

APPENDIX

C

Percentiles and Standard
Deviations of Mathematics
Achievement





		5th Percentile	25th Percentile	50th Percentile	75th Percentile	95th Percentile
States						
	Connecticut					
	Idaho					
	Illinois					
	Indiana					
	Maryland					
	Massachusetts					
	Michigan					
	Missouri					
	North Carolina					
(11.0)	Oregon (9.9)	567 (8.8)	649 (14.0)			
(10.7)	Pennsylvania	551 (7.1)	616 (7.4)			
(6.7)	South Carolina	563 (9.5)	645 (10.3)			
(6.6)	Texas (6.8)	566 (8.4)	639 (6.8)			
(7.5)	(8.2)	559 (6.2)	632 (6.9)			
(6.7)	(5.5)	568 (5.4)	642 (7.9)			
(7.8)	Academy School Dist. #20, CO (7.8)	574 (7.5)	641 (8.1)			
(6.7)	Chicago Public Schools, IL (4.9)	542 (6.4)	610 (8.8)			
(7.8)	Delaware Science Coalition, DE (9.8)	555 (7.6)	629 (9.2)			
(8.2)	First in the World Consort., IL (4.9)	570 (4.6)	642 (7.9)			
(8.6)	Fremont/Lincoln/WestSide PS, NE (5.8)	563 (5.7)	637 (12.8)			
(9.0)	Guilford County, NC (9.1)	567 (8.4)	647 (10.0)			
(13.3)	Jersey City Public Schools, NJ (10.8)	581 (9.2)	654 (6.5)			
	Miami-Dade County PS, FL					
	Michigan Invitational Group, MI					
(3.3)	Montgomery County, MD (6.6)	579 (2.1)	647 (4.6)			
(10.1)	Naperville Sch. Dist. #203, IL (8.7)	515 (7.1)	588 (7.0)			
(7.9)	Project SMART Consortium, OH (9.5)	540 (11.1)	619 (7.9)			
(0.1)	Rochester City Sch. Dist., NY (3.8)	610 (1.6)	684 (1.0)			
(11.1)	SW MathSci. Collaborative, PA (11.8)	504 (7.2)	627 (21.3)			
(12.0)		519 (10.5)	572 (9.1)	644 (14.3)		
(7.0)		474 (9.0)	531 (9.1)	619 (16.7)		
(9.5)		420 (9.0)	489 (8.1)	585 (12.3)		
(9.2)		537 (5.0)	580 (8.6)	649 (7.5)		
(3.3)		544 (3.2)	595 (5.4)	665 (15.2)		
(2.6)		569 (4.5)	614 (3.9)	681 (5.0)		
(9.8)		520 (8.6)	576 (9.9)	642 (7.1)(12.0)		
		442	497	585		
		519	572	649		



	Overall		Girls		Boys	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
United States	502 (4.0)	88 (2.4)	498 (3.9)	84 (2.1)	505 (4.8)	91 (3.0)
Australia	525 (4.8)	80 (2.9)	524 (5.7)	77 (3.8)	526 (5.7)	83 (3.3)
Belgium (Flemish)	558 (3.3)	77 (2.8)	560 (7.2)	74 (4.8)	556 (8.3)	79 (5.6)
Bulgaria	511 (5.8)	86 (3.8)	510 (5.9)	84 (3.5)	511 (6.9)	88 (4.7)
Canada	531 (2.5)	73 (1.7)	529 (2.5)	72 (1.9)	533 (3.2)	74 (1.7)
Chile	392 (4.4)	85 (3.5)	388 (4.3)	82 (2.9)	397 (5.8)	89 (4.2)
Chinese Taipei	585 (4.0)	104 (1.8)	583 (3.9)	98 (2.4)	587 (5.3)	110 (2.1)
Cyprus	476 (1.8)	82 (1.7)	479 (2.1)	77 (2.2)	474 (2.7)	85 (1.9)
Czech Republic	520 (4.2)	79 (2.4)	512 (4.0)	78 (2.6)	528 (5.8)	80 (2.9)
England	496 (4.1)	83 (2.2)	487 (5.4)	79 (3.5)	505 (5.0)	86 (2.8)
Finland	520 (2.7)	65 (1.3)	519 (3.0)	63 (1.7)	522 (3.5)	68 (1.7)
Hong Kong, SAR	582 (4.3)	73 (3.0)	583 (4.7)	69 (2.8)	581 (5.9)	77 (4.4)
Hungary	532 (3.7)	85 (2.0)	529 (4.0)	82 (2.3)	535 (4.3)	88 (2.6)
Indonesia	403 (4.9)	101 (2.9)	401 (5.4)	102 (3.4)	405 (5.0)	101 (3.1)
Iran, Islamic Rep.	422 (3.4)	83 (2.3)	408 (4.2)	81 (2.5)	432 (4.8)	83 (2.5)
Israel	466 (3.9)	96 (2.6)	459 (4.2)	90 (2.4)	474 (4.8)	100 (3.8)
Italy	479 (3.8)	87 (2.3)	475 (4.5)	85 (2.8)	484 (4.3)	88 (2.8)
Japan	579 (1.7)	80 (1.1)	575 (2.4)	76 (2.1)	582 (2.3)	82 (1.3)
Jordan	428 (3.6)	103 (1.6)	431 (4.7)	96 (2.3)	425 (5.9)	109 (2.2)
Korea, Rep. of	587 (2.0)	79 (1.0)	585 (3.1)	79 (1.3)	590 (2.2)	80 (1.6)
Latvia (LSS)	505 (3.4)	78 (2.0)	502 (3.8)	75 (2.6)	508 (4.4)	81 (2.4)
Lithuania	482 (4.3)	78 (2.6)	480 (4.7)	76 (3.2)	483 (4.8)	80 (3.2)
Macedonia, Rep. of	447 (4.2)	93 (2.5)	446 (5.3)	92 (3.0)	447 (4.3)	94 (2.8)
Malaysia	519 (4.4)	81 (2.0)	521 (4.7)	79 (2.2)	517 (6.0)	83 (2.6)
Moldova	469 (3.9)	85 (2.1)	468 (4.1)	83 (2.6)	471 (4.7)	87 (2.6)
Morocco	337 (2.6)	91 (2.0)	326 (5.3)	90 (3.5)	344 (4.1)	91 (2.0)
Netherlands	540 (7.1)	73 (4.2)	538 (7.6)	73 (4.4)	542 (7.0)	74 (4.3)
New Zealand	491 (5.2)	89 (2.3)	495 (5.5)	87 (2.9)	487 (7.6)	91 (3.0)
Philippines	345 (6.0)	97 (2.8)	352 (6.9)	96 (4.1)	337 (6.5)	98 (2.8)
Romania	472 (5.8)	93 (3.5)	475 (6.3)	90 (3.8)	470 (6.2)	96 (3.8)
Russian Federation	526 (5.9)	86 (3.0)	526 (6.0)	83 (3.0)	526 (6.4)	90 (3.8)
Singapore	604 (6.3)	79 (2.9)	603 (6.1)	76 (3.0)	606 (7.5)	82 (3.3)
Slovak Republic	534 (4.0)	75 (1.6)	532 (4.2)	72 (1.9)	536 (4.5)	79 (2.3)
Slovenia	530 (2.8)	83 (2.0)	529 (3.0)	79 (1.9)	531 (3.6)	86 (2.8)
South Africa	275 (6.8)	109 (4.7)	267 (7.5)	110 (5.1)	283 (7.3)	108 (4.7)
Thailand	467 (5.1)	85 (2.5)	469 (5.7)	84 (2.8)	465 (5.5)	86 (2.9)
Tunisia	448 (2.4)	64 (0.9)	436 (2.4)	64 (1.2)	460 (2.9)	61 (1.3)
Turkey	429 (4.3)	86 (2.0)	428 (4.7)	83 (2.1)	429 (4.4)	87 (2.4)

SOURCE: IEA Third International Mathematics and Science Study (TIMSS), 1998-1999.

() Standard errors appear in parentheses.

	Overall		Girls		Boys	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
States						
Connecticut	512 (9.1)	85 (4.8)	506 (8.9)	81 (4.2)	520 (9.8)	89 (5.9)
Idaho	495 (7.4)	82 (3.4)	495 (7.1)	78 (3.0)	495 (8.2)	86 (4.7)
Illinois	509 (6.7)	82 (2.6)	505 (8.0)	81 (3.5)	514 (6.1)	83 (3.2)
Indiana	515 (7.2)	76 (2.4)	510 (6.8)	72 (3.0)	519 (8.0)	80 (3.4)
Maryland	495 (6.2)	88 (3.5)	490 (6.4)	85 (3.7)	499 (6.8)	90 (3.9)
Massachusetts	513 (5.9)	82 (3.2)	510 (6.4)	79 (3.7)	517 (6.0)	84 (3.2)
Michigan	517 (7.5)	81 (3.8)	512 (7.2)	77 (3.6)	522 (8.1)	85 (4.5)
Missouri	490 (5.3)	77 (2.9)	488 (5.9)	74 (3.3)	491 (5.6)	81 (3.4)
North Carolina	495 (7.0)	84 (2.6)	494 (7.9)	82 (2.7)	497 (6.9)	86 (3.4)
Oregon	514 (6.0)	83 (2.6)	514 (6.6)	79 (3.2)	514 (6.9)	86 (2.9)
Pennsylvania	507 (6.3)	82 (3.0)	503 (6.2)	77 (3.3)	512 (7.2)	86 (3.1)
South Carolina	502 (7.4)	90 (3.1)	501 (8.0)	85 (3.0)	502 (7.6)	95 (4.1)
Texas	516 (9.1)	90 (3.6)	513 (8.2)	86 (3.3)	519 (10.7)	95 (4.7)
Districts and Consortia						
Academy School Dist. #20, CO	528 (1.8)	74 (1.7)	526 (2.9)	71 (2.3)	531 (3.4)	77 (2.6)
Chicago Public Schools, IL	462 (6.1)	76 (3.0)	460 (6.3)	74 (3.4)	465 (6.7)	79 (3.5)
Delaware Science Coalition, DE	479 (8.9)	90 (4.3)	475 (8.9)	85 (4.1)	485 (11.1)	94 (5.9)
First in the World Consort., IL	560 (5.8)	77 (4.3)	556 (6.7)	74 (3.5)	564 (6.8)	80 (6.5)
Fremont/Lincoln/WestSide PS, NE	488 (8.2)	89 (6.1)	485 (8.3)	88 (8.9)	491 (10.2)	89 (6.3)
Guilford County, NC	514 (7.7)	85 (3.2)	507 (8.3)	82 (4.2)	521 (8.2)	87 (3.3)
Jersey City Public Schools, NJ	475 (8.6)	87 (4.5)	472 (8.8)	87 (4.7)	478 (9.2)	87 (6.3)
Miami-Dade County PS, FL	421 (9.4)	99 (4.0)	419 (9.3)	93 (5.7)	423 (12.1)	104 (3.8)
Michigan Invitational Group, MI	532 (5.8)	73 (3.6)	535 (5.4)	71 (3.6)	529 (7.4)	74 (4.3)
Montgomery County, MD	537 (3.5)	86 (2.9)	534 (5.5)	86 (6.0)	540 (4.4)	85 (3.4)
Naperville Sch. Dist. #203, IL	569 (2.8)	69 (2.0)	566 (3.3)	68 (3.1)	573 (3.3)	69 (2.6)
Project SMART Consortium, OH	521 (7.5)	77 (3.6)	518 (7.8)	76 (4.1)	523 (8.1)	77 (4.0)
Rochester City Sch. Dist., NY	444 (6.5)	82 (4.5)	439 (7.8)	78 (4.6)	450 (6.6)	85 (5.4)
SW Math/Sci. Collaborative, PA	517 (7.5)	82 (3.7)	509 (7.5)	80 (4.0)	525 (8.5)	83 (3.9)

SOURCE: IEA Third International Mathematics and Science Study (TIMSS), 1998-1999.

