## **Guide to Workshop Scripts**

Unit	Syntax	Results	Description
01	01_unidimensionalIRT .R		R script for IRT models (Marginal ML and Bayesian)
	01_model01.stan	01_model01.RData	Unidimenionsal 1PL Model
	01_model02.stan	01_model02.RData	Unidimenionsal 2PL Model (Standardized Factor)
	01_model03.stan	01_model03.RData	Unidimenionsal 2PL Model (Maker Item Discrimination)
02	02_mlm_Bayes.R		R script for Multilevel (Non-Measurement) Models with Bayesian Estimation
	02_mlm_ML.docx		R markdown output for Multilevel (Non- Measurement) Models with Maximum Likelihood Estimation
	02_mlm_ML.R		R script for Multilevel (Non-Measurement) Models with Maximum Likelihood Estimation
	02_model01.stan	02_model01.RData	Empty (Non- Multilevel) Linear Model for Sum Score
	02_model02.stan	02_model02a.RData	Random Intercept Model for Sum Score
		02_model02b.RData	Multilevel Model of Sum Score with Free/Reduced Lunch Smushed

		02_model02c.RData	Multilevel Model of Sum Score with Free/Reduced Lunch at L1 and L2
		02_model02d.RData	Multilevel Model of Sum Score with Cluster Centered Free/Reduced Lunch at L1 and L2
	02_model03.stan	02_model03.RData	Empty (Non- Multilevel) Generalized Linear Model for Free/Reduced Lunch Status
	02_model04.stan	02_model04.RData	Random Intercept Model for Free/Reduced Lunch Status
	02_model05.stan	02_model05a.RData	Random Linear Slope Model for Free/Reduced Lunch Status
		02_model05b.RData	Random Linear Slope Model for Free/Reduced Lunch Status with Cross- Level Interaction
03	03_mlmm.R		R script for Multilevel Measurement Models with Stan
	03_model01.stan	03_model01.RData	Empty (Non- Measurement) Two- Level Model with Correlated Random Item Intercepts
	03_model02.stan	03_model02.RData	Within-School Measurement Model with Correlated Random Item

		Intercepts and Within- School Discriminations Fixed=1
03_model03.stan	03_model03.RData	Within-School Measurement Model with Correlated Random Item Intercepts and Estimated Within- School Discriminations using Standardized Theta
03_model04.stan	03_model04.RData	Within-School Measurement Model with Correlated Random Item Intercepts and Estimated Within- School Discriminations using Item1=Marker
03_model05.stan	03_model05.RData	Within-School and Between-School Measurement Model with Uncorrelated Random Item Intercepts and Estimated Level- Specific WS (Item1=Marker) and BS (Item10=Marker) Discriminations
03_model06.stan	03_model06.RData	Within-School and Between-School Measurement Model with Uncorrelated Random Item Intercepts and Estimated Level- Constrained WS (Item1=Marker) and

		BS (Item1=Marker) Discriminations
03_model07.stan	03_model07.RData	Within-School and Between-School Measurement Model without Random Item Intercepts and with Estimated Level- Constrained WS (Item1=Marker) and BS (Item1=Marker) Discriminations
03_model08.stan	03_model08.RData	Within-School and Between-School Measurement Model with Uncorrelated Random Item Intercepts and Free/Reduced Lunch MLM Predictor and Estimated Level- Constrained WS (Item1=Marker) and BS (Item1=Marker) Discriminations