

Exhibit P9.15: Resources for Conducting Physics Experiments

Reported by Physics Teachers

Country	Schools Have a Physics Laboratory				Teachers Have Assistance Available When Students Are Conducting Physics Experiments			
	Yes		No		Yes		No	
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement
France	99 (0.5)	375 (3.9)	1 (0.5)	~ ~	38 (3.1)	386 (5.8)	62 (3.1)	368 (4.6)
Portugal	95 (1.9)	464 (4.9)	5 (1.9)	452 (19.3)	6 (2.0)	448 (11.2)	94 (2.0)	466 (4.8)
Lebanon	94 (1.4)	412 (4.7)	6 (1.4)	396 (21.8)	51 (3.4)	415 (5.8)	49 (3.4)	404 (7.0)
Norway	92 (2.0)	506 (4.7)	8 (2.0)	495 (18.2)	6 (1.8)	505 (11.7)	94 (1.8)	505 (4.7)
Italy	90 (2.5)	388 (7.4)	10 (2.5)	300 (20.5)	r 61 (4.1)	385 (8.7)	39 (4.1)	368 (13.9)
Sweden	88 (2.3)	461 (6.3)	12 (2.3)	411 (21.1)	1 (0.8)	~ ~	99 (0.8)	455 (6.3)
Russian Federation	87 (2.6)	509 (7.4)	13 (2.6)	509 (13.6)	56 (5.0)	503 (8.6)	44 (5.0)	511 (12.7)
Slovenia	62 (4.0)	538 (3.8)	38 (4.0)	519 (5.7)	88 (1.4)	527 (2.5)	12 (1.4)	562 (12.2)
United States	s 59 (6.0)	463 (10.7)	41 (6.0)	405 (16.9)	s 6 (1.9)	443 (18.2)	94 (1.9)	439 (11.2)
International Avg.	85 (1.0)	457 (2.1)	15 (1.0)	436 (6.3)	35 (1.0)	452 (3.6)	65 (1.0)	453 (3.1)

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

A tilde (~) indicates insufficient data to report achievement.

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.

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