Appendix D

Parameters for IRT Analysis of PIRLS Achievement Data

Exhibit D.1 IRT Parameters for PIRLS Joint 2001-2006 Scaling of Overall Reading

Item	Slope (a_j)	Location (b_j)	Guessing (c_j)	Step 1 (d_{j1})	Step 2 (d_{j2})	Step 3 (d_{j3})
R011H01M	0.719 (0.063)	-1.516 (0.203)	0.315 (0.068)			
R011H02M	0.992 (0.067)	-1.410 (0.108)	0.207 (0.048)			
R011H03C	0.369 (0.020)	0.676 (0.047)		0.644 (0.065)	-0.644 (0.079)	
R011H04C	0.934 (0.041)	-1.117 (0.047)				
R011H05M	1.255 (0.078)	-1.002 (0.072)	0.208 (0.037)			
R011H06M	0.879 (0.060)	-0.503 (0.081)	0.159 (0.035)			
R011H07C	0.636 (0.025)	-0.613 (0.031)		0.276 (0.053)	-0.276 (0.040)	
R011H08C	0.821 (0.038)	-0.069 (0.030)				
R011H09C	0.774 (0.028)	-0.703 (0.029)		0.064 (0.049)	-0.064 (0.036)	
R011H10C	0.675 (0.019)	0.300 (0.018)		-0.164 (0.055)	1.105 (0.052)	-0.941 (0.047)
R011H11M	1.405 (0.086)	-0.483 (0.053)	0.195 (0.031)			
R011M01M	1.336 (0.093)	-0.658 (0.071)	0.334 (0.035)			
R011M02M	1.224 (0.085)	-1.234 (0.094)	0.311 (0.046)			
R011M03M	1.407 (0.093)	0.161 (0.038)	0.201 (0.020)			
R011M04C	0.807 (0.040)	0.591 (0.034)				
R011M05M	1.272 (0.084)	-0.523 (0.064)	0.267 (0.032)			
R011M06C	1.067 (0.036)	-0.555 (0.020)		0.281 (0.035)	-0.281 (0.025)	
R011M07C	1.128 (0.045)	-0.705 (0.031)				
R011M08M	1.198 (0.119)	0.657 (0.047)	0.270 (0.021)			
R011M09M	1.205 (0.073)	-0.680 (0.063)	0.189 (0.033)			
R011M10C	1.183 (0.056)	-1.566 (0.052)				
R011M11C	0.832 (0.040)	0.393 (0.030)				
R011M12C	0.621 (0.023)	0.541 (0.022)		0.768 (0.044)	-0.119 (0.048)	-0.649 (0.063)
R011M13M	0.958 (0.086)	-0.227 (0.098)	0.340 (0.039)			

( ) Standard errors appear in parentheses

Exhibit D.1 IRT Parameters for PIRLS Joint 2001-2006 Scaling of Overall Reading *(continued)*

Item	Slope (a_j)	Location (b_j)	Guessing (c_j)	Step 1 (d_{j1})	Step 2 (d_{j2})	Step 3 (d_{j3})
R011M14C	0.936 (0.040)	-0.402 (0.031)				
R021E01M	1.386 (0.114)	-1.132 (0.098)	0.381 (0.046)			
R021E02M	1.177 (0.092)	-0.422 (0.078)	0.298 (0.036)			
R021E03M	0.545 (0.059)	-0.174 (0.152)	0.163 (0.047)			
R021E04M	1.345 (0.103)	-1.204 (0.093)	0.303 (0.046)			
R021E05C	0.691 (0.024)	-0.446 (0.028)		-0.355 (0.056)	0.355 (0.047)	
R021E06M	1.355 (0.096)	-0.249 (0.056)	0.236 (0.029)			
R021E07C	0.677 (0.028)	-0.202 (0.027)		0.225 (0.049)	-0.225 (0.042)	
R021E08M	1.437 (0.110)	0.432 (0.035)	0.162 (0.019)			
R021E09C	0.607 (0.029)	0.604 (0.032)		0.531 (0.045)	-0.531 (0.056)	
R021E10C	1.072 (0.049)	-0.220 (0.029)				
R021E11M	0.874 (0.082)	0.126 (0.081)	0.203 (0.034)			
R021E12C	0.844 (0.035)	0.147 (0.021)		0.335 (0.037)	-0.335 (0.036)	
R021U01M	0.667 (0.076)	-0.248 (0.156)	0.278 (0.050)			
R021U02M	1.125 (0.079)	-0.920 (0.086)	0.213 (0.040)			
R021U03M	0.677 (0.072)	-0.099 (0.127)	0.217 (0.044)			
R021U04M	0.755 (0.077)	0.110 (0.097)	0.202 (0.037)			
R021U05C	1.008 (0.047)	-0.704 (0.039)				
R021U06C	0.922 (0.044)	-0.648 (0.040)				
R021U07M	0.740 (0.072)	-0.862 (0.170)	0.301 (0.058)			
R021U08C	0.985 (0.038)	-0.276 (0.021)		0.333 (0.038)	-0.333 (0.030)	
R021U09M	0.994 (0.090)	-0.264 (0.095)	0.304 (0.039)			
R021U10C	0.803 (0.042)	-0.966 (0.054)				
R021U11C	0.616 (0.026)	0.395 (0.022)		0.519 (0.052)	-0.345 (0.058)	-0.174 (0.065)
R021U12C	0.811 (0.036)	-0.156 (0.025)		0.455 (0.044)	-0.455 (0.036)	
R021Y01M	1.223 (0.105)	0.197 (0.055)	0.258 (0.027)			
R021Y02M	1.696 (0.121)	-0.191 (0.046)	0.281 (0.027)			
R021Y03C	0.897 (0.047)	0.490 (0.032)				
R021Y04M	1.282 (0.096)	0.098 (0.048)	0.203 (0.025)			
R021Y05M	1.806 (0.123)	0.098 (0.034)	0.214 (0.021)			
R021Y06M	1.719 (0.120)	0.121 (0.036)	0.218 (0.022)			
R021Y07M	0.889 (0.065)	-0.946 (0.106)	0.181 (0.044)			
R021Y08M	1.526 (0.109)	-0.272 (0.052)	0.269 (0.029)			
R021Y09C	1.005 (0.036)	-0.557 (0.024)		0.061 (0.043)	-0.061 (0.032)	
R021Y10C	0.821 (0.045)	0.465 (0.034)				
R021Y11M	1.553 (0.120)	0.035 (0.048)	0.288 (0.026)			
R021Y12C	0.752 (0.022)	0.003 (0.021)		-1.014 (0.059)	1.014 (0.057)	
R021Y13C	0.778 (0.030)	0.380 (0.018)		0.553 (0.042)	-0.237 (0.045)	-0.316 (0.052)
R021Y14C	0.625 (0.023)	0.206 (0.025)		-0.477 (0.055)	0.477 (0.055)	
R011C01C	1.366 (0.038)	-0.328 (0.017)				
R011C02C	0.857 (0.029)	0.239 (0.020)				

( ) Standard errors appear in parentheses

Exhibit D.1 IRT Parameters for PIRLS Joint 2001-2006 Scaling of Overall Reading *(continued)*

Item	Slope (a_j)	Location (b_j)	Guessing (c_j)	Step 1 (d_{j1})	Step 2 (d_{j2})	Step 3 (d_{j3})
R011C03C	1.367 (0.039)	-0.608 (0.020)				
R011C04M	1.373 (0.068)	0.197 (0.028)	0.182 (0.015)			
R011C05M	0.892 (0.064)	-0.186 (0.081)	0.359 (0.029)			
R011C06C	1.134 (0.033)	-0.253 (0.018)				
R011C07M	1.184 (0.061)	-0.464 (0.052)	0.268 (0.026)			
R011C08C	0.613 (0.016)	0.143 (0.017)		-0.310 (0.035)	0.310 (0.035)	
R011C09M	1.289 (0.073)	0.528 (0.027)	0.159 (0.014)			
R011C10C	0.657 (0.016)	0.124 (0.013)		0.192 (0.035)	-0.266 (0.038)	0.073 (0.037)
R011C11C	0.812 (0.021)	0.027 (0.016)		0.737 (0.027)	-0.737 (0.025)	
R011C12M	0.847 (0.058)	0.097 (0.064)	0.225 (0.027)			
R011C13M	0.954 (0.065)	0.261 (0.051)	0.227 (0.023)			
R011F01M	1.357 (0.059)	-0.601 (0.040)	0.192 (0.022)			
R011F02M	0.666 (0.041)	-0.757 (0.109)	0.188 (0.039)			
R011F03M	0.931 (0.043)	-0.778 (0.061)	0.143 (0.027)			
R011F04M	1.285 (0.060)	-0.921 (0.054)	0.240 (0.028)			
R011F05M	0.971 (0.053)	-0.377 (0.061)	0.236 (0.027)			
R011F06C	0.841 (0.027)	-0.409 (0.025)				
R011F07C	0.538 (0.013)	0.355 (0.019)		-0.799 (0.042)	0.799 (0.044)	
R011F08C	1.149 (0.034)	-0.280 (0.018)				
R011F09C	1.055 (0.026)	-0.697 (0.017)		0.071 (0.030)	-0.071 (0.021)	
R011F10C	0.913 (0.031)	-1.246 (0.039)				
R011F11M	0.735 (0.052)	0.199 (0.068)	0.175 (0.027)			
R011F12C	0.679 (0.018)	0.571 (0.017)		-0.303 (0.031)	0.303 (0.035)	
R011F13M	1.102 (0.063)	-0.035 (0.048)	0.240 (0.023)			
R011N01M	0.937 (0.074)	-0.342 (0.090)	0.269 (0.037)			
R011N02M	0.846 (0.079)	0.115 (0.085)	0.251 (0.034)			
R011N03M	1.082 (0.075)	-0.780 (0.086)	0.266 (0.040)			
R011N04M	1.234 (0.089)	0.324 (0.040)	0.170 (0.021)			
R011N05M	1.432 (0.096)	0.110 (0.040)	0.220 (0.022)			
R011N06M	1.872 (0.144)	0.708 (0.026)	0.175 (0.013)			
R011N07C	0.643 (0.027)	0.492 (0.026)		0.277 (0.040)	-0.277 (0.046)	
R011N08C	0.640 (0.025)	0.086 (0.026)		0.743 (0.043)	-0.743 (0.042)	
R011N09M	1.283 (0.080)	-0.485 (0.057)	0.208 (0.031)			
R011N10C	0.962 (0.049)	0.887 (0.037)				
R011N11M	1.185 (0.089)	0.260 (0.047)	0.198 (0.024)			
R011N12C	0.842 (0.029)	0.370 (0.019)		-0.035 (0.034)	0.035 (0.036)	
R011N13C	0.651 (0.037)	0.038 (0.037)				
R011R01M	0.828 (0.064)	-0.115 (0.079)	0.178 (0.033)			
R011R02M	1.262 (0.097)	0.400 (0.041)	0.213 (0.020)			
R011R03M	0.817 (0.062)	-1.216 (0.142)	0.268 (0.055)			
R011R04C	0.922 (0.040)	-1.175 (0.047)				

( ) Standard errors appear in parentheses

Exhibit D.1 IRT Parameters for PIRLS Joint 2001-2006 Scaling of Overall Reading *(continued)*

Item	Slope (a_j)	Location (b_j)	Guessing (c_j)	Step 1 (d_{j1})	Step 2 (d_{j2})	Step 3 (d_{j3})
R011R05C	1.130 (0.045)	-0.798 (0.032)				
R011R06C	0.651 (0.020)	-0.356 (0.024)		-0.492 (0.051)	0.492 (0.046)	
R011R07C	1.042 (0.043)	0.010 (0.024)				
R011R08C	0.861 (0.031)	0.130 (0.019)		0.313 (0.032)	-0.313 (0.032)	
R011R09C	0.671 (0.025)	-0.174 (0.024)		0.101 (0.044)	-0.101 (0.039)	
R011R10C	0.391 (0.015)	0.189 (0.031)		0.993 (0.082)	0.544 (0.069)	-1.536 (0.083)
R011R11C	0.635 (0.024)	-0.223 (0.021)		0.374 (0.060)	0.185 (0.051)	-0.559 (0.044)
R021K01C	0.432 (0.022)	-1.007 (0.056)		0.171 (0.087)	-0.171 (0.064)	
R021K02C	0.794 (0.039)	-0.748 (0.046)				
R021K03M	1.063 (0.086)	0.074 (0.061)	0.201 (0.029)			
R021K04M	0.848 (0.177)	1.192 (0.109)	0.377 (0.029)			
R021K05C	1.072 (0.048)	-0.002 (0.026)				
R021K06M	1.409 (0.100)	-0.127 (0.050)	0.230 (0.027)			
R021K07C	0.745 (0.030)	-0.034 (0.023)		0.113 (0.044)	-0.113 (0.040)	
R021K08M	1.098 (0.095)	0.304 (0.055)	0.195 (0.026)			
R021K09M	1.149 (0.093)	-0.016 (0.063)	0.235 (0.031)			
R021K10C	0.803 (0.030)	0.696 (0.025)		-0.305 (0.042)	0.305 (0.049)	
R021K11M	1.119 (0.101)	0.250 (0.061)	0.235 (0.029)			
R021K12C	0.621 (0.024)	-0.123 (0.022)		0.292 (0.063)	-0.053 (0.059)	-0.239 (0.053)
R021N01M	0.918 (0.083)	-0.575 (0.119)	0.320 (0.046)			
R021N02C	0.868 (0.042)	-0.466 (0.037)				
R021N03C	0.755 (0.036)	0.857 (0.032)		0.275 (0.038)	-0.275 (0.052)	
R021N04M	1.436 (0.107)	0.226 (0.041)	0.197 (0.022)			
R021N05M	1.630 (0.127)	-0.760 (0.070)	0.351 (0.038)			
R021N06M	1.633 (0.104)	-0.457 (0.046)	0.186 (0.028)			
R021N07M	1.205 (0.089)	-0.086 (0.057)	0.202 (0.029)			
R021N08C	0.988 (0.046)	-0.291 (0.031)				
R021N09M	1.260 (0.099)	-0.207 (0.066)	0.275 (0.033)			
R021N10M	0.947 (0.107)	0.288 (0.088)	0.320 (0.035)			
R021N11C	0.633 (0.023)	0.036 (0.025)		-0.415 (0.054)	0.415 (0.052)	
R021N12C	0.663 (0.030)	0.057 (0.026)		0.165 (0.048)	-0.165 (0.046)	
R021S01M	0.846 (0.071)	-0.014 (0.076)	0.152 (0.032)			
R021S02M	0.510 (0.054)	-0.605 (0.197)	0.164 (0.057)			
R021S03M	0.974 (0.079)	-0.559 (0.097)	0.255 (0.041)			
R021S04M	1.424 (0.112)	0.070 (0.049)	0.268 (0.026)			
R021S05C	0.803 (0.041)	-0.142 (0.034)				
R021S06M	1.279 (0.101)	-0.657 (0.083)	0.328 (0.039)			
R021S07C	0.484 (0.018)	0.735 (0.036)		-1.148 (0.075)	1.148 (0.083)	
R021S09C	0.886 (0.043)	-0.302 (0.034)				
R021S10C	0.845 (0.043)	-0.162 (0.034)				
R021S11C	0.727 (0.045)	0.757 (0.047)				

( ) Standard errors appear in parentheses

Exhibit D.1 IRT Parameters for PIRLS Joint 2001-2006 Scaling of Overall Reading *(continued)*

Item	Slope (a_j)	Location (b_j)	Guessing (c_j)	Step 1 (d_{j1})	Step 2 (d_{j2})	Step 3 (d_{j3})
R021S12C	0.631 (0.045)	1.074 (0.070)				
R021S13C	0.687 (0.047)	1.063 (0.065)				
R021S14M	1.617 (0.135)	0.489 (0.035)	0.207 (0.020)			
R021S15C	0.574 (0.021)	0.327 (0.027)		-0.782 (0.063)	0.782 (0.065)	
R011A01C	0.905 (0.031)	-1.367 (0.041)				
R011A02M	1.174 (0.066)	0.066 (0.041)	0.250 (0.020)			
R011A03C	0.798 (0.027)	-0.987 (0.036)				
R011A04C	0.787 (0.018)	-0.161 (0.018)		1.035 (0.030)	-1.035 (0.025)	
R011A05M	1.053 (0.054)	-1.215 (0.078)	0.250 (0.036)			
R011A06M	1.060 (0.056)	-1.254 (0.083)	0.279 (0.038)			
R011A07C	0.719 (0.017)	-0.555 (0.016)		0.167 (0.044)	-0.008 (0.038)	-0.159 (0.029)
R011A08C	0.606 (0.019)	-0.888 (0.028)		0.480 (0.046)	-0.480 (0.030)	
R011A09C	0.724 (0.021)	-0.129 (0.017)		0.532 (0.030)	-0.532 (0.026)	
R011A10M	1.426 (0.060)	-0.104 (0.028)	0.127 (0.016)			
R011A11C	0.844 (0.029)	-0.026 (0.021)				
R011L01M	0.539 (0.038)	-2.304 (0.260)	0.256 (0.080)			
R011L02M	0.836 (0.066)	0.554 (0.052)	0.221 (0.021)			
R011L03C	0.661 (0.024)	-0.494 (0.031)				
R011L04C	0.625 (0.013)	0.329 (0.017)		1.455 (0.035)	-0.984 (0.036)	-0.471 (0.048)
R011L05M	1.283 (0.078)	0.541 (0.029)	0.208 (0.014)			
R011L06C	0.765 (0.027)	0.055 (0.023)				
R011L07M	0.841 (0.057)	0.426 (0.048)	0.167 (0.021)			
R011L08C	0.822 (0.022)	0.563 (0.017)		0.652 (0.023)	-0.652 (0.029)	
R011L09M	0.994 (0.051)	-0.888 (0.072)	0.229 (0.033)			
R011L10C	0.798 (0.023)	0.581 (0.016)		0.092 (0.025)	-0.092 (0.030)	
R011L11M	0.909 (0.051)	-0.333 (0.064)	0.201 (0.028)			
R011L12C	0.827 (0.022)	0.510 (0.017)		0.702 (0.023)	-0.702 (0.029)	

( ) Standard errors appear in parentheses

Exhibit D.2 IRT Parameters for PIRLS Joint 2001-2006 Scaling of Literary Purposes

Item	Slope (a_j)	Location (b_j)	Guessing (c_j)	Step 1 (d_{j1})	Step 2 (d_{j2})	Step 3 (d_{j3})
R011H01M	0.665 (0.059)	-1.438 (0.226)	0.313 (0.071)			
R011H02M	0.953 (0.065)	-1.277 (0.115)	0.214 (0.048)			
R011H03C	0.339 (0.018)	0.942 (0.051)		0.700 (0.071)	-0.700 (0.086)	
R011H04C	0.895 (0.039)	-0.977 (0.048)				
R011H05M	1.246 (0.077)	-0.829 (0.071)	0.218 (0.036)			
R011H06M	0.881 (0.059)	-0.275 (0.081)	0.176 (0.034)			
R011H07C	0.621 (0.024)	-0.436 (0.032)		0.312 (0.055)	-0.312 (0.041)	
R011H08C	0.837 (0.037)	0.145 (0.030)				
R011H09C	0.789 (0.028)	-0.520 (0.028)		0.114 (0.049)	-0.114 (0.036)	
R011H10C	0.642 (0.018)	0.526 (0.019)		-0.148 (0.058)	1.159 (0.055)	-1.012 (0.050)
R011H11M	1.253 (0.077)	-0.330 (0.060)	0.198 (0.031)			
R011M01M	1.171 (0.080)	-0.564 (0.079)	0.319 (0.035)			
R011M02M	1.112 (0.078)	-1.174 (0.104)	0.305 (0.044)			
R011M03M	1.317 (0.086)	0.377 (0.040)	0.198 (0.020)			
R011M04C	0.770 (0.037)	0.835 (0.035)				
R011M05M	1.197 (0.077)	-0.357 (0.066)	0.269 (0.031)			
R011M06C	1.049 (0.035)	-0.392 (0.021)		0.332 (0.037)	-0.332 (0.026)	
R011M07C	1.000 (0.040)	-0.589 (0.035)				
R011M08M	1.167 (0.115)	0.932 (0.048)	0.278 (0.020)			
R011M09M	1.153 (0.068)	-0.522 (0.064)	0.192 (0.031)			
R011M10C	1.074 (0.050)	-1.546 (0.057)				
R011M11C	0.786 (0.037)	0.627 (0.031)				
R011M12C	0.575 (0.021)	0.792 (0.024)		0.846 (0.048)	-0.135 (0.051)	-0.710 (0.068)
R011M13M	0.898 (0.080)	-0.019 (0.102)	0.349 (0.037)			
R011M14C	0.853 (0.037)	-0.243 (0.034)				
R021E01M	1.279 (0.105)	-1.040 (0.105)	0.365 (0.046)			
R021E02M	1.057 (0.080)	-0.309 (0.084)	0.267 (0.036)			
R021E03M	0.531 (0.056)	0.025 (0.153)	0.160 (0.045)			
R021E04M	1.332 (0.101)	-1.072 (0.091)	0.286 (0.043)			
R021E05C	0.644 (0.022)	-0.268 (0.030)		-0.379 (0.060)	0.379 (0.051)	
R021E06M	1.313 (0.090)	-0.066 (0.056)	0.223 (0.028)			
R021E07C	0.637 (0.027)	-0.003 (0.029)		0.246 (0.052)	-0.246 (0.045)	
R021E08M	1.417 (0.107)	0.681 (0.036)	0.167 (0.018)			
R021E09C	0.562 (0.027)	0.864 (0.035)		0.573 (0.049)	-0.573 (0.060)	
R021E10C	0.977 (0.045)	-0.031 (0.031)				
R021E11M	0.857 (0.079)	0.361 (0.081)	0.208 (0.033)			
R021E12C	0.788 (0.033)	0.369 (0.023)		0.363 (0.040)	-0.363 (0.039)	
R021U01M	0.617 (0.070)	-0.067 (0.171)	0.276 (0.051)			
R021U02M	1.125 (0.077)	-0.746 (0.083)	0.214 (0.038)			
R021U03M	0.623 (0.065)	0.082 (0.139)	0.211 (0.045)			
R021U04M	0.701 (0.070)	0.312 (0.104)	0.197 (0.037)			

( ) Standard errors appear in parentheses

Exhibit D.2 IRT Parameters for PIRLS Joint 2001-2006 Scaling of Literary Purposes *(continued)*

Item	Slope (a_j)	Location (b_j)	Guessing (c_j)	Step 1 (d_{j1})	Step 2 (d_{j2})	Step 3 (d_{j3})
R021U05C	0.982 (0.045)	-0.532 (0.040)				
R021U06C	0.907 (0.042)	-0.466 (0.040)				
R021U07M	0.682 (0.067)	-0.724 (0.188)	0.304 (0.059)			
R021U08C	1.018 (0.039)	-0.076 (0.021)		0.377 (0.037)	-0.377 (0.029)	
R021U09M	0.865 (0.078)	-0.147 (0.109)	0.283 (0.041)			
R021U10C	0.723 (0.038)	-0.866 (0.060)				
R021U11C	0.523 (0.022)	0.643 (0.026)		0.570 (0.060)	-0.402 (0.069)	-0.168 (0.077)
R021U12C	0.729 (0.032)	0.021 (0.028)		0.504 (0.049)	-0.504 (0.040)	
R021Y01M	1.158 (0.099)	0.430 (0.058)	0.260 (0.026)			
R021Y02M	1.624 (0.116)	0.027 (0.048)	0.289 (0.026)			
R021Y03C	0.827 (0.043)	0.743 (0.035)				
R021Y04M	1.193 (0.089)	0.319 (0.052)	0.203 (0.025)			
R021Y05M	1.712 (0.117)	0.325 (0.036)	0.215 (0.021)			
R021Y06M	1.629 (0.114)	0.353 (0.038)	0.221 (0.021)			
R021Y07M	0.828 (0.061)	-0.809 (0.114)	0.182 (0.043)			
R021Y08M	1.424 (0.100)	-0.090 (0.056)	0.262 (0.029)			
R021Y09C	0.938 (0.034)	-0.390 (0.026)		0.076 (0.046)	-0.076 (0.034)	
R021Y10C	0.770 (0.042)	0.712 (0.037)				
R021Y11M	1.458 (0.114)	0.262 (0.051)	0.292 (0.026)			
R021Y12C	0.695 (0.020)	0.216 (0.023)		-1.095 (0.064)	1.095 (0.062)	
R021Y13C	0.721 (0.028)	0.623 (0.020)		0.601 (0.045)	-0.260 (0.049)	-0.342 (0.056)
R021Y14C	0.575 (0.022)	0.435 (0.027)		-0.518 (0.059)	0.518 (0.060)	
R011C01C	1.296 (0.036)	-0.148 (0.018)				
R011C02C	0.790 (0.027)	0.463 (0.022)				
R011C03C	1.262 (0.036)	-0.464 (0.021)				
R011C04M	1.259 (0.062)	0.418 (0.030)	0.181 (0.015)			
R011C05M	0.866 (0.061)	0.054 (0.080)	0.375 (0.027)			
R011C06C	1.069 (0.031)	-0.068 (0.020)				
R011C07M	1.103 (0.056)	-0.286 (0.056)	0.277 (0.024)			
R011C08C	0.567 (0.014)	0.358 (0.018)		-0.328 (0.038)	0.328 (0.038)	
R011C09M	1.166 (0.067)	0.790 (0.029)	0.161 (0.014)			
R011C10C	0.591 (0.014)	0.336 (0.014)		0.214 (0.039)	-0.299 (0.042)	0.086 (0.041)
R011C11C	0.739 (0.019)	0.228 (0.018)		0.815 (0.030)	-0.815 (0.027)	
R011C12M	0.781 (0.054)	0.321 (0.069)	0.231 (0.026)			
R011C13M	0.863 (0.060)	0.503 (0.056)	0.233 (0.023)			
R011F01M	1.283 (0.055)	-0.442 (0.042)	0.193 (0.022)			
R011F02M	0.638 (0.040)	-0.557 (0.116)	0.207 (0.038)			
R011F03M	0.884 (0.041)	-0.615 (0.064)	0.152 (0.027)			
R011F04M	1.205 (0.057)	-0.785 (0.057)	0.246 (0.027)			
R011F05M	0.907 (0.050)	-0.185 (0.065)	0.245 (0.026)			
R011F06C	0.794 (0.025)	-0.234 (0.026)				

( ) Standard errors appear in parentheses

Exhibit D.2 IRT Parameters for PIRLS Joint 2001-2006 Scaling of Literary Purposes *(continued)*

Item	Slope (a_j)	Location (b_j)	Guessing (c_j)	Step 1 (d_{j1})	Step 2 (d_{j2})	Step 3 (d_{j3})
R011F07C	0.515 (0.012)	0.582 (0.019)		-0.819 (0.044)	0.819 (0.046)	
R011F08C	1.095 (0.032)	-0.095 (0.019)				
R011F09C	1.030 (0.025)	-0.546 (0.018)		0.110 (0.031)	-0.110 (0.022)	
R011F10C	0.858 (0.029)	-1.144 (0.041)				
R011F11M	0.662 (0.049)	0.432 (0.076)	0.180 (0.027)			
R011F12C	0.607 (0.016)	0.830 (0.019)		-0.347 (0.035)	0.347 (0.039)	
R011F13M	1.017 (0.058)	0.167 (0.052)	0.242 (0.023)			

( ) Standard errors appear in parentheses

Exhibit D.3 IRT Parameters for PIRLS Joint 2001-2006 Scaling of Informational Purposes

Item	Slope (a_j)	Location (b_j)	Guessing (c_j)	Step 1 (d_{j1})	Step 2 (d_{j2})	Step 3 (d_{j3})
R011N01M	0.887 (0.067)	-0.293 (0.089)	0.248 (0.035)			
R011N02M	0.864 (0.073)	0.193 (0.076)	0.233 (0.030)			
R011N03M	1.138 (0.081)	-0.579 (0.082)	0.318 (0.035)			
R011N04M	1.293 (0.089)	0.455 (0.037)	0.173 (0.019)			
R011N05M	1.566 (0.101)	0.240 (0.036)	0.220 (0.020)			
R011N06M	1.926 (0.141)	0.825 (0.025)	0.168 (0.013)			
R011N07C	0.654 (0.027)	0.614 (0.025)		0.299 (0.040)	-0.299 (0.046)	
R011N08C	0.624 (0.024)	0.196 (0.027)		0.783 (0.044)	-0.783 (0.043)	
R011N09M	1.267 (0.077)	-0.399 (0.056)	0.201 (0.028)			
R011N10C	0.947 (0.048)	1.027 (0.038)				
R011N11M	1.152 (0.079)	0.319 (0.044)	0.166 (0.022)			
R011N12C	0.694 (0.025)	0.514 (0.022)		-0.090 (0.041)	0.090 (0.044)	
R011N13C	0.551 (0.033)	0.119 (0.043)				
R011R01M	0.818 (0.062)	0.041 (0.078)	0.173 (0.032)			
R011R02M	1.317 (0.096)	0.535 (0.038)	0.201 (0.020)			
R011R03M	0.884 (0.067)	-0.930 (0.128)	0.303 (0.050)			
R011R04C	0.942 (0.041)	-0.998 (0.046)				
R011R05C	1.220 (0.049)	-0.600 (0.030)				
R011R06C	0.718 (0.021)	-0.169 (0.022)		-0.406 (0.047)	0.406 (0.042)	
R011R07C	1.108 (0.044)	0.178 (0.022)				
R011R08C	0.880 (0.032)	0.293 (0.018)		0.320 (0.032)	-0.320 (0.031)	
R011R09C	0.641 (0.024)	-0.024 (0.025)		0.096 (0.046)	-0.096 (0.041)	
R011R10C	0.388 (0.015)	0.348 (0.031)		1.011 (0.083)	0.545 (0.070)	-1.556 (0.084)
R011R11C	0.661 (0.024)	-0.062 (0.021)		0.400 (0.059)	0.171 (0.049)	-0.571 (0.042)
R021K01C	0.448 (0.022)	-0.824 (0.054)		0.184 (0.084)	-0.184 (0.061)	
R021K02C	0.836 (0.041)	-0.561 (0.044)				
R021K03M	1.051 (0.084)	0.222 (0.061)	0.197 (0.029)			
R021K04M	0.878 (0.172)	1.333 (0.103)	0.378 (0.028)			
R021K05C	1.097 (0.049)	0.155 (0.025)				
R021K06M	1.476 (0.104)	0.044 (0.048)	0.237 (0.027)			
R021K07C	0.772 (0.030)	0.123 (0.023)		0.125 (0.042)	-0.125 (0.039)	
R021K08M	1.110 (0.093)	0.450 (0.054)	0.192 (0.026)			
R021K09M	1.172 (0.092)	0.126 (0.061)	0.227 (0.030)			
R021K10C	0.797 (0.030)	0.855 (0.025)		-0.303 (0.042)	0.303 (0.050)	
R021K11M	1.123 (0.099)	0.394 (0.060)	0.231 (0.029)			
R021K12C	0.650 (0.025)	0.036 (0.022)		0.312 (0.061)	-0.053 (0.057)	-0.259 (0.051)
R021N01M	0.848 (0.075)	-0.537 (0.126)	0.295 (0.047)			
R021N02C	0.848 (0.041)	-0.348 (0.038)				
R021N03C	0.743 (0.035)	1.008 (0.032)		0.286 (0.038)	-0.286 (0.053)	
R021N04M	1.444 (0.106)	0.361 (0.040)	0.197 (0.022)			
R021N05M	1.793 (0.141)	-0.590 (0.063)	0.365 (0.035)			
R021N06M	1.676 (0.106)	-0.321 (0.045)	0.191 (0.027)			
R021N07M	1.157 (0.085)	0.035 (0.059)	0.200 (0.029)			

( ) Standard errors appear in parentheses

Exhibit D.3 IRT Parameters for PIRLS Joint 2001-2006 Scaling of Informational Purposes *(continued)*

Item	Slope (a_j)	Location (b_j)	Guessing (c_j)	Step 1 (d_{j1})	Step 2 (d_{j2})	Step 3 (d_{j3})
R021N08C	0.983 (0.046)	-0.164 (0.031)				
R021N09M	1.268 (0.097)	-0.083 (0.064)	0.271 (0.032)			
R021N10M	0.945 (0.104)	0.424 (0.087)	0.320 (0.034)			
R021N11C	0.621 (0.023)	0.167 (0.025)		-0.417 (0.055)	0.417 (0.053)	
R021N12C	0.656 (0.029)	0.188 (0.026)		0.176 (0.049)	-0.176 (0.046)	
R021S01M	0.823 (0.071)	0.138 (0.079)	0.168 (0.032)			
R021S02M	0.510 (0.056)	-0.438 (0.203)	0.185 (0.057)			
R021S03M	0.963 (0.078)	-0.438 (0.096)	0.265 (0.039)			
R021S04M	1.324 (0.100)	0.137 (0.052)	0.241 (0.026)			
R021S05C	0.778 (0.039)	-0.030 (0.036)				
R021S06M	1.365 (0.104)	-0.525 (0.075)	0.331 (0.036)			
R021S07C	0.466 (0.017)	0.883 (0.038)		-1.188 (0.078)	1.188 (0.087)	
R021S09C	0.873 (0.042)	-0.192 (0.035)				
R021S10C	0.851 (0.042)	-0.044 (0.034)				
R021S11C	0.707 (0.043)	0.899 (0.048)				
R021S12C	0.632 (0.043)	1.202 (0.068)				
R021S13C	0.660 (0.045)	1.223 (0.067)				
R021S14M	1.583 (0.130)	0.618 (0.036)	0.205 (0.019)			
R021S15C	0.535 (0.019)	0.457 (0.029)		-0.841 (0.067)	0.841 (0.069)	
R011A01C	0.812 (0.027)	-1.444 (0.046)				
R011A02M	1.206 (0.065)	0.179 (0.039)	0.260 (0.018)			
R011A03C	0.734 (0.025)	-1.001 (0.039)				
R011A04C	0.741 (0.017)	-0.098 (0.019)		1.115 (0.032)	-1.115 (0.026)	
R011A05M	0.916 (0.049)	-1.293 (0.095)	0.254 (0.038)			
R011A06M	0.994 (0.054)	-1.259 (0.090)	0.292 (0.037)			
R011A07C	0.728 (0.017)	-0.502 (0.016)		0.247 (0.045)	-0.025 (0.038)	-0.222 (0.028)
R011A08C	0.594 (0.018)	-0.856 (0.028)		0.532 (0.047)	-0.532 (0.031)	
R011A09C	0.690 (0.019)	-0.060 (0.018)		0.576 (0.032)	-0.576 (0.027)	
R011A10M	1.365 (0.057)	-0.022 (0.028)	0.130 (0.015)			
R011A11C	0.793 (0.027)	0.050 (0.023)				
R011L01M	0.525 (0.037)	-2.251 (0.267)	0.253 (0.079)			
R011L02M	0.803 (0.062)	0.680 (0.054)	0.214 (0.021)			
R011L03C	0.643 (0.023)	-0.382 (0.032)				
R011L04C	0.627 (0.013)	0.463 (0.017)		1.479 (0.035)	-0.985 (0.036)	-0.494 (0.048)
R011L05M	1.203 (0.073)	0.678 (0.031)	0.203 (0.015)			
R011L06C	0.758 (0.027)	0.184 (0.023)				
R011L07M	0.812 (0.055)	0.570 (0.049)	0.168 (0.021)			
R011L08C	0.812 (0.022)	0.703 (0.017)		0.669 (0.023)	-0.669 (0.030)	
R011L09M	0.986 (0.051)	-0.762 (0.072)	0.240 (0.031)			
R011L10C	0.801 (0.022)	0.718 (0.016)		0.105 (0.025)	-0.105 (0.030)	
R011L11M	0.901 (0.051)	-0.179 (0.064)	0.219 (0.027)			
R011L12C	0.829 (0.022)	0.645 (0.017)		0.716 (0.023)	-0.716 (0.029)	

( ) Standard errors appear in parentheses

Exhibit D.4 IRT Parameters for PIRLS Joint 2001-2006 Scaling of Retrieving and Straightforward Inferencing Processes

Item	Slope (a_j)	Location (b_j)	Guessing (c_j)	Step 1 (d_{j1})	Step 2 (d_{j2})	Step 3 (d_{j3})
R011H01M	0.667 (0.055)	-1.686 (0.213)	0.267 (0.071)			
R011H02M	0.962 (0.063)	-1.476 (0.109)	0.181 (0.046)			
R011H04C	0.876 (0.038)	-1.157 (0.049)				
R011H05M	1.097 (0.065)	-1.152 (0.077)	0.153 (0.036)			
R011H07C	0.508 (0.021)	-0.694 (0.039)		0.272 (0.065)	-0.272 (0.049)	
R011M01M	1.292 (0.087)	-0.659 (0.071)	0.325 (0.034)			
R011M02M	1.179 (0.082)	-1.267 (0.097)	0.304 (0.045)			
R011M03M	1.318 (0.085)	0.213 (0.040)	0.192 (0.020)			
R011M05M	1.204 (0.078)	-0.505 (0.067)	0.268 (0.032)			
R011M07C	0.989 (0.040)	-0.738 (0.035)				
R011M09M	1.043 (0.062)	-0.746 (0.072)	0.169 (0.033)			
R011M10C	1.088 (0.051)	-1.649 (0.056)				
R011N01M	0.985 (0.075)	-0.255 (0.083)	0.287 (0.034)			
R011N02M	0.950 (0.081)	0.212 (0.072)	0.267 (0.029)			
R011N03M	1.201 (0.081)	-0.672 (0.076)	0.293 (0.036)			
R011N05M	1.535 (0.102)	0.198 (0.038)	0.237 (0.020)			
R011N09M	1.177 (0.072)	-0.509 (0.061)	0.195 (0.031)			
R011R03M	0.728 (0.054)	-1.363 (0.159)	0.233 (0.058)			
R011R04C	0.840 (0.037)	-1.236 (0.051)				
R011R05C	1.033 (0.042)	-0.824 (0.035)				
R011R06C	0.575 (0.017)	-0.350 (0.027)		-0.570 (0.058)	0.570 (0.051)	
R011R07C	0.934 (0.038)	0.058 (0.026)				
R021E01M	1.434 (0.116)	-1.163 (0.092)	0.355 (0.045)			
R021E02M	1.112 (0.082)	-0.476 (0.080)	0.261 (0.036)			
R021E03M	0.521 (0.056)	-0.135 (0.163)	0.164 (0.048)			
R021E04M	1.294 (0.096)	-1.304 (0.093)	0.253 (0.045)			
R021E05C	0.607 (0.021)	-0.462 (0.032)		-0.428 (0.063)	0.428 (0.054)	
R021E06M	1.153 (0.078)	-0.326 (0.063)	0.192 (0.030)			
R021K01C	0.381 (0.019)	-1.085 (0.064)		0.167 (0.098)	-0.167 (0.072)	
R021K02C	0.703 (0.035)	-0.798 (0.052)				
R021K03M	1.068 (0.084)	0.134 (0.060)	0.206 (0.027)			
R021K04M	0.600 (0.135)	1.368 (0.150)	0.348 (0.038)			
R021K05C	0.954 (0.043)	0.031 (0.029)				
R021K06M	1.338 (0.095)	-0.091 (0.053)	0.234 (0.027)			
R021K08M	0.989 (0.085)	0.354 (0.061)	0.189 (0.027)			
R021K11M	0.990 (0.091)	0.297 (0.070)	0.231 (0.030)			
R021N01M	0.856 (0.075)	-0.624 (0.126)	0.301 (0.047)			
R021N02C	0.769 (0.038)	-0.488 (0.042)				
R021N04M	1.371 (0.101)	0.278 (0.043)	0.196 (0.022)			
R021N05M	1.773 (0.137)	-0.748 (0.063)	0.346 (0.035)			
R021N06M	1.655 (0.102)	-0.452 (0.045)	0.179 (0.026)			

( ) Standard errors appear in parentheses

Exhibit D.4 IRT Parameters for PIRLS Joint 2001-2006 Scaling of Retrieving and Straightforward Inferencing Processes *(continued)*

Item	Slope (a_j)	Location (b_j)	Guessing (c_j)	Step 1 (d_{j1})	Step 2 (d_{j2})	Step 3 (d_{j3})
R021N07M	1.068 (0.077)	-0.101 (0.063)	0.183 (0.029)			
R021N08C	0.892 (0.042)	-0.289 (0.034)				
R021N09M	1.136 (0.089)	-0.197 (0.074)	0.275 (0.034)			
R021N10M	0.789 (0.092)	0.309 (0.109)	0.304 (0.038)			
R021S02M	0.511 (0.052)	-0.558 (0.194)	0.164 (0.057)			
R021S03M	0.941 (0.075)	-0.533 (0.101)	0.261 (0.042)			
R021S04M	1.246 (0.098)	0.087 (0.058)	0.257 (0.028)			
R021S06M	1.246 (0.095)	-0.666 (0.084)	0.318 (0.039)			
R021S11C	0.667 (0.041)	0.866 (0.051)				
R021U01M	0.640 (0.069)	-0.252 (0.162)	0.263 (0.051)			
R021U02M	1.071 (0.073)	-0.964 (0.087)	0.190 (0.040)			
R021U03M	0.607 (0.063)	-0.128 (0.144)	0.194 (0.047)			
R021U04M	0.717 (0.069)	0.121 (0.101)	0.186 (0.037)			
R021U05C	1.034 (0.047)	-0.667 (0.037)				
R021U06C	0.868 (0.041)	-0.649 (0.042)				
R021U07M	0.735 (0.069)	-0.834 (0.169)	0.302 (0.057)			
R021U09M	0.838 (0.073)	-0.389 (0.112)	0.250 (0.043)			
R021U10C	0.720 (0.038)	-1.027 (0.060)				
R021Y01M	1.126 (0.097)	0.249 (0.061)	0.259 (0.027)			
R021Y04M	1.301 (0.096)	0.162 (0.048)	0.213 (0.024)			
R021Y05M	1.668 (0.113)	0.127 (0.037)	0.207 (0.021)			
R021Y06M	1.655 (0.114)	0.159 (0.037)	0.215 (0.021)			
R021Y07M	0.830 (0.061)	-0.988 (0.115)	0.176 (0.045)			
R021Y08M	1.357 (0.094)	-0.313 (0.058)	0.244 (0.030)			
R021Y09C	0.872 (0.031)	-0.591 (0.027)		0.038 (0.049)	-0.038 (0.037)	
R011A01C	0.860 (0.029)	-1.404 (0.042)				
R011A02M	1.119 (0.061)	0.104 (0.043)	0.245 (0.020)			
R011A03C	0.751 (0.025)	-1.009 (0.038)				
R011A05M	0.964 (0.050)	-1.302 (0.087)	0.231 (0.038)			
R011A06M	1.042 (0.054)	-1.293 (0.083)	0.257 (0.038)			
R011A07C	0.673 (0.016)	-0.556 (0.017)		0.177 (0.047)	-0.000 (0.041)	-0.177 (0.031)
R011A08C	0.552 (0.017)	-0.924 (0.030)		0.512 (0.050)	-0.512 (0.033)	
R011C01C	1.327 (0.037)	-0.304 (0.017)				
R011C02C	0.819 (0.027)	0.299 (0.022)				
R011C03C	1.269 (0.036)	-0.616 (0.021)				
R011C04M	1.284 (0.062)	0.241 (0.030)	0.175 (0.015)			
R011C05M	0.810 (0.057)	-0.200 (0.091)	0.344 (0.031)			
R011C07M	1.148 (0.058)	-0.450 (0.053)	0.264 (0.025)			
R011C08C	0.554 (0.014)	0.197 (0.019)		-0.350 (0.039)	0.350 (0.039)	
R011C09M	1.155 (0.066)	0.612 (0.030)	0.155 (0.014)			
R011F02M	0.627 (0.039)	-0.780 (0.118)	0.183 (0.040)			

( ) Standard errors appear in parentheses

Exhibit D.4 IRT Parameters for PIRLS Joint 2001-2006 Scaling of Retrieving and Straightforward Inferencing Processes *(continued)*

Item	Slope (a_j)	Location (b_j)	Guessing (c_j)	Step 1 (d_{j1})	Step 2 (d_{j2})	Step 3 (d_{j3})
R011F03M	0.885 (0.041)	-0.794 (0.064)	0.139 (0.028)			
R011F04M	1.230 (0.057)	-0.952 (0.056)	0.232 (0.028)			
R011F05M	0.889 (0.048)	-0.396 (0.067)	0.225 (0.028)			
R011F06C	0.779 (0.025)	-0.406 (0.026)				
R011F08C	1.071 (0.031)	-0.268 (0.020)				
R011F09C	0.993 (0.024)	-0.715 (0.018)		0.081 (0.031)	-0.081 (0.022)	
R011F10C	0.850 (0.029)	-1.305 (0.041)				
R011L01M	0.525 (0.036)	-2.355 (0.260)	0.244 (0.080)			
R011L02M	0.802 (0.061)	0.634 (0.054)	0.220 (0.021)			
R011L03C	0.604 (0.022)	-0.493 (0.034)				
R011L05M	1.215 (0.075)	0.656 (0.031)	0.219 (0.014)			
R011L06C	0.662 (0.024)	0.102 (0.026)				
R011L08C	0.688 (0.019)	0.686 (0.020)		0.744 (0.027)	-0.744 (0.035)	
R011L09M	0.892 (0.045)	-0.989 (0.080)	0.196 (0.034)			

( ) Standard errors appear in parentheses

Exhibit D.5 IRT Parameters for PIRLS Joint 2001-2006 Scaling of Interpreting, Integrating, and Evaluating Processes

Item	Slope (a_j)	Location (b_j)	Guessing (c_j)	Step 1 (d_{j1})	Step 2 (d_{j2})	Step 3 (d_{j3})
R011H03C	0.354 (0.019)	0.658 (0.049)		0.674 (0.068)	-0.674 (0.083)	
R011H06M	0.837 (0.064)	-0.485 (0.093)	0.210 (0.036)			
R011H08C	0.798 (0.037)	-0.119 (0.031)				
R011H09C	0.722 (0.026)	-0.805 (0.031)		0.075 (0.053)	-0.075 (0.038)	
R011H10C	0.687 (0.020)	0.257 (0.018)		-0.121 (0.054)	1.076 (0.051)	-0.956 (0.047)
R011H11M	1.483 (0.096)	-0.430 (0.052)	0.262 (0.029)			
R011M04C	0.823 (0.040)	0.545 (0.033)				
R011M06C	0.948 (0.032)	-0.647 (0.023)		0.280 (0.040)	-0.280 (0.028)	
R011M08M	1.188 (0.117)	0.643 (0.048)	0.276 (0.020)			
R011M11C	0.866 (0.040)	0.341 (0.029)				
R011M12C	0.663 (0.024)	0.485 (0.021)		0.782 (0.042)	-0.122 (0.045)	-0.660 (0.059)
R011M13M	0.938 (0.083)	-0.275 (0.096)	0.343 (0.036)			
R011M14C	0.951 (0.041)	-0.453 (0.031)				
R011N04M	1.184 (0.089)	0.341 (0.043)	0.192 (0.021)			
R011N06M	1.704 (0.132)	0.696 (0.028)	0.172 (0.014)			
R011N07C	0.630 (0.026)	0.461 (0.026)		0.292 (0.041)	-0.292 (0.047)	
R011N08C	0.633 (0.024)	0.040 (0.026)		0.770 (0.044)	-0.770 (0.043)	
R011N10C	0.971 (0.049)	0.852 (0.037)				
R011N11M	1.089 (0.087)	0.271 (0.052)	0.218 (0.024)			
R011N12C	0.847 (0.029)	0.335 (0.019)		-0.019 (0.034)	0.019 (0.036)	
R011N13C	0.668 (0.036)	0.001 (0.036)				
R011R01M	0.882 (0.070)	-0.056 (0.073)	0.218 (0.030)			
R011R02M	1.221 (0.093)	0.375 (0.042)	0.213 (0.020)			
R011R08C	0.805 (0.030)	0.089 (0.020)		0.327 (0.035)	-0.327 (0.034)	
R011R09C	0.648 (0.024)	-0.230 (0.025)		0.114 (0.046)	-0.114 (0.041)	
R011R10C	0.362 (0.014)	0.145 (0.033)		1.069 (0.089)	0.582 (0.075)	-1.651 (0.090)
R011R11C	0.575 (0.022)	-0.301 (0.024)		0.401 (0.067)	0.192 (0.056)	-0.594 (0.048)
R021E07C	0.678 (0.028)	-0.252 (0.027)		0.245 (0.049)	-0.245 (0.042)	
R021E08M	1.232 (0.099)	0.421 (0.042)	0.166 (0.020)			
R021E09C	0.580 (0.028)	0.582 (0.033)		0.557 (0.047)	-0.557 (0.058)	
R021E10C	1.031 (0.047)	-0.279 (0.030)				
R021E11M	0.915 (0.085)	0.139 (0.075)	0.227 (0.032)			
R021E12C	0.898 (0.036)	0.104 (0.021)		0.353 (0.036)	-0.353 (0.034)	
R021K07C	0.759 (0.030)	-0.075 (0.023)		0.133 (0.043)	-0.133 (0.040)	
R021K09M	1.073 (0.088)	-0.061 (0.067)	0.238 (0.031)			
R021K10C	0.820 (0.031)	0.659 (0.024)		-0.281 (0.041)	0.281 (0.048)	
R021K12C	0.612 (0.024)	-0.174 (0.023)		0.318 (0.065)	-0.062 (0.060)	-0.256 (0.054)
R021N03C	0.690 (0.033)	0.869 (0.035)		0.281 (0.041)	-0.281 (0.057)	
R021N11C	0.625 (0.023)	-0.010 (0.025)		-0.407 (0.055)	0.407 (0.053)	
R021N12C	0.640 (0.029)	0.005 (0.027)		0.179 (0.050)	-0.179 (0.047)	
R021S01M	0.769 (0.069)	-0.038 (0.086)	0.165 (0.033)			
R021S05C	0.771 (0.039)	-0.195 (0.036)				

( ) Standard errors appear in parentheses

Exhibit D.5: IRT Parameters for PIRLS Joint 2001-2006 Scaling of Interpreting, Integrating, and Evaluating Processes *(continued)*

Item	Slope (a_j)	Location (b_j)	Guessing (c_j)	Step 1 (d_{j1})	Step 2 (d_{j2})	Step 3 (d_{j3})
R021S07C	0.509 (0.019)	0.682 (0.034)		-1.065 (0.072)	1.065 (0.079)	
R021S09C	0.851 (0.042)	-0.363 (0.036)				
R021S10C	0.796 (0.040)	-0.221 (0.036)				
R021S12C	0.640 (0.044)	1.028 (0.067)				
R021S13C	0.719 (0.047)	0.998 (0.060)				
R021S14M	1.410 (0.122)	0.476 (0.041)	0.207 (0.021)			
R021S15C	0.611 (0.022)	0.285 (0.026)		-0.703 (0.059)	0.703 (0.061)	
R021U08C	0.877 (0.035)	-0.352 (0.024)		0.347 (0.042)	-0.347 (0.033)	
R021U11C	0.656 (0.027)	0.350 (0.021)		0.552 (0.049)	-0.338 (0.055)	-0.214 (0.062)
R021U12C	0.748 (0.033)	-0.224 (0.027)		0.485 (0.048)	-0.485 (0.039)	
R021Y02M	1.499 (0.110)	-0.228 (0.052)	0.296 (0.027)			
R021Y03C	0.894 (0.046)	0.460 (0.032)				
R021Y10C	0.825 (0.044)	0.429 (0.034)				
R021Y11M	1.315 (0.106)	-0.018 (0.056)	0.289 (0.028)			
R021Y12C	0.782 (0.023)	-0.033 (0.021)		-0.948 (0.057)	0.948 (0.055)	
R021Y13C	0.822 (0.031)	0.342 (0.018)		0.584 (0.040)	-0.236 (0.043)	-0.348 (0.049)
R021Y14C	0.663 (0.024)	0.169 (0.024)		-0.415 (0.052)	0.415 (0.052)	
R011A04C	0.710 (0.016)	-0.230 (0.019)		1.126 (0.033)	-1.126 (0.027)	
R011A09C	0.722 (0.020)	-0.185 (0.017)		0.561 (0.031)	-0.561 (0.026)	
R011A10M	1.259 (0.055)	-0.144 (0.032)	0.146 (0.017)			
R011A11C	0.832 (0.028)	-0.076 (0.022)				
R011C06C	0.929 (0.029)	-0.356 (0.022)				
R011C10C	0.704 (0.016)	0.081 (0.012)		0.248 (0.033)	-0.262 (0.036)	0.014 (0.034)
R011C11C	0.862 (0.022)	-0.021 (0.016)		0.745 (0.026)	-0.745 (0.023)	
R011C12M	0.739 (0.052)	-0.003 (0.073)	0.207 (0.027)			
R011C13M	0.892 (0.061)	0.243 (0.054)	0.235 (0.022)			
R011F01M	1.303 (0.061)	-0.580 (0.044)	0.249 (0.022)			
R011F07C	0.486 (0.012)	0.340 (0.020)		-0.902 (0.047)	0.902 (0.049)	
R011F11M	0.740 (0.055)	0.250 (0.066)	0.208 (0.025)			
R011F12C	0.672 (0.018)	0.546 (0.018)		-0.295 (0.032)	0.295 (0.036)	
R011F13M	1.076 (0.062)	-0.032 (0.048)	0.263 (0.022)			
R011L04C	0.596 (0.013)	0.291 (0.017)		1.529 (0.036)	-1.038 (0.038)	-0.491 (0.050)
R011L07M	0.822 (0.057)	0.428 (0.048)	0.180 (0.020)			
R011L10C	0.803 (0.023)	0.545 (0.016)		0.106 (0.025)	-0.106 (0.030)	
R011L11M	0.887 (0.051)	-0.347 (0.065)	0.227 (0.026)			
R011L12C	0.865 (0.023)	0.461 (0.016)		0.705 (0.023)	-0.705 (0.028)	

( ) Standard errors appear in parentheses