	0.4 (0.11)
Kuwait	r 3 (0.6)	479 (12.3)	92 (0.9)	401 (4.2)	5 (0.7)	365 (13.7)	9.6 (0.05)	--
Saudi Arabia	2 (0.3)	~ ~	85 (1.0)	436 (4.0)	13 (1.1)	418 (11.5)	9.1 (0.05)	0.1 (0.09)
Azerbaijan	2 (0.2)	~ ~	75 (1.0)	486 (3.6)	24 (1.1)	440 (6.4)	8.7 (0.05)	0.2 (0.07)
Morocco	r 1 (0.1)	~ ~	38 (1.2)	401 (3.5)	61 (1.2)	342 (4.8)	6.9 (0.06)	s -0.2 (0.11)
Egypt	0 (0.1)	~ ~	61 (1.8)	366 (5.4)	38 (1.8)	277 (8.3)	7.9 (0.08)	--
England	--	--	--	--	--	--	--	--
United States	--	--	--	--	--	--	--	--
Australia	x 46 (1.6)	592 (3.4)	53 (1.6)	541 (3.1)	1 (0.2)	~ ~	11.6 (0.06)	x 0.0 (0.08)
Northern Ireland	x 42 (1.5)	615 (4.3)	57 (1.5)	569 (3.7)	1 (0.2)	~ ~	11.4 (0.05)	x 0.5 (0.09)
New Zealand	x 39 (1.4)	581 (3.2)	60 (1.4)	522 (3.0)	2 (0.4)	~ ~	11.2 (0.05)	x 0.0 (0.07)
South Africa	x 1 (0.4)	~ ~	70 (1.5)	354 (6.4)	29 (1.6)	295 (5.6)	8.3 (0.07)	x -0.1 (0.10)
International Avg.	20 (0.2)	572 (0.6)	73 (0.2)	509 (0.4)	7 (0.1)	432 (1.5)		

SOURCE: IEA's Progress in International Reading Literacy Study – PIRLS 2016

This PIRLS questionnaire scale was established in 2011 based on the combined response distribution of all countries that participated in PIRLS 2011. To provide a point of reference for country comparisons, the scale centerpoint of 10 was located at the mean of the combined distribution. The units of the scale were chosen so that 2 scale score points corresponded to the standard deviation of the distribution.

( ) Standard errors appear in parentheses. Because of rounding some results may appear inconsistent.

A dash (-) indicates comparable data not available. A tilde (~) indicates insufficient data to report achievement.

An "r" indicates data are available for at least 70% but less than 85% of the students. An "s" indicates data are available for at least 50% but less than 70% of the students. An "x" indicates data are available for less than 50% of the students—interpret with caution.

Significantly higher than 2011 ●  
Significantly lower than 2011 ○

**Exhibit 4.1: Home Resources for Learning (Continued)**

Country	Many Resources		Some Resources		Few Resources		Average Scale Score	Difference in Average Scale Score from 2011
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement		
<b>Benchmarking Participants</b>								
Norway (4)	44 (1.4)	543 (2.3)	56 (1.4)	501 (2.3)	1 (0.1)	~ ~	11.4 (0.04)	-0.1 (0.07)
Denmark (3)	41 (1.4)	527 (3.2)	58 (1.4)	488 (3.2)	1 (0.2)	~ ~	11.3 (0.05)	--
Moscow City, Russian Fed.	37 (1.7)	633 (2.1)	62 (1.7)	600 (2.2)	0 (0.1)	~ ~	11.3 (0.05)	--
Ontario, Canada	r 36 (2.0)	580 (3.6)	63 (2.0)	535 (3.3)	0 (0.2)	~ ~	11.2 (0.06)	r -0.1 (0.09)
Quebec, Canada	31 (1.9)	577 (3.4)	68 (1.9)	540 (2.6)	1 (0.2)	~ ~	11.1 (0.06)	0.0 (0.08)
Madrid, Spain	30 (1.6)	576 (2.7)	67 (1.5)	543 (1.9)	2 (0.4)	~ ~	10.8 (0.06)	--
Dubai, UAE	21 (0.5)	579 (2.4)	77 (0.5)	509 (2.2)	2 (0.1)	~ ~	10.7 (0.02)	0.1 (0.03)
Andalusia, Spain	15 (1.2)	563 (2.6)	79 (1.1)	526 (1.8)	6 (0.6)	477 (6.4)	10.0 (0.06)	0.2 (0.09)
Buenos Aires, Argentina	s 14 (1.2)	544 (4.5)	79 (1.2)	486 (3.1)	8 (0.6)	432 (6.7)	10.0 (0.07)	--
Abu Dhabi, UAE	r 10 (0.8)	505 (9.2)	87 (0.9)	420 (4.0)	3 (0.4)	330 (13.5)	10.0 (0.04)	r 0.2 (0.08) ●
Eng/Afr/Zulu - RSA (5)	s 3 (0.9)	564 (11.0)	75 (1.8)	439 (7.8)	22 (2.0)	370 (5.0)	8.7 (0.11)	--

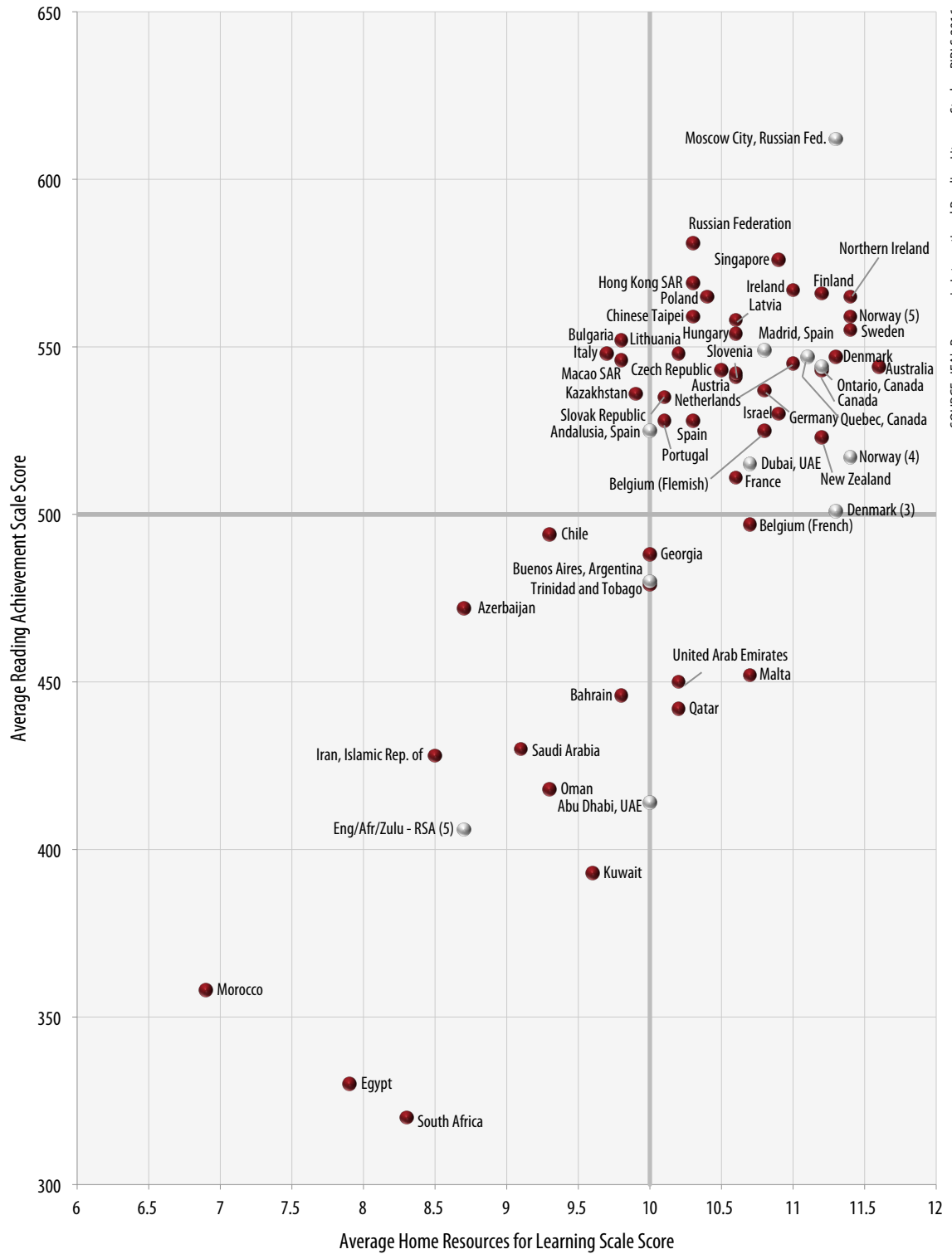
Significantly higher than 2011 ●  
Significantly lower than 2011 ○

SOURCE: IEA's Progress in International Reading Literacy Study – PIRLS 2016

<p><b>Number of books in the home (students):</b></p> <ul style="list-style-type: none"> <li>1) 0-10</li> <li>2) 11-25</li> <li>3) 26-100</li> <li>4) 101-200</li> <li>5) More than 200</li> </ul> <p><b>Number of home study supports (students):</b></p> <ul style="list-style-type: none"> <li>1) None</li> <li>2) Internet connection or own room</li> <li>3) Both</li> </ul> <p><b>Highest level of occupation of either parent (parents):</b></p> <ul style="list-style-type: none"> <li>1) Has never worked outside home for pay, general laborer, or semi-professional (skilled agricultural or fishery worker, craft or trade worker, plant or machine operator)</li> <li>2) Clerical (clerk or service or sales worker)</li> <li>3) Small business owner</li> <li>4) Professional (corporate manager or senior official, professional, or technician or associate professional)</li> </ul>	<p><b>Number of children's books in the home (parents):</b></p> <ul style="list-style-type: none"> <li>1) 0-10</li> <li>2) 11-25</li> <li>3) 26-50</li> <li>4) 51-100</li> <li>5) More than 100</li> </ul> <p><b>Highest level of education of either parent (parents):</b></p> <ul style="list-style-type: none"> <li>1) Finished some primary or lower secondary or did not go to school</li> <li>2) Finished lower secondary</li> <li>3) Finished upper secondary</li> <li>4) Finished post-secondary education</li> <li>5) Finished university or higher</li> </ul>
--	---

**Exhibit 4.1: Home Resources for Learning (Continued)**

Average Reading Achievement by Home Resources for Learning



SOURCE: IEA's Progress in International Reading Literacy Study - PIRLS 2016

**Exhibit 4.2: Digital Devices in the Home**

*Students Categorized by Parents' and Students' Reports*

Students were scored according to their own and their parents' responses concerning the availability of four items on the *Digital Devices in the Home* scale. Students with **High Access** had a score of at least 12.1, which is the point on the scale corresponding to students reporting they had a computer and Internet connection, and parents reporting they had seven or more digital information devices in the home as well as a digital device for reading for both themselves and their child. Students with **Low Access** had a score no higher than 6.0, which is the scale point corresponding to students reporting that they did not have a computer or Internet connection, and parents reporting that they had less than four digital information devices in the home and no digital devices for reading for either themselves or their child. All other students were assigned to the **Medium Access** category.

Country	High Access		Medium Access		Low Access		Average Scale Score
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	
Norway (5)	58 (1.0)	566 (2.4)	42 (1.0)	552 (2.7)	0 (0.0)	~ ~	11.8 (0.04)
Finland	53 (0.9)	577 (2.0)	47 (0.9)	560 (2.3)	0 (0.0)	~ ~	11.6 (0.03)
Denmark	49 (1.0)	554 (2.9)	51 (1.0)	546 (2.4)	0 (0.0)	~ ~	11.5 (0.04)
Sweden	42 (1.2)	567 (2.7)	58 (1.2)	554 (2.8)	0 (0.1)	~ ~	11.3 (0.05)
Netherlands	s 32 (1.3)	557 (3.4)	68 (1.3)	551 (2.3)	0 (0.0)	~ ~	10.8 (0.05)
Qatar	r 29 (0.5)	474 (2.5)	69 (0.5)	445 (2.5)	1 (0.1)	~ ~	10.6 (0.02)
Belgium (Flemish)	29 (0.7)	535 (2.2)	71 (0.7)	526 (2.1)	0 (0.1)	~ ~	10.6 (0.03)
Hungary	28 (1.2)	575 (3.8)	70 (1.0)	549 (3.0)	2 (0.3)	~ ~	10.6 (0.06)
Canada	r 28 (0.6)	563 (1.8)	71 (0.6)	545 (2.2)	1 (0.1)	~ ~	10.6 (0.02)
Kuwait	r 28 (1.1)	411 (5.5)	71 (1.1)	397 (4.5)	1 (0.2)	~ ~	10.6 (0.05)
United Arab Emirates	26 (0.6)	474 (3.9)	74 (0.6)	451 (3.4)	1 (0.1)	~ ~	10.5 (0.03)
Ireland	25 (0.8)	580 (3.0)	75 (0.8)	568 (2.4)	0 (0.1)	~ ~	10.4 (0.03)
Bahrain	24 (0.8)	470 (3.2)	74 (0.7)	444 (2.6)	2 (0.2)	~ ~	10.2 (0.03)
Singapore	24 (0.6)	605 (3.1)	76 (0.6)	571 (3.3)	1 (0.1)	~ ~	10.4 (0.03)
Israel	23 (0.9)	546 (3.4)	76 (0.9)	534 (3.0)	2 (0.3)	~ ~	10.3 (0.04)
Portugal	21 (0.9)	549 (4.3)	78 (0.9)	524 (2.1)	1 (0.2)	~ ~	10.4 (0.03)
Trinidad and Tobago	r 21 (1.0)	514 (5.0)	75 (1.0)	481 (3.4)	4 (0.4)	417 (11.7)	10.0 (0.05)
Spain	20 (0.6)	550 (2.3)	79 (0.6)	526 (1.9)	1 (0.2)	~ ~	10.1 (0.03)
Bulgaria	19 (0.8)	592 (3.3)	75 (1.0)	549 (4.3)	6 (0.9)	473 (15.8)	9.9 (0.08)
Malta	19 (0.6)	468 (3.6)	80 (0.6)	457 (1.8)	0 (0.1)	~ ~	10.3 (0.02)
Poland	19 (0.8)	586 (3.0)	80 (0.8)	561 (2.1)	1 (0.3)	~ ~	10.5 (0.03)
Lithuania	19 (0.9)	568 (3.7)	79 (0.9)	547 (2.9)	2 (0.4)	~ ~	10.2 (0.05)
Slovak Republic	17 (0.6)	561 (3.4)	80 (0.7)	536 (3.0)	3 (0.6)	389 (19.9)	10.0 (0.05)
Austria	17 (0.7)	557 (3.6)	82 (0.7)	540 (2.4)	1 (0.1)	~ ~	9.9 (0.03)
Latvia	17 (0.6)	572 (3.1)	82 (0.8)	556 (1.9)	1 (0.3)	~ ~	10.2 (0.03)
Saudi Arabia	17 (0.9)	454 (4.6)	78 (0.9)	432 (4.3)	5 (0.5)	415 (12.2)	9.7 (0.06)
Oman	16 (0.6)	452 (5.0)	78 (0.6)	421 (3.4)	6 (0.3)	375 (7.3)	9.5 (0.04)
Czech Republic	16 (0.6)	557 (3.1)	83 (0.6)	544 (2.2)	1 (0.2)	~ ~	9.9 (0.03)
Germany	s 15 (0.7)	558 (3.8)	84 (0.7)	550 (2.7)	1 (0.2)	~ ~	9.7 (0.04)
Belgium (French)	15 (0.7)	507 (4.3)	84 (0.7)	499 (2.8)	1 (0.2)	~ ~	9.9 (0.03)
Macao SAR	14 (0.5)	563 (3.0)	85 (0.5)	543 (1.1)	1 (0.1)	~ ~	9.9 (0.02)
Italy	14 (0.7)	557 (3.7)	85 (0.8)	550 (2.3)	1 (0.2)	~ ~	9.8 (0.03)
Slovenia	13 (0.7)	568 (3.9)	86 (0.6)	541 (2.2)	1 (0.2)	~ ~	9.9 (0.03)
France	13 (0.6)	516 (4.5)	86 (0.6)	514 (2.2)	1 (0.2)	~ ~	9.8 (0.03)
Hong Kong SAR	13 (1.0)	577 (4.6)	87 (1.0)	569 (2.9)	1 (0.2)	~ ~	9.9 (0.05)
Russian Federation	12 (0.7)	604 (3.0)	85 (0.7)	580 (2.2)	3 (0.3)	519 (11.6)	10.0 (0.04)
Chinese Taipei	11 (0.5)	575 (3.5)	87 (0.5)	559 (2.1)	2 (0.2)	~ ~	9.7 (0.03)
Kazakhstan	10 (0.8)	561 (5.0)	81 (0.9)	535 (2.4)	8 (0.8)	516 (5.6)	9.5 (0.08)
Chile	8 (0.5)	540 (3.7)	83 (1.0)	495 (2.6)	9 (0.9)	470 (7.3)	9.0 (0.06)
Egypt	4 (0.6)	407 (14.0)	66 (1.8)	352 (5.1)	30 (1.8)	281 (9.3)	7.8 (0.10)
Georgia	4 (0.3)	513 (6.6)	87 (0.9)	492 (2.7)	9 (1.0)	468 (9.3)	9.0 (0.06)
Azerbaijan	3 (0.5)	523 (6.7)	63 (1.4)	490 (3.4)	34 (1.5)	448 (5.6)	7.6 (0.08)
Morocco	3 (0.2)	431 (7.8)	50 (1.1)	386 (3.9)	47 (1.2)	335 (4.7)	6.9 (0.07)
South Africa	s 3 (0.5)	429 (15.6)	64 (1.5)	341 (6.3)	33 (1.6)	313 (4.5)	7.4 (0.09)
Iran, Islamic Rep. of	2 (0.2)	~ ~	75 (1.4)	445 (4.2)	23 (1.5)	381 (6.7)	8.1 (0.07)
England	--	--	--	--	--	--	--
United States	--	--	--	--	--	--	--
Northern Ireland	x 32 (1.4)	599 (5.0)	67 (1.4)	582 (3.6)	0 (0.2)	~ ~	10.9 (0.06)
Australia	x 29 (1.0)	572 (4.6)	71 (1.0)	560 (3.1)	0 (0.1)	~ ~	10.7 (0.04)
New Zealand	x 22 (1.0)	559 (4.2)	76 (1.1)	540 (2.8)	2 (0.3)	~ ~	10.2 (0.04)
International Avg.	20 (0.1)	536 (0.7)	74 (0.1)	512 (0.4)	5 (0.1)	414 (2.8)	

SOURCE: IEA's Progress in International Reading Literacy Study – PIRLS 2016

This PIRLS questionnaire scale was established in 2016 based on the combined response distribution of all countries that participated in PIRLS 2016. To provide a point of reference for country comparisons, the scale centerpoint of 10 was located at the mean of the combined distribution. The units of the scale were chosen so that 2 scale score points corresponded to the standard deviation of the distribution.

( ) Standard errors appear in parentheses. Because of rounding some results may appear inconsistent.

A dash (-) indicates comparable data not available. A tilde (~) indicates insufficient data to report achievement.

An "r" indicates data are available for at least 70% but less than 85% of the students. An "s" indicates data are available for at least 50% but less than 70% of the students. An "x" indicates data are available for less than 50% of the students—interpret with caution.



**Exhibit 4.2: Digital Devices in the Home (Continued)**

Country	High Access		Medium Access		Low Access		Average Scale Score
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	
<b>Benchmarking Participants</b>							
Norway (4)	54 (1.2)	528 (2.0)	46 (1.2)	508 (2.9)	0 (0.1)	~ ~	11.7 (0.04)
Denmark (3)	45 (1.1)	512 (3.4)	55 (1.1)	495 (3.6)	0 (0.0)	~ ~	11.4 (0.03)
Ontario, Canada r	32 (1.0)	561 (3.8)	68 (1.0)	547 (3.6)	0 (0.1)	~ ~	10.8 (0.04)
Dubai, UAE	30 (0.5)	531 (3.0)	70 (0.5)	516 (2.2)	0 (0.1)	~ ~	10.8 (0.02)
Madrid, Spain	27 (0.8)	567 (2.6)	72 (0.8)	546 (2.1)	0 (0.1)	~ ~	10.5 (0.04)
Abu Dhabi, UAE r	26 (1.0)	445 (6.3)	73 (1.0)	416 (4.5)	1 (0.1)	~ ~	10.5 (0.04)
Moscow City, Russian Fed.	25 (0.9)	625 (2.6)	75 (0.9)	608 (2.3)	0 (0.1)	~ ~	10.8 (0.03)
Buenos Aires, Argentina s	23 (1.4)	518 (4.6)	76 (1.3)	482 (3.3)	1 (0.2)	~ ~	10.2 (0.06)
Quebec, Canada	19 (0.8)	565 (4.0)	80 (0.8)	548 (3.1)	0 (0.2)	~ ~	10.2 (0.04)
Andalusia, Spain	18 (0.9)	548 (3.0)	80 (0.9)	524 (2.0)	2 (0.3)	~ ~	10.0 (0.04)
Eng/Afr/Zulu - RSA (5) s	6 (0.7)	503 (13.8)	70 (1.6)	427 (7.7)	24 (1.8)	376 (5.3)	8.0 (0.12)

SOURCE: IEA's Progress in International Reading Literacy Study – PIRLS 2016

