

**Exhibit M9.3: Students Attended Extra Tutoring in Advanced Mathematics
Not Provided by the School**

Reported by Advanced Mathematics Students

Country	Students Did Not Attend Extra Tutoring		Students Attended Extra Tutoring		Reasons for Attending Extra Tutoring (Students Could Indicate More than One)					
					To Excel in Class		To Keep Up in Class		To Do Well on an Examination	
	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
France	65 (1.0)	476 (3.2)	35 (1.0)	438 (3.6)	10 (0.6)	468 (5.2)	23 (0.9)	426 (3.5)	28 (0.8)	436 (3.5)
Italy	67 (1.2)	434 (5.7)	33 (1.2)	397 (6.4)	5 (0.4)	414 (11.0)	23 (0.9)	383 (6.4)	18 (0.9)	402 (6.9)
Lebanon	84 (1.4)	540 (3.0)	16 (1.4)	494 (5.5)	7 (0.8)	501 (9.3)	5 (0.6)	472 (8.4)	10 (1.1)	486 (6.0)
Norway	93 (0.8)	462 (4.6)	7 (0.8)	428 (7.8)	4 (0.8)	432 (10.7)	4 (0.5)	409 (10.6)	5 (0.6)	429 (8.7)
Portugal	39 (1.5)	491 (3.4)	61 (1.5)	477 (2.6)	38 (1.3)	484 (3.3)	46 (1.4)	466 (2.8)	54 (1.6)	478 (2.7)
Russian Federation	33 (1.3)	491 (7.3)	67 (1.3)	482 (5.5)	23 (1.1)	488 (6.6)	18 (0.9)	461 (8.1)	64 (1.4)	481 (5.4)
Russian Federation 6hr+	38 (2.8)	553 (8.6)	62 (2.8)	533 (8.7)	21 (1.8)	533 (11.5)	15 (1.4)	500 (11.4)	60 (2.7)	532 (9.0)
Slovenia	70 (1.2)	481 (3.3)	30 (1.2)	414 (5.1)	11 (0.9)	424 (7.9)	17 (0.8)	396 (5.8)	25 (1.1)	410 (5.1)
Sweden	89 (0.7)	438 (4.0)	11 (0.7)	379 (7.5)	6 (0.4)	397 (7.1)	5 (0.4)	347 (9.4)	9 (0.6)	371 (7.1)
United States	88 (0.9)	489 (5.4)	12 (0.9)	462 (7.6)	8 (0.7)	463 (10.9)	9 (0.7)	448 (7.9)	10 (0.8)	462 (8.8)
International Avg.	70 (0.4)	478 (1.5)	30 (0.4)	441 (2.0)	12 (0.3)	452 (2.8)	17 (0.3)	423 (2.5)	25 (0.3)	439 (2.1)

The Russian Federation 6hr+ results are for a subset of the Russian Federation students. This subset of students are in an Intensive stream that have at least 6 hours of mathematics lessons per week.

() Standard errors appear in parentheses. Because of rounding some results may appear inconsistent.

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



IEA

TIMSS & PIRLS
International Study Center
Lynch School of Education, Boston College