Exhibit P6.2: School Supports Advanced Mathematics and Physics Education – Principal Version

Reported by Principals

Students were scored according to their principals' degree of agreement with seven statements on the *School Supports Advanced Mathematics and Physics Education* scale. Students in schools where their principals reported that the school is **Strongly Supportive** of advanced mathematics and physics education had a score on the scale of at least 10.8, which corresponds to their principals "agreeing a lot" with four of the seven statements and "agreeing a little" with the other three, on average. Students in schools that are **Less than Supportive** of advanced mathematics and physics education had a score no higher than 6.5, which corresponds to their principals "disagreeing a little" with four of the seven statements and "agreeing a little" with the other three, on average. All other students attended schools that are **Supportive** of advanced mathematics and physics education.

Country	Strongly Supportive		Supportive		Less than Supportive		Average Scale Score
	Percent of Students	Average Achievement	Percent of Students	Average Achievement	Percent of Students	Average Achievement	
Russian Federation	79 (2.6)	521 (8.3)	21 (2.6)	456 (15.1)	0 (0.0)	~ ~	11.8 (0.11)
United States r	58 (6.0)	443 (16.4)	40 (6.0)	455 (12.1)	2 (1.1)	~ ~	10.8 (0.22)
Norway r	54 (5.7)	511 (6.2)	46 (5.7)	501 (6.5)	0 (0.0)	~ ~	10.9 (0.21)
Lebanon	39 (2.5)	410 (8.0)	59 (2.5)	411 (5.3)	2 (0.3)	~ ~	10.5 (0.10)
Portugal	34 (3.9)	468 (8.1)	61 (4.5)	467 (6.1)	5 (2.0)	465 (15.4)	10.0 (0.16)
Italy	29 (4.3)	385 (12.6)	67 (4.4)	369 (10.5)	4 (1.9)	377 (58.8)	9.7 (0.17)
Slovenia	10 (2.1)	591 (14.7)	90 (2.1)	525 (2.9)	0 (0.0)	~ ~	9.2 (0.06)
Sweden	8 (2.4)	449 (14.4)	77 (3.8)	461 (7.7)	15 (3.1)	412 (13.7)	8.5 (0.15)
France	8 (2.3)	400 (12.0)	84 (3.4)	369 (4.4)	8 (2.5)	360 (13.5)	8.7 (0.13)
International Avg.	35 (1.3)	464 (3.9)	61 (1.4)	446 (2.9)	4 (0.6)	403 (15.9)	

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

This TIMSS Advanced questionnaire scale was established in 2015 based on the combined response distribution of all countries that participated in TIMSS Advanced 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 tilde (~) indicates insufficient data to report achievement.

An "r" indicates data are available for at least 70% but less than 85% of the students.

How much do you agree with these statements about advanced mathematics and physics education within your school?