

Figure 8. US 4th and 8th Grade Student Achievement in "Data Representation, Analysis" and "Probability". The TIMSS tests at both 4th and 8th grades had sub-tests that built on items from two categories in the TIMSS framework of mathematical topics. "Data representation and analysis" dealt with organizing data, creating graphs, and interpreting them as well as simple statistics such as means. "Probability" consisted mainly of problems and concepts in probability. As with earlier figures, three tiers of countries are identified. the US was in the middle tier at both grades. Far more countries scored significantly less well than the US at 4th grade. The high mean percentage of items correct for the US 4th grade may well reflect the impact of recent reforms such as the *NCTM Standards*.

Grade 4	
Nation	Percent Correct
Singapore	81
Korea	80
Japan	79
Hong Kong	76
(Netherlands)	75
United States	73
Ireland	69
Canada	68
(Australia)	67
Czech Republic	67
(Austria)	66
Scotland	66
England	64
(Israel)	64
(Slovenia)	64
New Zealand	61
(Hungary)	60
Norway	59
Iceland	58
(Thailand)	56
(Latvia (LSS))	54
Cyprus	52
Greece	50
Portugal	43
(Kuwait)	26
Iran, Islamic Republic	23

Grade 8	
Nation	Percent Correct
Singapore	79
Korea	78
Japan	78
Belgium-Flemish	73
Switzerland	72
(Netherlands)	72
Hong Kong	72
France	71
Sweden	70
Ireland	69
Canada	69
(Austria)	68
Czech Republic	68
(Belgium-French)	68
(Australia)	67
(Denmark)	67
Norway	66
New Zealand	66
(Slovenia)	66
England	66
Hungary	66
United States	65
(Scotland)	65
(Germany)	64
(Israel)	63
Iceland	63
(Thailand)	63
(Bulgaria)	62
Slovak Republic	62
Russian Federation	60
Spain	60
(Greece)	56
Latvia (LSS)	56
Portugal	54
Cyprus	53
Lithuania	52
(Romania)	49
Iran, Islamic Republic	41
(Kuwait)	38
(Colombia)	37
(South Africa)	26