## Exhibit 9.14: Teaching Limited by Student Needs

## Reported by Teachers

Students were scored according to their teachers' responses concerning six needs on the Teaching Limited by Student Needs scale. Students with teachers who felt Not Limited by student needs had a score on the scale of at least 11.4, which corresponds to their teachers feeling "not at all" limited by three of the six needs and to "some" extent limited by the other three needs, on average. Students with teachers who felt Very Limited by student needs had a score no higher than 7.4, which corresponds to their teachers reporting feeling limited "a lot" by three of the six needs and to "some" extent limited by the other three needs, on average. All other students had teachers who felt Somewhat Limited by student needs.

| Country |  | Not Limited |  | Somewhat Limited |  | Very Limited |  | Average Scale Score |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Percent of Students | Average Achievement | Percent of Students | Average Achievement | Percent of Students | Average Achievement |  |
| Japan |  | 76 (3.4) | 575 (2.1) | 24 (3.4) | 558 (3.0) | 0 (0.0) | ~ | 12.5 (0.15) |
| Slovenia |  | 46 (2.3) | 558 (3.1) | 50 (2.3) | 546 (2.8) | 4 (0.9) | 543 (6.5) | 11.0 (0.10) |
| Norway (9) |  | 45 (4.0) | 519 (4.5) | 52 (4.0) | 504 (3.2) | 3 (1.2) | 475 (10.2) | 10.8 (0.14) |
| Singapore |  | 44 (2.7) | 629 (4.1) | 55 (2.6) | 572 (5.8) | 1 (0.5) | ~ ~ | 11.0 (0.09) |
| Hungary |  | 42 (2.5) | 551 (3.3) | 50 (2.2) | 512 (3.9) | 8 (1.6) | 481 (11.0) | 10.8 (0.13) |
| England | $r$ | 42 (3.0) | 575 (4.4) | 54 (2.9) | 517 (5.3) | 5 (1.0) | 466 (17.1) | 10.7 (0.14) |
| Ireland |  | 41 (3.2) | 546 (3.4) | 54 (3.3) | 533 (3.7) | 5 (1.3) | 485 (12.9) | 10.7 (0.11) |
| Kazakhstan |  | 41 (3.1) | 542 (6.2) | 51 (2.8) | 526 (5.1) | 8 (1.4) | 529 (14.1) | 10.6 (0.16) |
| United Arab Emirates | $r$ | 41 (2.4) | 514 (4.6) | 55 (2.4) | 454 (4.2) | 4 (0.9) | 443 (19.8) | 10.8 (0.09) |
| Malta |  | 40 (0.5) | 506 (2.4) | 52 (0.5) | 468 (1.9) | 8 (0.2) | 423 (4.7) | 10.6 (0.02) |
| Hong Kong SAR |  | 38 (5.0) | 565 (5.5) | 58 (4.9) | 533 (5.3) | 4 (1.7) | 531 (31.3) | 10.6 (0.17) |
| New Zealand |  | 37 (2.9) | 552 (5.5) | 58 (3.1) | 502 (4.7) | 5 (1.4) | 419 (18.7) | 10.5 (0.10) |
| Sweden |  | 35 (3.6) | 537 (5.3) | 62 (3.5) | 516 (4.3) | 3 (1.1) | 489 (17.3) | 10.6 (0.15) |
| Australia | $r$ | 33 (3.1) | 540 (5.1) | 61 (3.0) | 507 (3.3) | 6 (1.5) | 467 (10.9) | 10.5 (0.15) |
| Russian Federation |  | 30 (2.3) | 554 (6.3) | 59 (2.9) | 540 (4.7) | 10 (1.4) | 540 (6.2) | 10.0 (0.08) |
| Canada | $r$ | 30 (3.4) | 541 (5.2) | 64 (3.9) | 523 (3.0) | 7 (1.6) | 505 (7.9) | 10.1 (0.13) |
| Chinese Taipei |  | 30 (3.4) | 593 (4.7) | 60 (3.8) | 562 (2.7) | 10 (2.3) | 547 (7.3) | 10.0 (0.15) |
| Lebanon |  | 29 (3.9) | 393 (8.3) | 67 (4.0) | 399 (6.8) | 4 (1.1) | 415 (25.6) | 10.1 (0.12) |
| Lithuania |  | 26 (2.3) | 536 (4.4) | 63 (2.3) | 516 (3.1) | 10 (1.3) | 496 (6.2) | 10.0 (0.10) |
| Israel |  | 25 (2.5) | 553 (9.9) | 57 (3.2) | 503 (5.5) | 18 (2.4) | 462 (9.9) | 9.7 (0.12) |
| Qatar |  | 25 (3.0) | 506 (6.2) | 67 (3.3) | 444 (5.5) | 8 (2.0) | 398 (15.8) | 10.1 (0.11) |
| Italy |  | 24 (3.4) | 508 (6.1) | 65 (3.9) | 495 (3.2) | 11 (2.4) | 495 (11.2) | 10.0 (0.13) |
| Oman |  | 22 (3.0) | 473 (5.0) | 58 (3.5) | 454 (4.0) | 20 (2.1) | 439 (6.9) | 9.6 (0.13) |
| Korea, Rep. of |  | 22 (3.6) | 561 (5.2) | 64 (3.7) | 555 (2.5) | 14 (2.5) | 548 (4.0) | 9.8 (0.17) |
| Thailand |  | 21 (3.1) | 485 (8.0) | 74 (2.9) | 450 (5.1) | 5 (1.8) | 424 (17.0) | 10.0 (0.12) |
| Malaysia |  | 20 (2.6) | 522 (7.0) | 72 (3.0) | 460 (5.5) | 8 (2.1) | 414 (21.6) | 9.8 (0.11) |
| Georgia |  | 19 (1.5) | 453 (4.1) | 76 (1.7) | 442 (3.4) | 6 (1.1) | 438 (7.0) | 9.8 (0.07) |
| Saudi Arabia |  | 19 (3.2) | 420 (13.9) | 71 (3.9) | 390 (5.2) | 10 (2.5) | 396 (9.2) | 9.5 (0.13) |
| United States | $r$ | 18 (2.2) | 556 (6.6) | 74 (2.4) | 532 (3.4) | 9 (1.5) | 493 (13.7) | 9.7 (0.10) |
| Kuwait |  | 18 (2.5) | 426 (15.6) | 75 (3.1) | 406 (6.4) | 8 (2.0) | 400 (10.4) | 9.8 (0.12) |
| Bahrain |  | 15 (2.0) | 503 (11.8) | 73 (3.0) | 458 (3.3) | 12 (2.4) | 453 (8.2) | 9.6 (0.10) |
| Egypt |  | 14 (2.6) | 382 (12.0) | 71 (3.6) | 372 (5.1) | 15 (2.6) | 353 (14.4) | 9.3 (0.12) |
| Iran, Islamic Rep. of |  | 13 (2.3) | 490 (12.4) | 65 (3.7) | 456 (4.8) | 22 (2.9) | 440 (7.6) | 9.0 (0.12) |
| Chile |  | 12 (2.8) | 502 (12.7) | 67 (4.5) | 462 (4.5) | 21 (3.7) | 413 (5.5) | 8.9 (0.14) |
| Jordan |  | 12 (2.4) | 469 (9.6) | 76 (3.4) | 424 (3.7) | 12 (2.4) | 400 (9.9) | 9.4 (0.11) |
| Botswana (9) |  | 11 (2.7) | 413 (12.1) | 79 (3.7) | 392 (3.4) | 9 (2.7) | 382 (8.4) | 9.4 (0.12) |
| South Africa (9) |  | 11 (2.0) | 410 (24.2) | 72 (3.0) | 353 (7.0) | 17 (2.5) | 346 (11.3) | 9.2 (0.10) |
| Turkey |  | 11 (2.2) | 542 (11.3) | 64 (3.5) | 497 (4.8) | 25 (2.8) | 462 (6.4) | 8.9 (0.12) |
| Morocco |  | 8 (1.1) | 425 (8.7) | 68 (2.1) | 393 (2.8) | 24 (2.0) | 384 (3.2) | 8.8 (0.07) |
| International Avg. |  | 28 (0.5) | 511 (1.4) | 62 (0.5) | 480 (0.7) | 10 (0.3) | 454 (2.2) |  |

This TIMSS questionnaire scale was established in 2015 based on the combined response distribution of all countries that participated in TIMSS 2015 . 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 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. An " $x$ " indicates data are available for less than $50 \%$ of students.

Exhibit 9.14: Teaching Limited by Student Needs (Continued)

| Country |  | Not Limited |  | Somewhat Limited |  | Very Limited |  | Average Scale Score |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Percent of Students | Average Achievement | Percent of Students | Average Achievement | Percent of <br> Students | Average Achievement |  |
| Benchmarking Participants |  |  |  |  |  |  |  |  |
| Dubai, UAE | r | 59 (2.2) | 544 (3.9) | 40 (2.1) | 491 (5.4) | 1 (0.6) | ~ ~ | 11.7 (0.09) |
| Norway (8) |  | 37 (3.3) | 499 (3.4) | 59 (3.6) | 488 (2.9) | 4 (1.2) | 449 (14.2) | 10.7 (0.15) |
| Quebec, Canada |  | 36 (5.0) | 540 (10.8) | 56 (6.1) | 521 (6.5) | 8 (3.0) | 523 (12.6) | 10.3 (0.22) |
| Abu Dhabi, UAE | r | 35 (4.2) | 487 (12.2) | 60 (4.5) | 436 (6.2) | 5 (2.0) | 438 (38.7) | 10.3 (0.20) |
| Ontario, Canada | r | 25 (4.2) | 540 (4.0) | 68 (4.4) | 524 (3.3) | 7 (1.9) | 491 (6.6) | 10.0 (0.16) |
| Florida, US | $s$ | 23 (7.2) | 529 (23.7) | 64 (6.4) | 521 (9.2) | 13 (4.3) | 486 (20.0) | 9.7 (0.27) |
| Buenos Aires, Argentina |  | $\mathrm{x} \times$ | x x | x x | x x | x x | x x | x x |

In your view, to what extent do the following limit how you teach this class?

