

### Appendix 3: Sample Mplus Syntax for Example #1

TITLE: PIAAC in Mplus - SEM example #1;

!Note: “!” indicates a comment

!To obtain model fit indices make the following syntax modifications:

!Replace FILE IS datalist01.txt with FILE IS dataset01.csv

!Remove or comment out TYPE = IMPUTATION

!Replace TYPE IS COMPLEX with TYPE IS GENERAL

!Remove REPSE IS JACKKNIFE2

!Use ESTIMATOR IS MLR where indicated below

DATA: FILE IS datalist01.txt; !See Figure 1 & 2 for an example;

TYPE IS IMPUTATION;

!List the variables exactly as shown in the file Dataset01WithNames ;

VARIABLE: NAMES ARE

SPFWT0-SPFWT80

MtL01 MtL02 MtL03 MtL04

agecat12 female white black hisp others

college srh PVLIT;

USEVARIABLES

MtL01 MtL02 MtL03 MtL04

agecat12 female

college srh PVLIT;

!Specify missing values;

MISSING ARE ALL(-9999);

!Specify the sampling and replicate weights;

WEIGHT IS SPFWT0;

REPWEIGHT IS SPFWT1-SPFWT80; !Remove or comment out for model fit indices;

ANALYSIS:

TYPE IS COMPLEX;

REPSE IS JACKKNIFE2; !Re-sampling method for the US PIAAC data;

!ESTIMATOR IS MLR !Use to obtain fit indices

MODEL:

!Motivation to learn (MtL) latent variable;

MtL BY MtL01@1 MtL02 MtL03 MtL04;

MtL On PVLIT agecat12 female college srh;

OUTPUT: tech1 tech4 CINTERVAL STDYX;