

indicate if there are 2 groups or not. This variable should classify the cases into at least two groups.

Analysis Variables	The variables of interest for the analysis. In the case of a DIF analysis these would include one or more of the test items. In the example of income inequality between males and females across the levels of achievement, this would be the income variable. You can specify one or more analysis variables.
Performance Variable	The performance variable that will be used to classify the cases by achievement levels.
Cutpoints	The cut points of the performance distribution that will be used to classify the cases by performance levels. These could be the standard cut points used in international large-scale assessment studies supported by the IDB Analyzer (see Appendix B of this Help Manual), or any other values selected by the user. These values should be entered in increasing order, separated by spaces.
Weight Variable	The sampling weight that will be used in the analysis. The IDB Analyzer automatically selects the appropriate weight and replication variables for the analysis.

As an example, we will compute differences between boys and girls in 2 different test items (R11F06C, R11F07C and R11F08C), by performance levels defined by the achievement benchmarks (400, 475, 550, and 625) on the reading scale. Notice that for this example we have chosen three constructed response items that are already scored in the data file. One of them a 2-point item, the others are 1-point items. When using test items, you will need to score them prior to using them as analysis variables.

The data will be read from the data file **Merged\_PIRLS\_Data.sav** and the standard errors will be computed based on replicate weights and multiple imputations.

The steps in the IDB Analyzer are as follows:

1. Open the Analysis Module of the IDB Analyzer (Start → All Programs → IEA → IDBAnalyzerV3 → IDBAnalyzer).
2. Select the data file named **Merged\_PIRLS\_Data.sav**.
3. As type of the analysis, select **PIRLS (Using Student Weights)**. The weight variable is automatically selected by the software. As this is an example for analysis on student level, the weight TOTWGT is selected by default. Additionally the variance estimation procedure is defined according to the technical specifications of the study.
4. From the **Statistic Type** dropdown menu, select **Group Differences by Performance** and **Use PVs** from the **Plausible Value Option**.
5. In the next steps, all variables for the analysis are selected:
  - As **Grouping Variables**, the software always selects variable IDCNTRY by default. No other variable needs to be added for this example.
  - Next select the **Analysis Group Variable**. For our example select ASBG01, which take son two values, and defining 2 groups. When this variable defines only 2 groups, the program will compute the difference between the two groups, and the standard error of the difference so that a t-test of the mean value of the