The IDB Analyzer creates SPSS syntax that can be used to combine files from across different countries and levels (student, teacher, school, etc.), and perform analysis with these international databases. It generates SPSS syntax that takes into account information from the sampling design in the computation of sampling variance, and handles the plausible values. The code generated by the IDB Analyzer enables the user to compute descriptive statistics and conduct statistical hypothesis testing among groups in the population without having to write any programming code.

The IDB Analyzer is licensed free of cost, not sold, and is for use only in accordance with the terms of the licensing agreement. While you can use the software for free, you do not have ownership of the software itself or its components, including the SPSS macros, and you are only authorized to use the SPSS macros in combination with the IDB Analyzer unless explicitly authorized by the IEA. The software and license expire at the end of each calendar year, when you will again have to download and reinstall the most current version of the software, and agree to the new license. Complete copy of the licensing agreement is included in the Appendix of this Help Manual.

The IDB Analyzer consists of two modules – the Merge Module and the Analysis Module – which are integrated in one single application.

Support for the IDB Analyzer can be obtained by contacting the IEA Data Processing and Research center software unit at software@iea-dpc.de.

## About this Help Manual

The IDB Analyzer can be used to merge and analyze datasets from several studies. This Help Manual uses data from the PIRLS 2006 assessment for the examples. Examples using data for specific IEA studies can be found in the International Database User Guide for the specific study. Technical documentation on the procedures used for calculating statistics and standard errors can be found in the corresponding Technical Report for the study.

Throughout this Help Manual we present several example analyses. These are copied to the installation folder during installation of the program. All the sample files are available from here.

## The Merge Module

The Merge Module is used to combine data files from different countries<sup>8</sup> and when necessary, merge data files from different sources like student background questionnaires and achievement files, or student background files with teacher or school level files. It also allows the user to select individual or sets of variables to create a smaller and more manageable dataset.

When running the Merge Module, the IDB Analyzer creates SPSS code that merges and combines files specified by the user, keeping only the selected variables. The SPSS code is automatically saved to an SPSS syntax file and opened in an SPSS syntax window. The data files created using the Merge Module can be processed either with the Analysis Module of the IDB Analyzer or by any other analysis software that accepts SPSS files as input.

<sup>&</sup>lt;sup>7</sup> As of 2016, TIMSS will be calculating the standard errors using the "FULL" method. This change will apply retroactively. For more information about this, please refer to the Appendix of this Help Manual.

<sup>&</sup>lt;sup>8</sup> Throughout this manual, the term "country" is used to refer to reporting jurisdictions in the corresponding study. These include countries per se, "states", "provinces", "benchmarking participants", "partner countries", etc. Each study has adopted its own convention for naming and identifying these entities, but in general these are identified by a unique value in the variables usually called IDCNTRY, CNT, CNTRYID, etc.