

Exhibit 4.9: Could Do Literacy and Numeracy Tasks When Began Primary School

Reported by Parents

Students were scored according to their parents' responses to how well their children could do *Literacy and Numeracy Tasks* when they began primary school. Students who could do the tasks **Very Well** had a score on the scale of at least 11.5, which corresponds to their parents reporting that the students could do all eleven of the tasks (five of the tasks at the highest level and four at the second highest level as well do simple addition and subtraction), on average. Students doing the tasks **Not Well** had a score no higher than 8.7, which corresponds to their parents reporting that the students could do the eleven tasks at a minimal level (five of the tasks at the second lowest level, four at the second highest level, and could not do simple addition and subtraction), on average. All other students could do the literacy and numeracy tasks **Moderately Well** when they began primary school.

Country	Very Well		Moderately Well		Not Well		Average Scale Score
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	
Korea, Rep. of	53 (0.9)	627 (2.4)	43 (0.8)	591 (2.5)	3 (0.3)	539 (7.7)	12.0 (0.04)
Ireland	51 (1.0)	575 (2.5)	43 (1.1)	530 (2.7)	6 (0.5)	489 (6.3)	11.6 (0.04)
Singapore	43 (1.1)	655 (3.4)	51 (1.0)	599 (3.9)	5 (0.4)	521 (7.7)	11.4 (0.05)
Bahrain	42 (0.9)	477 (1.8)	50 (1.0)	440 (2.9)	7 (0.3)	406 (4.7)	11.2 (0.02)
Jordan	34 (0.9)	439 (3.4)	52 (0.9)	378 (3.4)	14 (0.9)	313 (7.8)	10.7 (0.06)
Spain	34 (0.8)	535 (2.4)	53 (0.8)	501 (2.1)	13 (0.7)	473 (4.8)	10.7 (0.04)
Chinese Taipei	33 (0.9)	621 (2.7)	62 (0.9)	588 (2.1)	5 (0.3)	550 (6.3)	11.0 (0.03)
Hong Kong SAR	33 (1.2)	639 (3.4)	62 (1.1)	607 (2.8)	5 (0.4)	571 (7.8)	11.0 (0.04)
United Arab Emirates	31 (0.6)	491 (2.8)	55 (0.6)	447 (2.5)	14 (0.4)	403 (3.9)	10.7 (0.02)
Qatar	r 31 (1.0)	478 (3.9)	55 (0.9)	438 (3.8)	15 (0.8)	408 (7.0)	10.6 (0.04)
Poland	29 (0.9)	564 (2.9)	56 (1.0)	528 (2.2)	15 (0.6)	505 (3.6)	10.5 (0.03)
Japan	28 (0.7)	624 (2.4)	61 (0.9)	589 (2.1)	11 (0.6)	545 (3.7)	10.7 (0.03)
Croatia	28 (0.8)	534 (2.5)	58 (0.9)	495 (2.0)	15 (0.7)	471 (3.7)	10.5 (0.03)
Oman	26 (0.6)	459 (3.2)	59 (0.6)	423 (2.9)	14 (0.5)	383 (4.4)	10.4 (0.03)
Serbia	26 (0.8)	560 (3.6)	58 (1.3)	515 (3.5)	16 (1.3)	462 (10.5)	10.4 (0.05)
Saudi Arabia	25 (1.0)	399 (4.5)	54 (1.1)	386 (4.4)	21 (1.2)	364 (5.8)	10.2 (0.06)
Canada	r 25 (0.9)	550 (2.6)	57 (0.9)	514 (1.8)	19 (0.6)	488 (4.0)	10.3 (0.04)
Kazakhstan	22 (1.2)	567 (6.3)	65 (1.1)	540 (4.4)	13 (0.9)	526 (6.2)	10.4 (0.05)
Finland	22 (0.7)	581 (2.4)	49 (0.8)	539 (2.2)	29 (0.8)	501 (2.8)	9.9 (0.03)
Kuwait	r 21 (1.0)	403 (6.2)	57 (0.7)	357 (4.4)	22 (0.8)	319 (5.0)	10.1 (0.05)
Sweden	21 (0.8)	559 (3.9)	57 (0.9)	522 (2.9)	22 (0.7)	494 (3.8)	10.1 (0.04)
Lithuania	20 (0.8)	583 (3.7)	62 (1.0)	537 (2.4)	17 (0.8)	491 (3.9)	10.2 (0.03)
Indonesia	20 (0.9)	445 (3.9)	60 (1.3)	399 (3.6)	20 (1.8)	353 (5.9)	10.1 (0.08)
Bulgaria	17 (0.8)	562 (4.0)	48 (1.5)	530 (3.9)	34 (1.9)	501 (10.2)	9.4 (0.09)
Chile	r 17 (0.7)	505 (3.6)	59 (0.9)	465 (2.3)	24 (1.0)	432 (3.5)	9.9 (0.04)
Russian Federation	17 (0.9)	601 (4.3)	59 (1.0)	568 (3.8)	24 (1.0)	531 (4.4)	9.9 (0.05)
South Africa (5)	17 (0.7)	422 (5.5)	63 (1.1)	376 (3.5)	20 (1.3)	338 (4.3)	10.0 (0.05)
Turkey	16 (0.9)	512 (4.8)	40 (1.1)	493 (3.2)	44 (1.6)	466 (4.6)	9.1 (0.09)
Morocco	15 (0.9)	428 (4.0)	48 (1.3)	380 (4.0)	36 (1.7)	357 (5.8)	9.1 (0.10)
Cyprus	15 (0.6)	562 (5.1)	59 (0.9)	526 (2.7)	26 (0.9)	505 (3.2)	9.8 (0.03)
Iran, Islamic Rep. of	12 (0.7)	477 (4.4)	54 (1.6)	438 (4.1)	34 (1.7)	408 (5.2)	9.4 (0.08)
Czech Republic	10 (0.4)	570 (4.3)	54 (0.8)	531 (2.4)	35 (0.9)	514 (2.9)	9.4 (0.03)
France	10 (0.6)	519 (5.1)	59 (0.9)	497 (3.1)	31 (0.9)	471 (3.5)	9.5 (0.03)
Georgia	9 (0.6)	497 (5.4)	54 (1.0)	469 (3.9)	36 (1.0)	447 (5.3)	9.3 (0.04)
New Zealand	s 9 (0.6)	557 (6.8)	50 (0.9)	521 (2.5)	41 (1.1)	490 (4.2)	9.2 (0.04)
Portugal	8 (0.8)	574 (5.2)	55 (0.8)	545 (2.5)	37 (1.0)	529 (3.0)	9.3 (0.04)
Hungary	8 (0.5)	578 (5.8)	41 (0.8)	532 (4.2)	52 (0.9)	520 (3.4)	8.8 (0.04)
Slovenia	s 7 (0.6)	574 (7.4)	41 (1.0)	540 (2.6)	52 (0.9)	514 (2.8)	8.8 (0.03)
Italy	7 (0.5)	542 (5.4)	47 (0.9)	513 (3.0)	46 (0.9)	500 (2.9)	9.0 (0.04)
Germany	s 5 (0.5)	559 (7.3)	45 (1.1)	536 (2.7)	50 (1.2)	526 (2.6)	8.9 (0.03)
Denmark	4 (0.4)	580 (6.2)	52 (0.9)	550 (2.8)	43 (1.0)	528 (3.8)	9.0 (0.03)
Slovak Republic	4 (0.4)	541 (10.5)	41 (0.9)	508 (3.2)	55 (1.0)	489 (3.1)	8.6 (0.04)
Belgium (Flemish)	4 (0.3)	554 (5.5)	44 (1.0)	549 (2.5)	52 (1.1)	547 (2.2)	8.7 (0.03)
Australia	x x	x x	x x	x x	x x	x x	x x
Netherlands	x x	x x	x x	x x	x x	x x	x x
Norway (5)	x x	x x	x x	x x	x x	x x	x x
England	--	--	--	--	--	--	--
Northern Ireland	--	--	--	--	--	--	--
United States	--	--	--	--	--	--	--
International Avg.	21 (0.1)	537 (0.7)	53 (0.2)	501 (0.5)	25 (0.2)	470 (0.8)	

SOURCE: IEA's Trends in International Mathematics and Science Study – TIMSS 2015

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 dash (-) indicates comparable data not available.

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 that data are available for less than 50% of students.

Exhibit 4.9: Could Do Literacy and Numeracy Tasks When Began Primary School (Continued)

Country	Very Well		Moderately Well		Not Well		Average Scale Score
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	
Benchmarking Participants							
Dubai, UAE	35 (0.9)	538 (2.5)	54 (1.0)	505 (1.8)	11 (0.5)	469 (4.7)	10.8 (0.03)
Ontario, Canada	r 31 (1.6)	552 (3.2)	56 (1.6)	512 (2.1)	14 (0.6)	472 (4.5)	10.6 (0.06)
Abu Dhabi, UAE	28 (1.1)	471 (6.3)	55 (1.0)	418 (4.9)	16 (0.9)	367 (6.9)	10.5 (0.05)
Quebec, Canada	r 15 (1.0)	573 (6.0)	57 (1.4)	540 (3.7)	28 (1.2)	521 (5.3)	9.7 (0.05)
Buenos Aires, Argentina	x x	x x	x x	x x	x x	x x	x x
Norway (4)	x x	x x	x x	x x	x x	x x	x x
Florida, US	--	--	--	--	--	--	--

SOURCE: IEA's Trends in International Mathematics and Science Study – TIMSS 2015

How well could your child do the following when he/she began the first grade of primary/elementary school?

	Very well	Moderately well	Not very well	Not at all
1) Recognize most of the letters of the alphabet -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2) Read some words -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3) Read sentences -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4) Read a story-----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5) Write letters of the alphabet -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6) Write some words -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Could your child do the following when he/she began the first grade of primary/elementary school?

	Up to 100 or higher	Up to 20	Up to 10	Not at all
1) Count by himself/herself -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2) Recognize written numbers -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3) Write numbers -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Could your child do the following when he/she began the first grade of primary/elementary school?

	Yes	No
1) Do simple addition -----	<input type="radio"/>	<input type="radio"/>
2) Do simple subtraction -----	<input type="radio"/>	<input type="radio"/>

Very Well Moderately Well Not Well

11.5 8.7