## Exhibit 4.4: Parents Like Reading

Young students who see adults and older children reading or using texts in different ways are learning to appreciate and use materials. Exhibit 4.4 presents the PIRLS 2016 Parents Like Reading scale. As described in the exhibit, students' parents were asked a series of questions about their reading enjoyment and students were scored according to their parents' responses. Exhibit 4.4 shows students' average reading achievement in relation to how much their parents like to read. Across the PIRLS 2016 countries, the students whose parents Very Much Like to read (32\%) had higher average achievement than the 51 percent of the students whose parents only like to read Somewhat (535 vs. 508). In turn, the students with parents who Do Not Like to read (17\%) had the lowest achievement (488).

Compared to PIRLS 2011, parental attitudes toward reading in 2016 were less positive on average in 31 countries, and more positive in only 2 countries.

## Exhibit 4.4: Parents Like Reading

## Students Categorized by Parents' Reports

Students were scored on the Parents Like Reading scale according to their parents' responses to eight statements about reading as well as how often they read for enjoyment. Students whose parents Very Much Like reading had a score on the scale of at least 10.5 , which corresponds to their parents "agreeing a lot" with four of the eight statements and "agreeing a little" with the other four, as well as reading for enjoyment "every day or almost every day," on average. Students whose parents Do Not Like reading had a score no higher than 8.1 , which corresponds to their parents "disagreeing a little" with four of the eight statements and "agreeing a little" with the other four, as well as reading for enjoyment only "once or twice a month," on average. All other students had parents who Somewhat Like reading.

| Country | Very Much Like |  |  | Somewhat Like |  | Do Not Like |  | 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 |  |  |  |  |
| Ireland |  | 47 (1.1) | 588 (2.9) | 40 (1.0) | 560 (2.9) | 13 (0.7) | 544 (5.2) | 10.3 (0.05) |  | -0.4 (0.07) | - |
| Netherlands | s | 46 (1.5) | 566 (2.8) | 39 (1.2) | 548 (3.1) | 16 (0.9) | 525 (4.3) | 10.0 (0.05) |  | -0.4 (0.08) | (7) |
| Malta |  | 45 (0.8) | 471 (2.3) | 42 (0.9) | 451 (2.6) | 13 (0.5) | 439 (3.9) | 10.2 (0.03) |  | -0.4 (0.05) | (7) |
| Denmark |  | 44 (1.1) | 564 (2.3) | 38 (1.0) | 542 (2.7) | 17 (0.7) | 530 (3.6) | 10.1 (0.05) |  | -0.6 (0.06) | - |
| Sweden |  | 44 (1.1) | 576 (2.9) | 42 (1.1) | 551 (3.0) | 13 (0.8) | 529 (4.4) | 10.1 (0.05) |  | -0.8 (0.07) | ( $)$ |
| Azerbaijan |  | 44 (1.3) | 481 (5.1) | 46 (1.1) | 470 (4.4) | 10 (0.9) | 453 (6.8) | 10.4 (0.06) |  | 0.7 (0.08) | 0 |
| Norway (5) |  | 42 (1.0) | 574 (2.6) | 44 (0.9) | 556 (2.5) | 15 (0.9) | 532 (3.9) | 10.1 (0.05) |  | - - |  |
| Trinidad and Tobago |  | 41 (1.0) | 499 (3.6) | 49 (0.9) | 478 (4.3) | 10 (0.6) | 468 (6.1) | 10.2 (0.04) |  | -0.5 (0.06) | ( 7 |
| Finland |  | 41 (1.0) | 585 (2.2) | 43 (0.9) | 563 (2.5) | 16 (0.7) | 542 (3.4) | 10.0 (0.05) |  | -0.5 (0.07) | ( ) |
| Spain |  | 41 (0.8) | 545 (2.1) | 43 (0.7) | 524 (2.3) | 16 (0.7) | 512 (2.5) | 10.0 (0.04) |  | 0.0 (0.05) |  |
| Israel |  | 40 (1.1) | 554 (3.1) | 47 (0.9) | 522 (3.2) | 13 (0.6) | 519 (6.4) | 10.0 (0.04) |  | -0.5 (0.06) | - |
| Austria |  | 40 (1.1) | 564 (2.3) | 42 (0.8) | 534 (2.7) | 18 (0.8) | 516 (3.7) | 9.9 (0.05) |  | -0.4 (0.08) | ( |
| Canada | $r$ | 40 (0.8) | 566 (2.1) | 46 (0.7) | 540 (2.5) | 15 (0.5) | 531 (3.3) | 10.0 (0.03) |  | -0.5 (0.05) | (7) |
| Bulgaria |  | 39 (1.4) | 587 (3.1) | 43 (1.4) | 548 (4.2) | 19 (1.7) | 493 (9.1) | 9.8 (0.09) |  | -0.2 (0.13) |  |
| Hungary |  | 38 (1.4) | 583 (3.0) | 45 (1.2) | 547 (3.3) | 17 (1.0) | 516 (4.6) | 9.8 (0.06) |  | -0.1 (0.08) |  |
| Czech Republic |  | 37 (1.0) | 565 (2.4) | 45 (0.7) | 540 (2.2) | 18 (0.8) | 514 (4.2) | 9.8 (0.05) |  | -0.2 (0.06) | (1) |
| Italy |  | 37 (1.0) | 566 (2.5) | 47 (0.9) | 546 (2.7) | 16 (0.8) | 530 (3.8) | 9.9 (0.04) |  | 0.1 (0.06) |  |
| Germany | $r$ | 36 (1.1) | 578 (2.7) | 44 (0.9) | 540 (3.3) | 20 (0.9) | 509 (5.0) | 9.7 (0.05) |  | -0.4 (0.08) | (1) |
| Poland |  | 35 (0.8) | 581 (2.9) | 50 (0.8) | 561 (2.3) | 14 (0.8) | 540 (4.3) | 9.9 (0.04) |  | - - |  |
| Slovak Republic |  | 35 (1.0) | 566 (2.6) | 46 (1.0) | 532 (3.2) | 19 (1.0) | 489 (9.5) | 9.6 (0.06) |  | -0.3 (0.08) | (1) |
| Portugal |  | 35 (0.9) | 546 (3.0) | 50 (0.9) | 522 (2.4) | 15 (0.7) | 510 (5.4) | 9.8 (0.04) |  | 0.2 (0.05) | 0 |
| Georgia |  | 32 (1.0) | 512 (2.9) | 60 (1.1) | 482 (2.9) | 8 (0.8) | 460 (11.3) | 9.9 (0.04) |  | -0.2 (0.06) | - |
| Belgium (French) |  | 29 (0.9) | 526 (2.8) | 48 (0.9) | 495 (3.2) | 23 (0.8) | 473 (3.6) | 9.4 (0.04) |  | -0.4 (0.07) | - |
| Belgium (Flemish) |  | 28 (0.8) | 546 (2.0) | 48 (0.8) | 527 (2.1) | 24 (0.7) | 509 (2.9) | 9.3 (0.04) |  | -- |  |
| Lithuania |  | 27 (1.0) | 572 (3.2) | 48 (1.3) | 546 (3.5) | 25 (1.1) | 530 (3.9) | 9.3 (0.04) |  | -0.3 (0.06) | (7) |
| Slovenia |  | 27 (0.9) | 571 (3.0) | 58 (1.1) | 539 (2.2) | 16 (0.7) | 517 (3.6) | 9.5 (0.03) |  | -0.3 (0.05) | ( ) |
| Bahrain |  | 26 (0.7) | 471 (3.2) | 60 (0.9) | 444 (2.9) | 14 (0.6) | 417 (4.3) | 9.6 (0.02) |  | - - |  |
| Kazakhstan |  | 26 (1.1) | 545 (3.2) | 67 (1.1) | 533 (2.9) | 7 (0.5) | 531 (4.7) | 9.9 (0.04) |  | -- |  |
| Latvia |  | 26 (0.8) | 579 (2.6) | 52 (0.9) | 557 (2.2) | 22 (0.8) | 541 (3.3) | 9.4 (0.04) |  | -- |  |
| Kuwait |  | 25 (1.0) | 425 (6.1) | 57 (1.0) | 395 (4.5) | 18 (0.8) | 378 (7.5) | 9.5 (0.04) |  | -- |  |
| Russian Federation |  | 25 (0.8) | 602 (2.5) | 56 (0.8) | 578 (2.3) | 20 (0.7) | 560 (3.6) | 9.4 (0.03) |  | -0.2 (0.05) | - |
| Singapore |  | 25 (0.6) | 603 (3.3) | 57 (0.7) | 572 (3.2) | 18 (0.6) | 561 (4.0) | 9.4 (0.02) |  | -0.3 (0.03) | ( |
| Iran, Islamic Rep. of |  | 25 (1.1) | 459 (4.9) | 62 (1.1) | 429 (3.5) | 14 (1.0) | 374 (11.2) | 9.5 (0.05) |  | -0.3 (0.06) | ( |
| South Africa | 5 | 24 (0.7) | 359 (7.0) | 63 (1.1) | 322 (5.3) | 13 (0.9) | 307 (7.0) | 9.7 (0.03) |  | -0.2 (0.05) | ( |
| Qatar |  | 24 (0.7) | 489 (3.3) | 62 (0.8) | 441 (2.0) | 14 (0.4) | 428 (4.3) | 9.5 (0.02) |  | -0.2 (0.05) | $\checkmark$ |
| France |  | 22 (0.8) | 539 (3.2) | 56 (0.8) | 513 (2.2) | 21 (0.9) | 491 (4.0) | 9.3 (0.04) |  | -0.2 (0.06) | - |
| United Arab Emirates |  | 22 (0.5) | 496 (3.6) | 65 (0.5) | 445 (3.4) | 13 (0.4) | 436 (4.5) | 9.5 (0.02) |  | -0.1 (0.03) | - |
| Morocco |  | 22 (0.9) | 397 (4.3) | 47 (1.5) | 365 (4.4) | 31 (1.8) | 330 (6.0) | 9.0 (0.06) |  | -0.3 (0.10) | ( ) |
| Chile |  | 21 (0.8) | 529 (3.3) | 52 (0.9) | 491 (2.8) | 27 (0.9) | 480 (3.7) | 9.2 (0.04) |  | - - |  |
| Oman |  | 21 (0.5) | 450 (4.7) | 67 (0.6) | 418 (3.3) | 12 (0.5) | 380 (5.3) | 9.5 (0.02) |  | 0.0 (0.03) |  |
| Saudi Arabia |  | 21 (0.9) | 454 (4.7) | 62 (1.0) | 428 (4.8) | 17 (0.8) | 414 (6.2) | 9.4 (0.04) |  | -0.2 (0.06) | ( |
| Chinese Taipei |  | 19 (0.8) | 584 (2.9) | 61 (0.7) | 556 (2.5) | 20 (0.8) | 548 (2.8) | 9.2 (0.03) |  | -0.2 (0.05) | - |
| Hong Kong SAR |  | 17 (0.8) | 580 (3.1) | 61 (0.9) | 569 (3.2) | 22 (0.8) | 562 (3.5) | 9.1 (0.03) |  | -0.2 (0.04) | ( 7 |
| Macao SAR |  | 17 (0.6) | 563 (2.4) | 62 (0.8) | 544 (1.4) | 22 (0.6) | 538 (2.7) | 9.1 (0.02) |  | - - |  |
| Egypt |  | 13 (1.0) | 385 (8.1) | 54 (1.6) | 345 (5.0) | 33 (1.8) | 286 (8.4) | 8.7 (0.07) |  | -- |  |
| England |  | - - | - - | - - | - - | - - | - - | - - |  | -- |  |
| United States |  | -- | -- | -- | -- | -- | -- | -- |  | -- |  |
| Northern Ireland | X | 49 (1.5) | 602 (3.9) | 36 (1.5) | 577 (5.1) | 15 (1.0) | 568 (6.0) | 10.3 (0.07) | X | -0.4 (0.08) | T |
| Australia | X | 48 (1.4) | 582 (3.5) | 40 (1.3) | 551 (3.6) | 12 (0.9) | 535 (5.3) | 10.3 (0.06) |  | -0.4 (0.09) | - |
| New Zealand | X | 47 (1.6) | 567 (3.0) | 40 (1.5) | 524 (4.0) | 13 (0.7) | 511 (6.2) | 10.3 (0.06) |  | -0.6 (0.07) | ( |
| International Avg. |  | 32 (0.1) | 535 (0.5) | 51 (0.1) | 508 (0.5) | 17 (0.1) | 488 (0.8) |  |  |  |  |

[^0] An " $x$ " indicates data are available for less than $50 \%$ of the students-interpret with caution.

Exhibit 4.4: Parents Like Reading (Continued)




[^0]:    This PIRLS questionnaire scale was established in 2011 based on the combined response distribution of all countries that
    Significantly higher than 2011 © 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 ( $\sim$ ) indicates insufficient data to report achievement.
    $A n$ " $r$ " 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.

