

**Appendix 13. Estimates of the proportions of teachers at various levels of correlation
and match to the test scales.**

Table A13.1 tabulates the correlation coefficients for the majority of sites with students assessed by both teachers and tests for 1997 and 1998. The combined data include an estimated 600 teachers. About 120 teachers/sites are excluded on the basis of small number of students (<5) due to the relatively higher correlations that these very small sets generate. The tabulation is a very broad estimate only of the proportions of teachers in each cell.

Table A13.1 Estimates of the percentage of teachers in categories of correlation with the tests and rate of match to the test

Correlation Coefficient Category	Match Rate											Total	Accumulated %
	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0		
1			0.1%	0.4%	0.1%	0.1%		1.1%			1.2%	3.2%	3.2%
0.9	0.3%		0.6%	0.4%		2.4%	2.8%	2.5%	1.2%	0.7%	0.4%	11.2%	14.4%
0.8	0.1%	0.3%	1.7%	0.8%	1.1%	1.9%	8.2%	4.7%	5.1%	0.7%		24.6%	39.0%
0.7		0.3%		1.1%	2.8%	6.4%	4.3%	4.1%	1.0%	1.1%		21.0%	60.0%
0.6		1.1%		0.1%	2.6%	8.3%	6.1%	2.1%	2.1%		0.1%	22.5%	82.6%
0.5	0.1%	0.3%	0.1%		0.6%	1.2%	3.0%	1.1%	0.8%			7.3%	89.9%
0.4				1.1%	2.5%	0.7%	0.6%	1.2%				6.1%	96.0%
0.3				0.4%		0.4%		0.1%				1.0%	97.0%
0.2						1.1%						1.1%	98.1%
0.1			0.1%			0.4%		0.3%				0.8%	98.9%
0	0.1%											0.1%	99.0%
-0.1												0.0%	99.0%
-0.2				0.1%								0.1%	99.2%
-0.3								0.1%				0.1%	99.3%
-0.4				0.1%								0.1%	99.4%
-0.5				0.1%								0.1%	99.6%
-0.6												0.0%	99.6%
-0.7				0.3%								0.3%	99.9%
-0.8								0.1%				0.1%	100.0%
Total	0.7%	1.9%	2.6%	5.1%	9.7%	23%	25%	18%	10%	2.5%	1.8%	100.0%	
High Correlation													
Low Match	0.4%	0.6%	2.4%	2.8%	4.0%							10.1%	
Low Correlation													
Low Match	0.3%	1.4%	0.3%	2.4%	5.7%							10.0%	
High Correlation													
High Match						11%	15%	12%	7.3%	2.5%	1.7%	49.9%	
Low Correlation													
High Match						12%	9.7%	5.1%	2.9%	0.0%	0.1%	30.0%	

Estimates are of the proportions of teachers providing assessments in each of the categories of match. The data are a combination of the 1997 and 1998 cases. The correlation coefficients for each broad category are cross tabulated with the match rates to the test, that is the site specific match rate and correlation are weighted by the estimated number of teachers at the site. The site performance is ascribed to all the teachers estimated to be at the site. As a result the estimates diminish the variability in teacher performance.

Aggregating the data for both 1997 and 1998 hides some minor differences in the distribution of the matches and correlations by learning area. The values for correlations and match rates

are categorised by rounding to one decimal point, effectively centring the points on the listed values.

The table is segmented into four sectors on the basis of arbitrary definitions of High and Low correlation and High and Low match. High correlations are defined as those above 0.6 (about 60% of teachers), High matches are those 0.5 and above (about 80% of teachers). Cross checking shows that the mean match rate for all the teachers is 0.57, slightly higher than the expected match rate overall of about 0.54 established in Chapter 8. The mean match rate of the teachers with a 'high' match rate (estimated to be 80% of teachers) is 0.64. The mean match rate for the remaining 20% of teachers is 0.3. Combined for all teachers this can be shown to average out at 0.57 as above.

The tabulation indicates that the overall match rate is obtained from a wider range of teachers than the simple assumption that some teachers match for all assessments and some match for none. The relatively large proportion of teachers with greater than 0.5 match rates implies that those sites/teachers excluded due to small numbers of cases also had lower than average match rates.

An estimated ninety six percent of teachers have correlations with the test at 0.4 or higher. This highlights that teachers on the whole, order students in general terms in the same broad order as the test. When they do this they may not meet the criteria for a match. On the High/Low criteria in the table, 10% of teachers have 'high' correlations but low matches. This implies these 10% are displaced from the test scores in such a way that their assessments lay outside the control lines.