

## Exhibit 5.1.6: Teachers Majored in Primary Education and Mathematics – Teachers' Reports

**About the Index**

**Major in Primary Education and Major (or Specialization) in Mathematics:** Teachers majored in primary education and majored or specialized in mathematics

**Major in Primary Education but No Major (or Specialization) in Mathematics:** Teachers majored in primary education but did not major or specialize in mathematics

**Major in Mathematics but No Major in Primary Education:** Teachers did not major in primary education but majored or specialized in mathematics

**All Other Majors:** Teachers did not major in primary education, did not major or specialize in mathematics, but completed post-secondary education (ISCED Level 4) or higher

**No Formal Education Beyond Upper-Secondary:** Teachers completed no higher than ISCED Level 3

Exhibit 5.1.7: Teachers Majored in Primary Education and Mathematics – Teachers' Reports

Country	Major in Primary Education and Major (or Specialization) in Mathematics		Major in Primary Education but No Major (or Specialization) in Mathematics		Major in Mathematics but No Major in Primary Education		All Other Majors		No Formal Education Beyond Upper-Secondary		
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	
Albania	r	36 (5.9)	516 (6.7)	51 (5.2)	500 (10.4)	0 ~	~ ~	1 ~	~ ~	12 (3.7)	521 (10.0)
Armenia		65 (4.4)	508 (3.5)	13 (3.1)	506 (10.0)	16 (3.3)	528 (9.0)	1 ~	~ ~	5 (2.1)	508 (9.4)
Australia	r	12 (2.9)	533 (8.3)	83 (3.4)	527 (3.5)	1 ~	~ ~	5 (1.7)	528 (17.3)	0 ~	~ ~
Azerbaijan	r	74 (3.4)	498 (4.9)	12 (2.2)	503 (10.5)	8 (2.2)	483 (16.1)	2 ~	~ ~	3 (1.4)	472 (18.5)
Bahrain		55 (3.8)	464 (6.4)	5 (1.8)	483 (22.5)	34 (3.1)	454 (7.4)	5 (1.9)	477 (22.0)	1 ~	~ ~
Belgium (French)	r	22 (2.6)	488 (6.6)	73 (2.9)	495 (3.1)	1 ~	~ ~	2 ~	~ ~	2 ~	~ ~
Bosnia & Herzegovina	r	44 (5.2)	451 (5.6)	52 (5.0)	446 (4.1)	1 ~	~ ~	3 (1.3)	459 (13.9)	0 ~	~ ~
Brazil		45 (3.3)	408 (6.0)	40 (3.2)	391 (5.4)	2 ~	~ ~	8 (2.0)	417 (24.3)	6 (1.4)	391 (12.6)
Bulgaria		17 (2.9)	546 (8.4)	78 (3.3)	528 (4.4)	2 ~	~ ~	3 (1.5)	513 (33.9)	0 ~	~ ~
Canada		13 (1.3)	514 (6.7)	72 (2.1)	503 (2.4)	2 ~	~ ~	12 (1.7)	494 (5.5)	0 ~	~ ~
Chile		71 (3.7)	446 (3.7)	28 (3.8)	438 (6.5)	1 ~	~ ~	0 ~	~ ~	0 ~	~ ~
Chinese Taipei		37 (3.8)	607 (3.1)	43 (4.0)	608 (2.4)	3 (1.3)	596 (6.5)	17 (2.7)	605 (3.8)	0 ~	~ ~
Cyprus		20 (2.8)	521 (5.4)	79 (2.7)	514 (3.1)	1 ~	~ ~	1 ~	~ ~	0 ~	~ ~
Czech Republic		2 ~	~ ~	78 (2.5)	531 (2.4)	3 (1.3)	532 (19.6)	14 (2.2)	530 (6.6)	3 (1.0)	537 (11.5)
Denmark	r	25 (3.3)	517 (4.1)	13 (2.6)	529 (6.9)	48 (3.6)	527 (3.4)	9 (2.0)	526 (5.3)	5 (1.5)	522 (9.3)
England	r	17 (4.0)	558 (10.2)	57 (4.9)	550 (4.7)	3 (1.5)	564 (27.4)	20 (3.9)	551 (10.9)	2 ~	~ ~
Finland		7 (1.7)	546 (7.3)	81 (2.7)	530 (2.7)	1 ~	~ ~	8 (1.6)	522 (10.1)	2 ~	~ ~
France	r	11 (2.4)	479 (7.7)	27 (3.0)	488 (4.6)	16 (2.5)	491 (7.0)	45 (3.6)	482 (4.9)	1 ~	~ ~
Georgia		72 (3.5)	498 (3.7)	3 (1.3)	469 (15.1)	21 (3.1)	503 (7.1)	3 (1.2)	495 (26.4)	1 ~	~ ~
Germany		65 (3.4)	526 (3.1)	25 (3.3)	526 (5.6)	4 (1.3)	509 (10.4)	5 (1.5)	488 (7.9)	2 ~	~ ~
Hong Kong SAR	r	62 (4.0)	599 (5.0)	15 (3.4)	565 (9.4)	10 (2.6)	602 (11.2)	12 (4.4)	605 (28.6)	0 ~	~ ~
Hungary	r	5 (1.8)	543 (18.7)	94 (2.1)	518 (4.5)	0 ~	~ ~	1 ~	~ ~	0 ~	~ ~
Iran, Islamic Rep. of		24 (2.8)	421 (9.1)	28 (2.8)	413 (5.4)	15 (2.8)	433 (13.7)	29 (3.1)	421 (8.2)	5 (1.5)	398 (29.7)
Ireland		7 (1.8)	546 (7.6)	90 (2.5)	545 (3.3)	0 ~	~ ~	4 (1.6)	560 (7.4)	0 ~	~ ~
Italy		9 (1.9)	519 (12.1)	9 (1.9)	514 (7.0)	4 (1.4)	508 (12.5)	24 (2.9)	513 (4.9)	54 (3.1)	512 (3.9)
Japan		14 (2.8)	589 (7.2)	73 (3.4)	588 (2.7)	1 ~	~ ~	12 (2.4)	604 (6.2)	0 ~	~ ~
Jordan		18 (3.4)	426 (15.8)	0 ~	~ ~	68 (4.1)	428 (5.8)	9 (2.4)	428 (14.3)	5 (2.0)	421 (36.8)
Kazakhstan		77 (2.8)	484 (3.9)	19 (2.6)	497 (10.8)	1 ~	~ ~	0 ~	~ ~	4 (1.1)	472 (15.5)
Korea, Rep. of		13 (2.7)	610 (4.0)	85 (2.7)	592 (3.0)	1 ~	~ ~	2 ~	~ ~	0 ~	~ ~
Kosovo	r	42 (4.3)	457 (5.4)	48 (4.4)	459 (4.4)	5 (1.4)	455 (10.4)	5 (2.0)	430 (51.5)	1 ~	~ ~
Kuwait		46 (4.1)	374 (6.4)	3 (1.1)	445 (34.6)	48 (3.8)	379 (8.4)	2 ~	~ ~	1 ~	~ ~
Latvia		44 (3.9)	533 (4.3)	42 (4.0)	539 (3.7)	7 (2.3)	531 (18.1)	4 (1.5)	516 (13.3)	3 (1.3)	541 (8.1)
Lithuania		15 (2.7)	564 (6.9)	82 (2.9)	560 (3.5)	0 ~	~ ~	3 (1.1)	558 (14.7)	1 ~	~ ~
Macao SAR		43 (0.1)	594 (1.4)	32 (0.1)	571 (1.8)	4 (0.1)	608 (3.8)	21 (0.1)	572 (2.3)	0 ~	~ ~
Montenegro		48 (2.9)	479 (3.2)	38 (3.0)	475 (3.7)	6 (1.4)	471 (7.8)	7 (1.4)	479 (7.3)	0 ~	~ ~
Morocco	s	4 (1.7)	374 (14.6)	10 (2.7)	399 (9.5)	14 (3.0)	403 (14.7)	43 (4.6)	385 (9.8)	29 (4.2)	394 (11.2)
New Zealand	s	10 (2.3)	501 (7.7)	80 (3.4)	496 (4.4)	1 ~	~ ~	9 (2.5)	488 (11.5)	0 ~	~ ~
North Macedonia	s	34 (4.4)	470 (9.2)	45 (4.2)	482 (6.1)	7 (1.6)	470 (11.5)	13 (2.7)	462 (11.6)	2 ~	~ ~
Norway (5)	r	62 (4.0)	533 (2.7)	28 (3.7)	528 (4.1)	5 (1.4)	534 (9.2)	5 (1.7)	523 (12.5)	0 ~	~ ~
Oman		47 (3.7)	420 (6.1)	7 (1.8)	433 (21.8)	27 (3.0)	436 (8.5)	19 (2.6)	402 (8.0)	1 ~	~ ~
Poland		10 (2.0)	527 (6.3)	0 ~	~ ~	89 (2.1)	548 (2.1)	0 ~	~ ~	0 ~	~ ~
Portugal		43 (3.3)	519 (5.5)	56 (3.3)	516 (3.5)	0 ~	~ ~	0 ~	~ ~	0 ~	~ ~
Qatar		34 (3.8)	461 (5.5)	18 (2.4)	506 (9.2)	38 (3.6)	446 (6.6)	9 (2.0)	458 (15.0)	1 ~	~ ~
Romania	r	41 (4.4)	549 (8.7)	36 (4.0)	548 (5.9)	4 (1.8)	518 (28.3)	12 (3.1)	547 (14.4)	7 (2.7)	512 (23.1)
Saudi Arabia		43 (3.8)	422 (7.5)	8 (2.1)	413 (14.1)	44 (3.8)	423 (5.9)	4 (1.4)	408 (28.7)	2 ~	~ ~
Serbia		37 (3.5)	529 (6.3)	63 (3.5)	520 (3.7)	0 ~	~ ~	0 ~	~ ~	0 ~	~ ~
Singapore		61 (2.6)	612 (4.0)	8 (1.6)	630 (8.5)	16 (2.2)	623 (7.9)	13 (1.9)	609 (6.0)	1 ~	~ ~
Slovak Republic		25 (2.9)	521 (6.1)	66 (3.3)	511 (4.7)	5 (1.7)	504 (11.6)	4 (1.3)	536 (9.2)	0 ~	~ ~
Slovenia		13 (2.4)	511 (5.5)	86 (2.5)	514 (2.0)	0 ~	~ ~	1 ~	~ ~	0 ~	~ ~
South Africa (5)	r	48 (3.8)	364 (8.0)	13 (2.6)	393 (22.6)	19 (3.0)	351 (10.2)	8 (2.1)	352 (19.0)	12 (2.6)	339 (12.2)
Spain		25 (2.3)	500 (4.3)	66 (2.8)	498 (2.5)	1 ~	~ ~	7 (1.5)	497 (8.8)	0 ~	~ ~
Sweden		80 (3.2)	529 (3.3)	10 (2.4)	530 (10.7)	6 (1.8)	522 (11.4)	4 (1.3)	535 (9.6)	1 ~	~ ~
Türkiye (5)		60 (4.1)	548 (5.8)	0 ~	~ ~	39 (4.2)	564 (6.6)	1 ~	~ ~	0 ~	~ ~
United Arab Emirates		34 (1.7)	492 (4.0)	18 (0.8)	510 (4.6)	39 (1.7)	500 (3.4)	9 (0.8)	508 (7.7)	0 ~	~ ~
United States		12 (1.8)	518 (10.5)	71 (2.7)	518 (3.8)	2 ~	~ ~	15 (2.0)	517 (7.4)	0 ~	~ ~
Uzbekistan		63 (4.1)	446 (4.2)	32 (4.1)	442 (5.0)	2 ~	~ ~	1 ~	~ ~	3 (1.3)	416 (30.9)
<b>International Average</b>		<b>35 (0.4)</b>	<b>504 (1.0)</b>	<b>41 (0.4)</b>	<b>504 (1.3)</b>	<b>12 (0.3)</b>	<b>498 (2.1)</b>	<b>9 (0.3)</b>	<b>500 (2.6)</b>	<b>3 (0.2)</b>	<b>464 (4.8)</b>
Belgium (Flemish)		--	--	--	--	--	--	--	--	--	--
Netherlands		--	--	--	--	--	--	--	--	--	--
<b>Benchmarking Participants</b>											
Ontario, Canada	r	18 (2.4)	520 (9.5)	62 (3.8)	501 (4.8)	2 ~	~ ~	18 (3.4)	496 (7.6)	0 ~	~ ~
Quebec, Canada		5 (1.6)	506 (11.8)	89 (2.4)	515 (3.1)	1 ~	~ ~	5 (1.8)	516 (13.3)	0 ~	~ ~
Abu Dhabi, UAE		38 (2.2)	451 (5.8)	22 (1.8)	469 (7.4)	30 (2.3)	470 (5.5)	9 (1.6)	449 (16.1)	0 ~	~ ~
Dubai, UAE		32 (3.2)	553 (5.9)	24 (1.7)	566 (3.2)	30 (3.1)	560 (5.8)	13 (1.7)	562 (6.2)	0 ~	~ ~
Sharjah, UAE		34 (5.1)	500 (4.4)	9 (1.3)	500 (8.2)	50 (5.0)	508 (6.1)	7 (0.6)	499 (7.0)	0 ~	~ ~

( ) Standard errors appear in parentheses. Because of rounding some results may appear inconsistent.  
 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.  
 A dash (-) indicates comparable data not available. A tilde (~) indicates insufficient data to report result.