Appendix D

Item Parameters for IRT Analyses of TIMSS 2003 Data

Exhibit D.2 **IRT Parameters for TIMSS Joint 1999-2003 Eighth-Grade Science**
(...Continued)

Exhibit D.2 **IRT Parameters for TIMSS Joint 1999-2003 Eighth-Grade Science**
(...Continued)

Item	Slope (a_j)	S.E. (a_j)	Location (b_j)	S.E. (b_j)	Guessing (c_j)	S.E. (c_j)	Step 1 (d_{j1})	S.E. (d_{j1})	Step 2 (d_{j2})	S.E. (d_{j2})
SF22160	0.871	0.048	0.549	0.044	0.000	0.000				
SF22161	0.821	0.047	0.489	0.045	0.000	0.000				
SF22181	1.061	0.097	0.282	0.053	0.168	0.023				
SF22183	1.248	0.115	0.477	0.043	0.157					

Exhibit D.2 **IRT Parameters for TIMSS Joint 1999-2003 Eighth-Grade Science**
(...Continued)

Mat at s

(. t)

Exhibit D.4 **IRT Parameters for TIMSS Joint 1995-2003 Fourth-Grade Science**
(...Continued)

Item	Slope (a_j)	S.E. (a_j)	Location (b_j)	S.E. (b_j)	Guessing (

Exhibit D.5

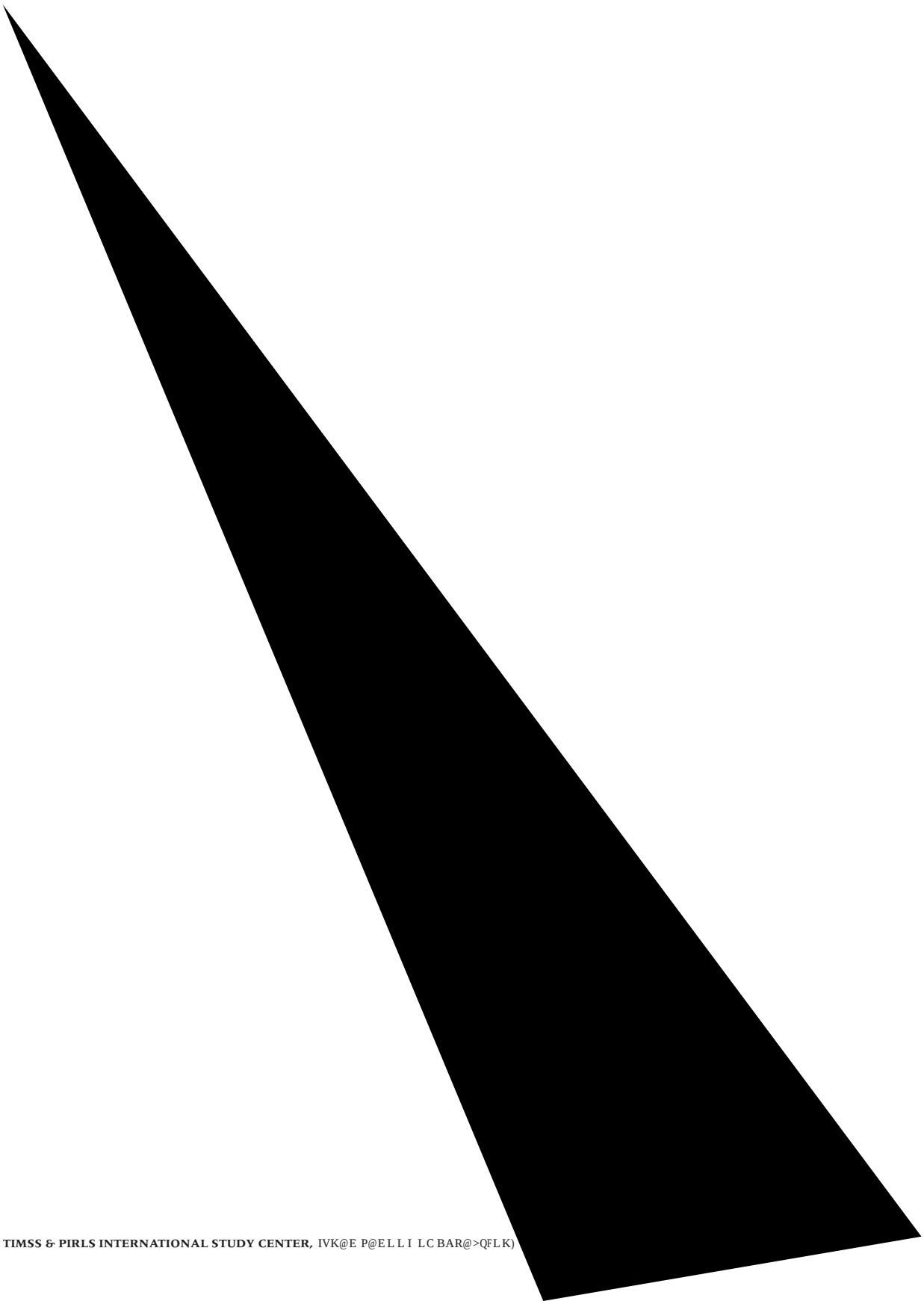
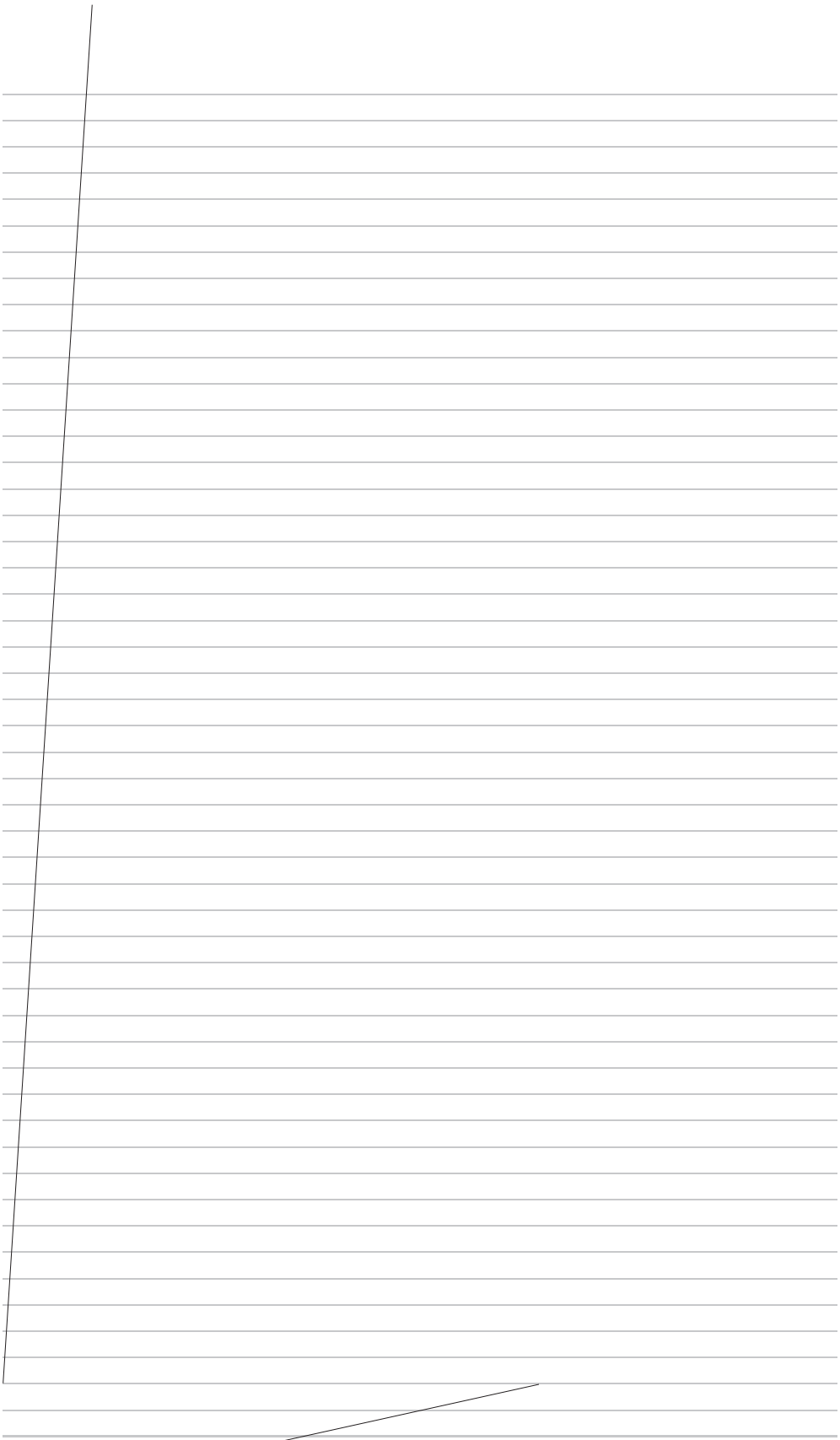


Exhibit D.6 **IRT Parameters for TIMSS2003 Eighth-Grade Mathematics - Measurement**
(...Continued)

Item	Slope (a_j)	S.E. (a_j)	Location (b_j)	S.E. (b_j)	Guessing (c_j)	S.E. (c_j)	Step 1 (d_{j1})	S.E. (d_{j1})	Step 2 (d_{j2})	S.E. (d_{j2})
MF32344	1.450	0.050	0.676	0.021						



It m	S p	S E	S E Gu ss	S E St	S E St
	(j	(j) (j)	( ) ( )	( ) ( )	( ) ( ))

IT Parame

			j	j	j	j1
0.644	0.054	0.426	0.082	0.338	0.024	
0.654					0.049	

Exhibit D.12 **IRT Parameters for TIMSS Eighth-Grade Science - Life Science**

(...Continued)

Item	Slope (a_j)	S.E. (a_j)	Location (b_j)	S.E. (b_j)	Guessing (c_j)	S.E. (c_j)	Step 1 (d_{j1})	S.E. (d_{j1})	Step 2 (d_{j2})	S.E. (d_{j2})
S032706B	1.340	0.051	0.731	0.022	0.000	0.000				
S032707	1.600	0.078	1.307	0.032	0.000	0.000				
SF12001	0.856	0.052	0.081	0.051	0.116	0.021				
SF12014	1.212	0.063	-0.237	0.041	0.154	0.019				
SF12026	0.974	0.070	-0.313	0.078	0.345	0.029				
SF12028	1.069	0.064	0.511	0.035	0.106	0.014				
SF12038	0.798	0.051	0.062	0.057	0.117	0.022				
SF12039	1.090	0.056	-0.296	0.044	0.126	0.020				
SF22106	1.219	0.124	1.404	0.054	0.108	0.010				
SF22115	1.130	0.072	0.396	0.039	0.179	0.017				
SF22117	0.989	0.079	0.776	0.044	0.179	0.017				

Exhibit D.14 **IRT Parameters for TIMSS 2003 Eighth-Grade Science - Environmental Science**

Item	Slope (a_j)	S.E. (a_j)	Location (b_j)	S.E. (b_j)	Guessing (c_j)	S.E. (c_j)	Step 1 (d_{j1})	S.E. (d_{j1})	Step 2 (d_{j2})	S.E. (d_{j2})
S012005	0.684	0.057	0.457	0.069	0.305	0.021				
S012017	1.110	0.059	0.536	0.027	0.197	0.011				
S012042	1.137	0.082	0.779	0.035	0.352	0.012				
S022086	0.760	0.021	0.235	0.021	0.000	0.000				
S022088A	1.016	0.024	-0.416	0.019	0.000	0.000				
S022088B	0.793	0.021	0.168	0.020	0.000	0.000				
S022240	0.959	0.109	1.729	0.084	0.254	0.001				
S022244	1.151	0.029	0.922							

Exhibit D.16

Exhibit D.17 **IRT Parameters for TIMSS 2003 Fourth-Grade Mathematics - Data**

Exhibit D.21 **IRT Parameters for TIMSS 2003 Fourth-Grade Science - Earth Science**
(...Continued)

Item

Exhibit D.22 **IRT Parameters for TIMSS 2003 Fourth-Grade Science - Physical Science**
(...Continued)