## Appendix G.3: Percentages of Students with Mathematics Achievement Too Low for Estimation\*



Country	eTIMSS		paperTIMSS	
	Percentage of Students with Achievement Too Low for Estimation	Average Percent Correct	Percentage of Students with Achievement Too Low for Estimation	Average Percent Correct
Australia			5 (0.4)	45 (1.0)
Bahrain			9 (0.4)	38 (0.4)
Ψ Chile	16 (0.8)	25 (0.5)		
Chinese Taipei	2 (0.2)	66 (0.6)		
Cyprus			5 (0.4)	41 (0.4)
Ψ Egypt			20 (1.1)	25 (0.9)
England	7 (0.8)	42 (1.3)		
Finland	5 (0.5)	39 (0.6)		
France	8 (0.5)	33 (0.5)		
Georgia	13 (1.0)	30 (0.9)		
Hong Kong SAR	3 (0.5)	58 (1.0)		
Hungary	6 (0.6)	42 (0.7)		
Iran, Islamic Rep. of			14 (0.5)	30 (0.8)
Ireland			3 (0.4)	47 (0.7)
Israel	6 (0.5)	44 (1.1)		
Italy	6 (0.5)	37 (0.6)		
Japan			1 (0.1)	65 (0.6)
Ψ Jordan			17 (1.2)	25 (0.7)
Kazakhstan			7 (0.5)	38 (0.9)
Korea, Rep. of	2 (0.3)	65 (0.6)		
Ψ Kuwait			21 (1.2)	23 (0.8)
Lebanon			14 (0.8)	26 (0.5)
Lithuania	5 (0.5)	43 (0.7)	14 (0.0)	20 (0.3)
Malaysia	14 (0.8)	30 (0.6)		
₩ Morocco	14 (0.8)	30 (0.6) 	25 (0.9)	19 (0.4)
New Zealand			9 (0.8)	37 (0.7)
Norway (9)	7 (0.5)	38 (0.5)	9 (0.8)	
	` '			
₩ Oman			21 (0.8)	25 (0.4)
Portugal	5 (0.6)	37 (0.7)		
Ψ Qatar	17 (0.8)	28 (0.8)		
Romania	 0 (0.4)		11 (0.9)	37 (1.0)
Russian Federation	3 (0.4)	49 (1.2)		
₩ Saudi Arabia			22 (0.8)	21 (0.3)
Singapore	1 (0.2)	68 (1.1)		
X South Africa (9)  → The state of the st			26 (0.7)	19 (0.3)
Sweden	6 (0.4)	38 (0.6)		
Turkey	10 (0.7)	39 (0.9)		
United Arab Emirates	13 (0.4)	34 (0.4)		
United States	7 (0.6)	43 (1.1)		
nchmarking Participants				
Ontario, Canada	4 (0.4)	45 (1.2)		
Quebec, Canada	1 (0.3)	48 (1.0)		
Moscow City, Russian Fed.	1 (0.2)	57 (1.1)		
Ψ Gauteng, RSA (9)			18 (0.8)	24 (0.6)
Ψ Western Cape, RSA (9)			16 (0.8)	28 (1.0)
Ψ Abu Dhabi, UAE	18 (0.7)	27 (0.5)	′	
Dubai, UAE	5 (0.4)	48 (0.5)		

<sup>\*</sup> Students were considered to have achievement too low for estimation if their performance on the assessment was no better than could be achieved by simply guessing on the multiple-choice assessment items. However, such students were assigned scale scores (plausible values) by the achievement scaling procedure, despite concerns about their reliability.

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Ψ Reservations about reliability because the percentage of students with achievement too low for estimation exceeds 15% but does not exceed 25%. Ж Reservations about reliability because the percentage of students with achievement too low for estimation exceeds 25%.

<sup>( )</sup> Standard errors appear in parentheses. Because of rounding some results may appear inconsistent. A dash (-) indicates comparable data not available.