

The GLIMMIX Procedure

Model Information	
Data Set	MYDATA.SCHOOL
Response Variable	Reading3
Response Distribution	Gaussian
Link Function	Identity
Variance Function	Default
Variance Matrix	Not blocked
Estimation Technique	Restricted Maximum Likelihood
Degrees of Freedom Method	Containment

Class Level Information		
Class	Levels	Values
School	3	Cottonwood Maple Pine
Gender	2	F M
Teacher	8	Miss Apple Miss Jones Miss Peters Mr. Johnson Mr. Rogers Mrs. King Mrs. Scott Ms. Chapman

Number of Observations Read	190
Number of Observations Used	134

Dimensions	
G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z	8
Subjects (Blocks in V)	1
Max Obs per Subject	134

Optimization Information	
Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Fixed Effects	Profiled
Residual Variance	Profiled
Starting From	Data

Iteration History					
Iteration	Restarts	Evaluations	Objective Function	Change	Max Gradient

Iteration History					
Iteration	Restarts	Evaluations	Objective Function	Change	Max Gradient
0	0	4	1314.9674599	.	7.581581
1	0	5	1314.90989	0.05756992	0.484701
2	0	2	1314.9095448	0.00034517	0.133386
3	0	2	1314.9095173	0.00002751	0.003496
4	0	2	1314.9095173	0.00000002	0.000024

Convergence criterion (GCONV=1E-8) satisfied.

Fit Statistics	
-2 Res Log Likelihood	1314.91
AIC (smaller is better)	1318.91
AICC (smaller is better)	1319.01
BIC (smaller is better)	1319.07
CAIC (smaller is better)	1321.07
HQIC (smaller is better)	1317.84
Generalized Chi-Square	184996.0
Gener. Chi-Square / DF	1445.28

Covariance Parameter Estimates		
Cov Parm	Estimate	Standard Error
Teacher(School)	51.9739	111.86
Residual	1445.28	185.48

Type III Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
School	2	5	3.87	0.0964
Gender	1	123	0.07	0.7853
School*Gender	2	123	5.16	0.0070

Least Squares Means Estimate Coefficients			
Effect	School	Gender	Row1
School*Gender	Cottonwood	F	1
School*Gender	Cottonwood	M	-0.2
School*Gender	Maple	F	-0.2
School*Gender	Maple	M	-0.2
School*Gender	Pine	F	-0.2
School*Gender	Pine	M	-0.2

Least Squares Means Estimates						
Effect	Label	Estimate	Standard Error	DF	t Value	Pr > t
School*Gender	Cottonwood Girls vs. All Others	-34.0590	10.9071	123	-3.12	0.0022