Appendix A

Correlations among Passage WCPM within Grade and Passage Set

Passage Set and Number (#)		Grade 6				Grade 7				Grade 8			
A	#	1	6	11	16	6	11	16	21	11	16	21	26
	6	.85											
	11	.88	.91			.90							
	16	.87	.91	.92		.85	.91			.95			
	21	.87	.89	.91	.92	.85	.94	.92		.94	.94		
	26					.85	.91	.90	.92	.92	.91	.92	
	31									.92	.92	.93	.94
	M		.89				.90				.93		
B	#	2	7	12	17	7	12	17	22	12	17	22	27
	7	.88											
	12	.86	.86			.92							
	17	.87	.87	.91		.91	.92			.91			
	22	.84	.84	.87	.88	.91	.87	.90		.87	.90		
	27					.91	.89	.90	.90	.87	.86	.89	
	32									.90	.90	.88	.91
	M		.87				.91				.89		
C	#	3	8	13	18	8	13	18	23	13	18	23	28
	8	.85											
	13	.90	.91			.91							
	18	.85	.89	.89		.89	.92			.92			
	23	.87	.86	.91	.89	.88	.89	.88		.92	.91		
	28					.87	.91	.90	.88	.87	.90	.91	
	33									.87	.90	.90	.92
	M		.88				.89				.90		
D	#	4	9	14	19	9	14	19	24	14	19	24	29
	9	.88											
	14	.88	.90			.88							
	19	.86	.89	.91		.88	.94			.94			
	24	.89	.87	.89	.91	.85	.94	.92		.92	.93		
	29					.87	.93	.92	.93	.91	.93	.92	
	34									.89	.91	.92	.92
	M		.89				.91				.92		
E	#	5	10	15	20	10	15	20	25	15	20	25	30
	10	.91											
	15	.91	.92			.83							

20	.89	.91	.90		.87	.86			.91		
25	.87	.89	.88	.89	.78	.81	.81		.86	.85	
30					.83	.83	.84	.83	.87	.90	.85
35									.79	.83	.80	.89
M		.90				.83				.86	

Note. Within Grade and Passage Set, the same students read all five passages, and the passages are ordered from least to highest Lexile score. Passages listed in corresponding orders across Passage Sets within Grade fall within the same Lexile band (e.g., Passages 1 -5 were the first passages read in sets A-D, respectively, within Grade 6 and all fall within Lexile Band 350-460; Passages 6-10 were the second passages read in sets A-D, respectively, within Grade 6 and all fall within Lexile Band 461-570, etc.).

Appendix B

Covariance Model Fits and Estimates

Covariance Structure	AIC	BIC	SRMR	AIC	BIC	SRMR
		Covariance Model Fits				
		NG - NG			G - NG	
Variance Components (VC)	78604	78615	.06	78606	78628	.14
Banded Main Diagonal	78153	78185	.10	78155	78198	.17
Autoregressive (AR)	78035	78051	.06	78038	78065	.14
		NG - G			G - G	
Variance Components	78603	78625	.13	78606	78638	.15
Banded Main Diagonal	77957	78045	.15	77959	78057	.17
Autoregressive	77892	77931	.19	77890	77939	.15

Covariance Structure	Grade	Intercept	Intercept Variance	Residual Variance	ρ	R^2
		Covariance Model Estimates				
NG-NG VC	6,7,8	125.28	1285.50	269.32		.83
NG-NG AR	6,7,8	125.47	1178.60	376.97	.46	.76
NG-G AR	6	124.78	1120.86	286.5	.21	.80
	7			443.35	.54	.72
	8			640.28	.73	.64
G-G AR	6	125.27	1191.63	285.67	.21	.81
	7		1161.4	437.78	.54	.73
	8		778.73	855.42	.80	.48

Read	1	2	3	4	5
	NG NG AR Residual Covariance Estimates				
1	376.97				
2	174.39	376.97			
3	80.68	174.39	376.97		
4	37.32	80.68	174.39	376.97	
5	17.27	37.32	80.68	174.39	376.97

Note. NG-NG = No grade (NG) differences in either intercept (between student) or residual (within student) variances in reading fluency; G-NG = Grade (G) differences in intercept variances but no grade (NG) differences in residual variances. The covariance structure refers to the residual covariances. The covariance structure of the intercept variance was variance components in every case. Variance components models assume a single residual variance (for each of the five reads in this case) and covariances between residuals = 0. The autoregressive

model assumes a single residual variance estimate as well as a single multiplicative factor (ρ). Residual covariances are a function of the variance and ρ estimates as well as the distance between reads (e.g., adjacent residuals such as the residuals for reads 1 and 2, reads 2 and 3, etc. are assumed to have the same covariance which is higher than non-adjacent residuals such as those for reads 1 and 3, reads 2 and 4, etc.). R^2 represents the proportion of variance due to the intercept, i.e., the proportion of variances due to differences between students versus differences within students.